

# MODERNIZING THE HEA:

## Congressional priorities for innovation in higher education

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# EXECUTIVE SUMMARY

Higher education expenditures have ballooned to nearly half a trillion dollars a year, but despite rising costs, it is unclear that higher education is succeeding at its core mission: graduating students prepared for today's dynamic world.

Four-year completion rates for students at public schools are below 35 percent, and there continue to be massive disparities in outcomes based on race and class. The combination of low completion rates and high costs makes enrolling in college a risky proposition for students. Salaries for college graduates, adjusted for inflation, have remained flat since the 1960s, even as costs have risen dramatically. Employers are also dissatisfied; they struggle to fill positions and express frustration with recent college graduates' skill sets.

These problems stem from a business model that was never designed to serve students, a regulatory model that reinforces that broken business model and spurns innovation, and a lack of data to hold colleges and universities accountable.

But there are bright spots on the horizon. Online learning has made college accessible to students for whom college was previously an impossible dream. A few innovative schools are demonstrating the potential of online and competency-based education to bend the cost curve of college, create value for students, and align with the needs of a globally competitive workforce. Outside of traditional higher education, alternative providers are going even further, demonstrating the potential of innovation to address the cost, access, and workforce alignment problems currently plaguing traditional institutions.

The Higher Education Act, as written, is not supportive of innovation. But Congress can help:

- **Develop a new regulatory framework for online and competency-based education.**

Congress should aim to give institutions the flexibility to develop instructional models that take advantage of the potential of technology, and are designed around the needs of the 21st-century student and workplace.

- **Reform accreditation to measure colleges by their outcomes, not their inputs.**

Accreditors should be encouraged to focus primarily on whether institutions are creating value for students. Colleges that do so should be given wide latitude in how they do so.

- **Improve the basic data infrastructure of higher education.**

Transitioning to an individual student record would enable institutions and regulators to track whether innovations are effectively moving the needle on student outcomes.

# INTRODUCTION

Beginning with the founding of Harvard University in 1636, higher education has been inextricably linked with the development of America’s knowledge base, economy, and national character. This is no less true today. Higher education in America plays an important role in research and innovation, is all but essential to economic mobility, and continues to be a formative experience for almost two-thirds of American high school graduates who—at least initially—enroll.

But the centuries-old model of college is showing signs of strain under the turbulent and rapidly changing conditions of today’s economy. Recent generations of students are so overburdened by debt that they appear likely to slow down overall rates of homeownership and household formation. Worse, significant numbers of them are underemployed relative to their education level—suggesting that despite academic degrees, they lack the skills necessary to move ahead in the workforce. Shortages of workers trained in STEM fields have long been addressed through H-1B visas, but even so, employers struggle to find skilled workers.

While higher education struggles to produce skilled graduates that can compete in the workforce, and as the costs of doing so continue to escalate dramatically, the needs of the workforce are changing as well. Technology is

changing the nature of work in industries far from Silicon Valley, including manufacturing, healthcare, and retail. Studies estimate that nearly half of current jobs face a high risk of obsolescence caused by technology over the next few decades.<sup>1</sup> Driven by fast-paced technological shifts, workers face significant retraining in the middle of their careers—not just large investments in college degrees at the beginning. These shifts raise a critical question for our economy, our citizens, and our national competitiveness: *How do we train and retrain workers quickly, affordably, and effectively in order to match the tempo of the skills required by the global economy?*

For policymakers of the 1960s who authored the first Higher Education Act, their experience of college centered around a grassy quad, lined by brick buildings filled with young students and lecturing professors. This traditional model of higher education is unlikely to disappear overnight. But it is proving inadequate to cost-effectively meet today’s workforce needs, and it is rapidly losing ground relative to new delivery models, unbundled offerings, and nimble approaches that can rapidly adapt to the demands of the workforce.

Congress has a critical role to play in encouraging innovation to help American higher education meet the needs of the next generation. As it turns its attention to reauthorizing the Higher Education Act, it should consider three key initiatives: modernizing the regulation of online and competency-based education, reforming accreditation, and improving the data infrastructure of American higher education.

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# HIGHER EDUCATION IS NOT SERVING AMERICA

America is home to some of the most elite higher education institutions in the world<sup>2</sup>—but overall, our system is failing our nation, and charging a great deal for the privilege.

