University Ventures

Faster + Cheaper Alternatives to College

February 2018
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College
What’s Not to Love?

A college education should “cultivate a broadly informed, highly disciplined intellect… [and provide] a phase of exploration, a place for the exercise of curiosity, and an opportunity for the discovery of new interests and abilities.”

Depth = Major

Breadth = Distributional requirements
1) Humanities and arts
2) Science
3) Social science
4) Foreign languages
5) Quantitative reasoning
6) Writing
A Brief History of the Bachelor’s Degree

18th and 19th centuries

Post WWII

Today

5%

30%

UV CONFIDENTIAL // TRADE SECRET
Is College Working?

On the other hand…

Dystopian counterfactual

if all talented and motivated students feel compelled by the new social norm to go to college and earn degrees – leaving behind less talented and motivated students – it would be awfully strange if college graduates didn’t earn (much) more.

What if college premium is primarily a result of self-selection rather than value added?
Is College Working? (continued)

• Completion rates

• Surveys on learning
  • CLA+: 1/3 of seniors
  • NSSE: 20-40% disengaged

• Non-completers + non-learners easily > 60%
What Colleges are Spending Money On

The Four “Rs”
Which Would be Fine if it Didn’t Cost So Much

The New York Times

YOUR MONEY

Does God Want You to Spend $300,000 for College?

Your Money

By RON LIEBER  JUNE 23, 2017
Crippling Student Loan Debt

• Avg. $37k per graduate who takes out loans
• Total $1.4 trillion
• Grown over 800% per household since 1999.
• 12M borrowers in their 30s still owe avg. of $34k.
• Nearly 1,500 colleges and universities where majority of students are making interest-only payments on their loans, or no payments at all.

• Only 57% current
• 8M of 44M in default
• 1M borrowers default for the first time each year.
• One third of borrowers graduating between ‘06 and ‘11 have defaulted.

“Stop Calling Millennials the Facebook Generation. They’re the Student Loan Generation.”
Unprecedented Unhappiness

**Alumni**

- Only half agree investment was good one (38% of younger alumni).
- 17% would have foregone college if they’d understood debt.
- Only 44% of currently enrolled students would attend same college again.
- 30% would sell an organ to get rid of debt.

**Parents**

- Only 21% say cost of college is justified.
- In 2005, majority of young adults in 35 states lived independently; now only true in 6 states.
- 76% of parents with adult kids at home say they’d pay $24k to get them out.

**Policy Makers**

- “Too many Americans have come to believe that the pathway to a successful career lies solely on a college campus, and in a baccalaureate degree.” – Rep Virginia Foxx, Chairwoman of House Committee on Education and the Workforce.
Betsy DeVos: Stop 'Forcing' Four-Year Degrees as Only Pathway to Success

By Alyson Klein on November 13, 2017 5:06 PM
Engine of Socioeconomic Mobility in Reverse

- Families with incomes of $116k+ represent more than half the degrees awarded to traditional age students (18-24).

- At the top 200 colleges, 75 percent of students come from the top income quartile and only 5 percent from the bottom quartile.

- Nearly 2/3 of selective public colleges enroll fewer lower-income students than they did 20 years ago.

- At 38% of our most selective institutions, there are more students from top 1% than from bottom 60%.

- Since Great Recession, low-income students who enroll in college immediately after high school has declined 10%.
What Students Want
Millennials: The Cursed Generation

• Low unemployment, but ~50% of recent graduates underemployed

• Housing
  • Avg. age of new homeowners has increased from 34 to 42 in past 15 years.

• Impact on new business creation
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.

• 90%+ report primary or sole motivation is employment/income related.
Reasons for the Employment Imperative

Why Aren’t American Teenagers Working Anymore?
The decline of the summer job.