In 1965, the year the original Higher Education Act (HEA) was passed, annual tuition was \$968 at public universities and \$2,005 at private institutions, relative to median family income of \$6,957.<sup>3</sup> Less than 10 percent of Americans held a bachelor's degree,<sup>4</sup> but a college degree was sufficient to launch graduates into the middle class. A newly minted college graduate made \$7,257—more than the median family income, and almost double the cost of four years of college at a public school.<sup>5</sup> College created value far in excess of its cost; as he signed the HEA, President Lyndon Johnson said of higher education, “in my judgment, this Nation can never make a wiser or a more profitable investment anywhere.”<sup>6</sup>

College is still a good investment for most students, but its value is weakening as costs rise. The benefits of going to college have more or less kept pace with inflation: the \$7,257 that a new graduate made in 1965 equates to \$52,994 in today's dollars, slightly higher than the \$50,219 a college graduate can expect to make today. The costs of college, on the other hand, have wildly exceeded inflation. A year at a public institution now costs \$16,188. Private school tuition is now \$37,424, and costs show no sign of slowing down.<sup>7</sup>

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High tuition costs have also undermined college as an engine of social mobility: there is evidence that high costs deter low-income students from attending, despite available financial aid programs.<sup>8</sup>

In spite of the exorbitant price tag, colleges are in an increasingly weak financial position. The number of institutions eligible for federal financial aid programs is dropping as more schools close their doors.<sup>9</sup> And a rising percentage of colleges appear on the Department of Education's list of financially troubled institutions.<sup>10</sup>

Higher education expenditures have ballooned to nearly a half a trillion dollars a year, but despite rising costs, it is unclear that higher education is succeeding at its core mission: graduating students prepared for today's dynamic world. Increasing expenses haven't led to strong outcomes: four-year completion rates for students at public schools are below 35 percent. Completion rates for minority students at public institutions are even more startling: 18.1 percent of black students and 25.3 percent of Hispanic students will graduate within four years.<sup>11</sup> At private nonprofit institutions, the rates are better, at 53 percent. At private for-profit institutions, they are far worse, at 13.9 percent. Those that do graduate face heavy student loan burdens—but those that do not graduate bear them as well.<sup>12</sup>

Holding a degree continues to carry a significant premium in the labor force relative to not having one. But employers are dissatisfied with recent college graduates' skill sets.<sup>13</sup> Managers report that over a third of graduates have inadequate writing skills, public speaking skills, and data acumen.<sup>14</sup>

Higher education took in revenues of over half a trillion dollars last year, from students, parents, donors, and federal and state governments.<sup>15</sup> In return, it graduated less than half of students within four years, many of them without the skills necessary to succeed in the workforce. Collectively the graduates and nongraduates of higher education hold more than \$1.4 trillion in student loan debt.<sup>16</sup>

# WHY THE IVORY TOWER IS CRUMBLING

Given the affordability crisis, it's perhaps unsurprising that there is a bevy of proposals to change how we, as a country, pay for college. These ideas include making tuition free for all students through additional federal or state subsidies, expanding subsidies particularly for low-income students, or changing the terms or structure of student loans and financing options. Some of these ideas have merit and others do not. But none of them are in any way sufficient to address the underlying causes of why higher education has become so expensive, and why, despite its cost, it is failing to equip students with the skills they need to succeed.

## A broken business model

For policymakers to address the roots of higher education's problems, it's critical to first examine its complex, costly, and deeply unsustainable business model. At most institutions, professors are expected not only to teach classes, but also to take on responsibilities for advancing research in their discipline, publishing their research, governing the college, and advising students. Specialist academics are often promoted and rewarded primarily for their research. This entrenches incentives to focus time and energy on academic work. College presidents are often pressured to focus on raising money and constructing new buildings.

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Student learning rarely takes priority over these other activities—if learning outcomes are measured at all. In the traditional business model, almost no attention is paid to aligning the curriculum to the needs of the workforce or to ensuring that students find jobs after graduation. Despite the lack of focus on student and workforce outcomes, taxpayer funds and loans comprise a significant portion of college and university revenues.<sup>17</sup>

## A broken regulatory model

The regulatory structures that should protect taxpayers and students, including accreditation and the Department of Education, fall short. They pay too much attention to the *inputs* of higher education—like faculty degrees and shared governance—and far too little to its *outcomes*—such as graduation rates or student employment outcomes.

Accreditors conduct peer reviews of institutions that evaluate compliance with the standards set by the accrediting organization. These standards are complex and run hundreds of pages—but the vast majority of them focus on the “ingredients” of college, such as whether the institution has a mission statement, and ensuring that the process by which it was written conforms to the culture of the institution.<sup>18</sup> The standards function to ensure that institutions look alike, but they do not measure schools based on their outcomes. A similar approach in K-12 education would have schools evaluate one another on the quality of their stocks of pencils and paper, rather than looking at their test scores and graduation rates.

Unfortunately, the headlines have been rich with stories of quasi-fraudulent institutions like Corinthian Colleges and ITT Technical Institute closing their doors. But each was accredited until the end. Accreditors have pursued their own definition of quality, focusing on the processes, plans, and procedures that colleges follow, but this definition does little to protect students and taxpayers from waste, abuse, and poor outcomes. Equally troubling, this focus on inputs, rather than outcomes, also deters, dissuades, and—in some cases—prevents colleges from innovating.

## A broken information system

The current federal data system is inadequate to capture the paths of most students, which hurts students, but also taxpayers. Colleges and universities bring in over half a trillion dollars of revenue annually, much of which is taxpayer money.<sup>19</sup> They are spending it in the dark.

Regulators could and should evaluate institutions based on their outcomes, and better information would facilitate a shift in their focus. Information is essential to functioning markets. Parents and students need data about both costs and outcomes in order to make smart investment decisions in higher education. Regulators need data in order to hold schools accountable and to use tax dollars efficiently. Colleges themselves need data in order to manage their organizations well. But the data infrastructure maintained by the federal government is currently inadequate to meet these various needs.

Current data collection efforts don't count all students. Instead, they collect data on full-time, first-time freshmen, excluding the 38 percent of students who are part-time,<sup>20</sup> as well as the 37 percent of students who transfer during the course of their college careers.<sup>21</sup> The lack of data on nontraditional students stymies efforts to innovate against their needs.<sup>22</sup>

The current data collection efforts focus on institutions, not student outcomes, limiting efforts to make smart investments in higher education. Metrics like completion rates are not broken down by program, making it impossible to differentiate between the outcomes of online programs and traditional programs at the same institution. Students aren't tracked across institutions, meaning that the 37 percent of students who transfer are counted as noncompletions. This fails to represent the value added by schools that help students affordably accumulate general education credits before transferring to another institution. Although some students begin higher education immediately after high school and complete their education at the institution at which they began it, most don't.



# A GLIMPSE OF THE FUTURE: INNOVATION IN HIGHER EDUCATION

Although the declining returns on investments in the traditional higher education system are disturbing, there are bright spots on the horizon. Innovators are rapidly iterating on models that have potential to lower costs and improve outcomes for students and the workforce.<sup>23</sup> Some of these innovators are reinventing college degree programs within traditional institutions. Others are entrepreneurs developing models that potentially compete with traditional college degrees. But what they have in common is that they are innovating around a new value proposition: helping students succeed in the workplace.

These organizations are building new business models that compete on providing value to students—not on elitism or prestige. They market themselves on the outcomes students can expect, and actively innovate to ensure that their value proposition remains competitive. These models are laser-focused on aligning their curricular content to the labor market, ensuring that students are able to find well-paying jobs upon graduation.

## New business models emerging: Microcredentials and boot camps

Online and competency-based degree programs are creating opportunity for students for whom a traditional college degree might otherwise be out of reach. Online and blended learning models, as well as the pedagogical innovations of competency-based learning, are also being employed by providers outside of the higher education system. These providers, including bootcamps such as General Assembly and Galvanize, as well as microcredential providers such as Udacity and Coursera—among a slew of many others—are targeting educational needs that have not typically been well-served by traditional degree programs. These include upskilling employees who already have a job but who need to adapt to technologically driven changes in their industry or company; reskilling mid-career workers who have seen their industry and opportunities shrink in the face of global competition or automation; and training workers to take new jobs in new and high-demand fields.

These providers shouldn't be brought into the traditional higher education regulatory structure. State-level consumer protection efforts are working to ensure that the market for alternative credentials is transparent and fair to consumers. Marketplace incentives are driving these models to innovate in ways that meet the needs of students and employers. New financing models are emerging, including income share agreements, employer-pay models, and no-risk financing models in which students do not pay tuition unless they find a job upon completing the program. These payment models put the onus on providers to make sure that programs are designed with workforce success in mind, that students complete them successfully, and that students build the skills to network and engage with employers. Higher education can learn from the evolution of these business models, and Congress should give institutions the latitude—and incentives—to do so.

## Reaching nontraditional students: Online learning comes into its own

Online learning is no longer new—the first online programs were pioneered in the 1980s.<sup>24</sup> But the potential of online learning is still being unleashed. Innovators are taking advantage of improvements in bandwidth and the number of families who have online access, the power of big data to analyze the vast amounts of information available from online learning, and the ability of machine learning technology to create adaptive, personalized learning environments at scale.

Online learning has the potential to provide education more affordably, but it also has the potential to improve access and quality.