10 Reasons Why You Shouldn’t Freak Out if You’re Graduating Without a Job
You are so not alone.
Universities Uninterested in Aligning Curricula

THE CHRONICLE OF HIGHER EDUCATION

How to Revamp a Curriculum Quickly — but Not Too Quickly

Those conditions can pose a trap for well-meaning administrators and faculty members. Work-force demand can lead some institutions to teach students the skills needed for today’s entry-level jobs. But those tools may well be obsolete five or 10 years from now.

Sara Goldrick-Rab @saragoldrickrab · Jun 5

Sorry, that isn't a shared goal. It is a questionable goal, in fact.

Ryan Craig @ryancraiguv

Replying to @djvanness

Thanks for your comment. How does faculty governance get us closer to the shared goal of better aligning curricula with labor market needs?
Career Services: A Poor Interface

Since the Recession, colleges and universities have cut spending on career services by 11.4%.

“Career services must die”
- Andy Chan, VP Career Dev’t at Wake Forest
The 2017 Survey of Admissions Directors: Pressure All Around

Only 34 percent of colleges met new student enrollment targets this year by May 1, the traditional date by which most institutions hope to have a class set.

That is a key finding of the 2017 Survey of College and University Admissions Directors, released today by Inside Higher Ed, in collaboration with Gallup.

The 34 percent figure is down from 37 percent a year ago and 42 percent two years ago.
Employers
Why Are Employment Outcomes Worse? Mechanics of Hiring Have Changed
How Not to Get a Job

What do a fragrance designer, New York City cop, bed-and-breakfast manager and youth hockey coach have in common?

Each of them recently applied for an account director position at my public relations firm, along with 500 others whose experience and skill sets ranged from vaguely on-point to off-the-charts irrelevant. Auto collections manager? Home health aide? Visual merchandiser? Count them all in.

It’s not that my postings on Indeed, LinkedIn and other career sites weren’t explicit in outlining desired qualifications. I added instructions urging candidates to contact us only if they had backgrounds in journalism, P.R. or law. There was nothing to suggest I was looking for a fiscal benefits analyst, emergency medical technician or brand ambassador, but they showed up anyway.

In part, the disconnect stems from a revved-up labor market that encourages job hopping and inflated credentials. It also reflects the vast online jobs marketplace, where restless applicants shoot off their résumés like one of those T-shirt cannons at a football stadium, firing without aiming. Not a single candidate bothered to look us up and refer to what we do in the cover note. Instead, they all invoked grand boilerplate statements meant to impress the hiring gods.

Here’s how one actress stated her case: “Not only do I believe in Ripp Media’s ability to deliver human and intuitive touchpoints through physical and technological interaction, but I can contribute to this strategic investment for the modern enterprise by bringing my diverse experiences ...” It was like reading Mad Libs.
Why Are Employment Outcomes Worse? Proliferation of Technical Skills

<table>
<thead>
<tr>
<th>Career Area</th>
<th>Technical Skills Specified</th>
<th>Cognitive and Soft Skills Specified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Technology</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>74%</td>
<td>26%</td>
</tr>
<tr>
<td>Engineering</td>
<td>71%</td>
<td>29%</td>
</tr>
<tr>
<td>Life/Physical Science and Math</td>
<td>68%</td>
<td>32%</td>
</tr>
<tr>
<td>Manufacturing and Production</td>
<td>68%</td>
<td>32%</td>
</tr>
<tr>
<td>Design, Media, and Writing</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>Research, Planning, and Analysis</td>
<td>65%</td>
<td>35%</td>
</tr>
<tr>
<td>Personal Care and Services</td>
<td>63%</td>
<td>37%</td>
</tr>
<tr>
<td>Finance</td>
<td>62%</td>
<td>38%</td>
</tr>
<tr>
<td>Marketing and Public Relations</td>
<td>62%</td>
<td>38%</td>
</tr>
<tr>
<td>Management and Operations</td>
<td>61%</td>
<td>39%</td>
</tr>
<tr>
<td>Education and Human Services</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>Hospitality, Food, and Tourism</td>
<td>59%</td>
<td>41%</td>
</tr>
<tr>
<td>Sales</td>
<td>59%</td>
<td>41%</td>
</tr>
<tr>
<td>Human Resources</td>
<td>57%</td>
<td>43%</td>
</tr>
<tr>
<td>Clerical and Administrative</td>
<td>57%</td>
<td>43%</td>
</tr>
<tr>
<td>Customer and Client Support</td>
<td>49%</td>
<td>51%</td>
</tr>
</tbody>
</table>
What Are These Technical Skills?
Employers Aren’t Seeing These Skills

Degree Inflation

Experience Inflation

Unfilled Jobs
The Empty Quadrant
Leading Employers Already Open-Minded

71% of employers say they would consider hiring a candidate without a degree over someone with a degree.
Faster + Cheaper Revolution
Last-mile Training

Borrowed from Telephony

- Hardest + most expensive to build
- Therefore most valuable segment
- Basis for natural monopoly

Talent Market Correlation

- Technical training
  - At minimum, so candidate is no longer filtered out via ATS
  - At maximum, training + experience on the exact software/SaaS platforms employer utilizes
- Placement
  - Ensuring candidates get job

- Connection to employer is hardest to build
- Best to start there
Characteristics of Last-mile Training

1. Technical skills +
2. Intensity ("bootcamps")
3. Demonstrate competencies
4. Fingers on "pulse" of employer needs
5. Clear pathways (organization kids)
6. “The credential is the job.”
7. Began life as top-up programs
8. Now with “MVP” potential
# Last-mile Training Providers

<table>
<thead>
<tr>
<th>Provider type</th>
<th>Description</th>
<th>Sample providers</th>
</tr>
</thead>
</table>
| **Immersive Bootcamp Training**        | • Intense, immersive technical focused training programs to develop and demonstrate the complete set of job competencies required for hiring  
• Strong employer connections          | ![galvanize](image1), ![PrepMD](image2)                                                                                                           |
| **Income Share Programs**              | • Innovative bootcamps aligned to student job outcomes through tuition payments via percentage of student income after job attainment                                                                 | ![AH ALWAYS HIRED](image3), ![vemo](image4) |

| **On-the-Job Training & Placement**    | • Third-party providers which coordinate with employers to place candidates in paid apprenticeships, which combine instructional training, on-the-job mentorship, and pathways to full-time hiring  
• Completion of typically free educational program leads to guaranteed hiring, either by training organization (staffed out to clients) or via employer paid placement | ![yearup](image5), ![WhiteHat](image6) |
| **Apprenticeship Service Providers**   |                                                                                                                                                                                                           | ![Revature](image7) |
| **Staffing + Placement Providers**     |                                                                                                                                                                                                           | ![AVENICA](image8), ![equitysim](image9) |
Superior Value Propositions

Cost to student

<table>
<thead>
<tr>
<th>Paid</th>
<th>Free or debt-free</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Bootcamp Programs</em></td>
<td><em>Staffing + Placement Providers</em></td>
</tr>
<tr>
<td>galvanize</td>
<td>Avenica</td>
</tr>
<tr>
<td>AH ALWAYS HIRED</td>
<td>Revature</td>
</tr>
<tr>
<td>PrepMD</td>
<td>equitiesim</td>
</tr>
<tr>
<td>Qubed</td>
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Guaranteed outcome

Yes

No
Bootcamps: Galvanize & PrepMD

Galvanize

- Introductory and intermediate full-stack (front-end and back-end) web development
- Fast-growing coding bootcamp with 80%+ placement
- Combines education and coworking with leading tech employers and entrepreneurs
- Denver, Boulder, Austin, SF, Seattle, NY
- Invested $13M starting in Q214 at $2M ARR
- Projected 2017 revenue of ~$50M

PrepMD

- Technical training on Cardiac Implantable Electronic Devices (CIEDs) for medical device technical support and sales positions
- 6 month training solves major pain points for hiring managers: candidate quality, and training expense / length
- 94% placement with $30K tuition (discount for graduates joining hiring partners)
- Invested $3.7M in Q217
- Leveraging UV expertise and network to drive revenue and EBITDA growth by:
  - Increasing class sizes while maintaining quality education
  - Improving student financing options
  - Increasing last mile training offerings
  - Building out sales and marketing team to drive enrollment and placement

<table>
<thead>
<tr>
<th>Year</th>
<th>Student Enrollment</th>
<th>Operating Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>47</td>
<td>$1.4m</td>
</tr>
<tr>
<td>2014</td>
<td>103</td>
<td>$4.7m</td>
</tr>
<tr>
<td>2015</td>
<td>450</td>
<td>$20m</td>
</tr>
<tr>
<td>2016</td>
<td>&gt;1,000</td>
<td>$37m</td>
</tr>
</tbody>
</table>
Income Share Program: MissionU

- Technical (Python, Stata, SQL, Excel) and soft skills (teamwork, presentation) leading to entry-level Data Science jobs

- A Minimum Viable Product, or MVP, is the simplest, smallest product providing enough value for consumers to adopt – and for producers to receive enough feedback to iterate and improve
- MissionU is creating a disruptive, 12-month “College MVP” alternative to traditional college by adding to Last Mile Training preparation on cognitive, and non-cognitive skills traditionally offered by 4-year colleges (albeit in context of data science training)

- 12-month bachelor’s degree replacement in Data Analytics & Business Intelligence
- One of first true faster + cheaper alternatives to college
- Income Share Agreement aligns MissionU to student career outcomes – students pay nothing upfront and contribute 15% of earnings for 3 years after graduation after earning jobs with minimum salaries of $50,000

- 2017 seed investment; participated in Series A
- First cohort of 30 students selected from 4,700+ applications launched September 2017; indicating high baseline of cognitive and non-cognitive skills
- Employer partnerships include Uber, Lyft, Spotify, Warby Parker, Casper, Birchbox, Plated, 2U, and Chegg
Income Share Program Enabler: Vemo

- Income Share Agreements been around for decades, conceived by Milton Friedman
- With new student protections, now ready for prime time

**Description**

- Only originator/servicer of school-based ISAs
- For faster programs (< 1 year), rapidly becoming standard
- For degree programs, better deal for students than high-cost debt (PLUS loans, private loans)
- Potential to provide valuable market signals to students

**Progress since investment**

- 14 launched schools, including Purdue (Back-a-Boiler)
- Originated over 1,200 ISAs
- Total ISA volume over $30M
- Recently signed two new universities
- Large pipeline of bootcamps
- Working with UV and Strada on ISA Fund
- Progress towards further regulatory certainty
Staffing + Placement: Revature

- Advanced, bespoke coding training leading to staffing as entry-level programming professional
- $55M revenue IT services provider that recruits, trains, and staffs its own coding workforce. The company uses free coding bootcamps to source and evaluate candidates, driving supply creation aligned to workforce needs
- Company was closely held and highly profitable prior to investment; sought UV to guide shift to national leader in IT education-to-employment talent supply chain management
- UV, Strada and affiliates made $20M investment in Q1 2016
- Current estimated Gross IRR of 42.1% due to leveraging UV expertise and network to drive revenue and EBITDA growth, including:
  - Leading rebranding and PR initiative to create and position the Revature brand as a leading, innovative talent supply chain solutions provider
  - Building out scalable systems and processes across finance, marketing, and sales
  - Building out sales and marketing team to expand footprint into additional U.S. markets
  - Establishing high-value college and university partnerships to drive strong market share and brand positioning
Staffing + Placement: EquitySim

- Advanced, bespoke coding training leading to staffing as entry-level programming professional

- Simulation-based hiring for finance, starting with equity trading platform that invites students to trade equities, options, futures, etc. with $50M; records over 100,000 data points per students (not just what, but why).
- 60,000 students from 250 universities on platform.
- 83% of selected students placed at top firms.
- 68% of placed students come from non-target schools (opening up new sources of talent for employers).
- Revenue model: 15% of 1st year comp.
- Planning to launch simulations in other fields (e.g., accounting)
Apprenticeship Service Provider: WhiteHat

WhiteHat

- Founded by Euan Blair, son of former PM Tony Blair, WhiteHat is creating the “Ivy League of Apprenticeships” with blue chip clients like Nomura, Burberry, and Wellcome.
- Lengthy admissions process before being matched with employer.
- Digital apprenticeships include: digital marketing, finance, HR, business development.
- While working, apprentices participate in WhiteHat-led learning for 5-10 hours per week – typically onsite at the employer with the support of an online platform.
- After min. 12 months, employers are expected to hire apprentices as regular employees with commensurate salary increase.
- WhiteHat “hides the wiring” – handling recruitment, training, securing government funding, and managing paperwork that’s part and parcel of dealing with the government.
- To date, over 250 apprentices placed.
- Employers happy: apprentices stay twice as long with employers as new university graduates.
- WhiteHat/UK models now entering U.S.

UK ASP Model

- Emergence of private sector Apprenticeship Service Providers have helped launch hundreds of thousands of digital apprenticeships
- Model enabled by clear link between RTI and government funding
- Government also supported emergence of private sector ASPs

Description

Emergence of private sector Apprenticeship Service Providers have helped launch hundreds of thousands of digital apprenticeships
Model enabled by clear link between RTI and government funding
Government also supported emergence of private sector ASPs
Role of Intermediary: Reduce Hiring Friction

Paperwork, benefits = hard hiring cost
+ Risk * cost of bad hire
   Hiring Friction

1. Faster + cheaper intermediaries reduce hiring friction by bearing some/most of the cost and risk of hiring.

2. Colleges and universities aren’t situated to do this, primarily due to attitude:
   a. Approach has been to take labor market as a given (“not our problem, that’s a labor market problem”).
   b. They don’t realize hiring and HR managers aren’t adept at understanding required skills.
   c. Engagement can change behavior – which is what intermediaries are doing.
Faster + Cheaper Directory

247 faster + cheaper pathways to digital/new economy jobs

- Bootcamps - tuition-pay
- Bootcamps - no tuition
- Apprenticeships
- Apprenticeship service provider
- Income share programs
- Staffing/placement
- Online paths to jobs
In Faster World, Tuition Becomes Anachronism

• Good pathways to jobs that are 12 months or less can easily be paid via ISA.

• Many will also be employer pay (staffing/placement/apprenticeship).

• ISA and staffing are superior value propositions for students: no tuition upfront (less risk).

• Attempting to charge tuition for faster programs will be signal to market that program may not lead to good employment outcomes.

• Tuition-based programs will either need to shift to ISA or staffing, or watch enrollment dry up.
Graduating from College
Deciding on College

- Non-selective college
- Selective college

<table>
<thead>
<tr>
<th></th>
<th>Affordable</th>
<th>Unaffordable</th>
</tr>
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<tbody>
<tr>
<td>Non-selective college</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selective college</td>
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</tbody>
</table>
Defining Affordability

Students should pay no more for college than the savings their families have generated through 10 percent of discretionary income for the past 10 years, plus the earnings from working 10 hours a week while in school.

Example #1
- Household income of $100k
- Save $429/month for a decade, or $51,500
- $3,625 annually for working 10 hours per week
- Total contribution (incl. loans) < $65k.

Example #2
- Household income of $50k
- Save $1,500 over a decade
- $3,625 annually for working 10 hours per week
- Total contribution (incl. loans) < $16k.
Hard Case #1: Selective, Unaffordable

When is it worth stretching Rule of 10 to attend a selective school?

**Stretch Indicators**
- I never stopped or dropped out of college before.
- I have a network of family and/or friends to support and encourage me to complete college.
- I live in the Northeast.
- I’m a woman or a minority.
- If I major in business, it will be in finance or accounting rather than general business or marketing.
- I might want to work in a field that requires a license e.g., medicine, law, education
- I’m hopeless with and/or not interested in technology.
Hard Case #2: Non-selective

- Wide gulf between selective and non-selective schools.
- Non-selective schools attempt to downplay significance of hierarchy.
- Focus on superficial similarities, including of credential.

- Strict adherence to Rule of 10: only consider non-selective college if it meets Rule of 10 (and then compare value proposition to alternatives).
Tipping Point for Millennials

“The message we send is, this isn’t your father’s credit card. For Millennials, travel might mean taking an Uber to a hole-in-the-wall restaurant in Chinatown, and then riding the subway to karaoke, and then catching a taxi home. So we’re going to give you accelerated travel points on all that. This is a card for accumulating experiences.”

“An Amex says you’re rich, but [Sapphire Reserve] says you’re interesting.”
Why Faster + Cheaper?

“It’s like our politicians think college is the only way… For many, it’s great. But a lot of our kids have no realistic shot of getting a college degree.”
Reactions to Perceived Loss of Opportunity

2016 Harvard poll: 51% of 18-29-year-olds reject capitalism.

2017 poll of white working class voters by a Democratic PAC: 57% say college degree “would result in more debt and little likelihood of landing a good-paying job.”
What’s at Risk?

Probably Not Skills
What’s at Risk?

- Colleges and their communities
- Discovery
- Fun
- Educated citizenry

“I have a foreboding of an America in my children’s or grandchildren’s time – when the United States is a service and information economy… when awesome technological powers are in the hands of a very few, and no one representing the public interest can even grasp the issues; when the people have lost the ability to set their own agendas or knowledgeably question those in authority; when… our critical faculties in decline, unable to distinguish between what feels good and what’s true, we slide, almost without noticing, back into superstition and darkness.”

Triage

Once we improve economic security, these other issues can be dealt with.
A Decade from Now...

The fact that young people were encouraged to load up on debt just as they were starting their careers will seem bizarre and anachronistic – a practice that benefited providers of higher education more than the Millennials they aimed to serve.

In hindsight, given all the uncertainty around technological change and the future of work, it will seem incredible that Millennials risked taking on all that debt at one time, at such a young age.
Plausible Strategies for Non-Selective Colleges

1. Faster degrees (off-ramps)

2. Cheaper degrees (WGU)

3. New faster + cheaper pathways (not degrees)
   - Employer engagement?

4. Secondary and tertiary programs to boost cognitive and non-cognitive skills
   - Ceding pathway to first job to F&C competitors
   - Crucial for educated citizenry and economic competitiveness
   - Harness innovation in graduate and professional education
Secondary and Tertiary Pathways

• Unbundled master’s and professional degrees

• More confident that colleges and universities will rise to occasion, because of more innovation and entrepreneurship in graduate and professional schools

• Example of unbundled MBA:
Caution Around 100% Online Delivery

Lead to Jobs?

Models That Work

Online Bootcamp: An Oxymoron?
What SaaS Has Done to Enterprise Software...

SaaS MODEL

One-time purchase  Customer for life
We’re Past “Peak Credential”

Second, third employers care more about first job and demonstrable achievements and competencies.
• More likely in world where achievements and competencies are archived and accessible digitally
The Problem With Welders
Unbundling + Competency Marketplaces
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”

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 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
How LinkedIn’s Latest Move May Matter to Colleges

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 Case for ‘Unbundling’ Higher Education

By ROBERT LITAN

Certify the skills employers want may be one way universities can make education more effective and affordable. 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

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<th>Category</th>
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**Series:**
- Bootstrapped
- Seed
- Series A
- Series B
- Series C-F
- Acquired
UV 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?
Many Degrees Will Go Way Of Debutantes

- Expensive
- Elitist
- ROI?