Today, many online programs currently in place do not take advantage of the full potential of online technology to reduce costs and enhance learning outcomes.<sup>25</sup> But others, like Southern New Hampshire University and Arizona State University, are dramatically bending the cost curve of higher education.<sup>26</sup> These programs are also relentlessly and iteratively improving the quality of their online programs through internal R&D efforts.

Online learning has the potential to provide education more affordably, but it also has the potential to improve access and educational quality. Students typically left out of educational opportunities are far more likely to take advantage of online learning opportunities: older students and students with dependents have the highest rates of online learning adoption. Students over 30 are enrolled in exclusively online programs at three times the rate of traditional-aged students.<sup>27</sup> The flexibility to attend courses asynchronously allows students, especially working adults and parents, the ability to fit degree programs into their lives. As the economy becomes more dynamic, providing opportunities for working adults to quickly and effectively reskill is paramount to our economic competitiveness as a nation.

## Engaging the workforce: Competency-based education

Competency-based education is an exciting development in the pedagogy of higher education. Enabled by online technology, competency-based education is self-paced but requires students to progress through objective assessments of mastery in order to move through the coursework.<sup>28</sup> Students can take as long as they need to achieve mastery, in contrast to traditional programs which move through material at a fixed pace, irrespective of the comprehension or ability of the students in the course. Because competency-based education is designed with learning outcomes in mind, it can close what has been a persistent gap between academia and the needs of the workforce.<sup>29</sup>

One example that shows the potential of competency-based models in higher education is Western Governors University (WGU), founded in 1995.<sup>30</sup> WGU employs an online competency-based education model designed around the needs of working adults. WGU's model also demonstrates the potential of competency-based education to align with workforce needs. According to Lisa Raisor, director of curriculum for WGU's IT College, and Carlo Sapijaszko, curriculum program manager for the IT College, WGU engages deeply with employers before developing new majors in an effort to identify unmet demand for workers.<sup>31</sup> The curriculum design process is informed by program councils for each discipline, which include industry leaders and content experts.

# THREE RECOMMENDATIONS TO MEET 21ST-CENTURY NEEDS

As the proliferation of new approaches to reskilling and alternative credentials demonstrate, students—and their employers—are gravitating to a new breed of educational experiences that demonstrate strong return on investment. Colleges and universities could be filling this demand as well. But historically, regulatory structures have discouraged traditional institutions from developing new, innovative business models. Congress has a critical role to play in encouraging innovation and modernizing American higher education. Key priorities include:

## 1 Rethink regulation of online and competency-based education

Innovations in online and competency-based education have far outpaced the rules and regulations that govern them. The HEA’s definition of “distance education” dates from 1992, well before the online education market reached maturity. The definition unfortunately has not been an effective check against waste, fraud, and abuse, and it is far from reflective of what separates high-quality online programs from low-quality ones. Competency-based education has never been defined in the HEA, and as such has been a square peg in a round regulatory hole.

New definitions should aim to give institutions the flexibility to develop instructional models that take advantage of the potential of technology and are designed around the needs of the 21st-century student and workplace.

## 2 Reform accreditation: Focus on outcomes, not inputs

Within the context of Title IV’s language on program integrity, Congress should press accreditors to focus along a range of critical outcome measures appropriate to each school’s mission: learning assessments, graduation rates, student employment outcomes, salary growth, ability to repay student loans, return on investment (for both students and taxpayers), and student satisfaction after graduates have had time out of school to evaluate the experience.

Accreditors should be encouraged to focus primarily on whether institutions are creating value for students. Those that do so should be given wide latitude in how they do so. Institutions that do not create value for students should be heavily scrutinized, and the peer-review nature of accreditation could become a creative, collaborative tool to improve low-performing schools. Moving to assess the quality of all programs by focusing on outcomes—learning assessments, graduation rates, student employment outcomes, ability to repay loans, and student satisfaction—should level the playing field for online and competency-based education.

## 3 Improve the basic data infrastructure of higher education

The true intent of the HEA cannot be accomplished so long as information on student outcomes remains hidden. No market can function rationally without information on the value consumers do or do not reap. Moving to an individual student record could shed much-needed light on an industry that is bringing in half a trillion dollars each year and spending it in the dark. Collecting data at the student level, rather than at the level of the institution, could create tremendous benefits to institutions and regulators seeking to track whether their innovations are effectively moving the needle on student outcomes.

# Innovation in Higher Education

## HIGH COST, LOW COMPLETION, WEAKENED VALUE

**\$1.4 TRILLION**

Outstanding student loan debt

**8.5 MILLION**

Borrowers in default on their student loan



**11%**

Increase in higher education institutions on the Department of Education's "financially troubled" list in 2015



**35%**

Four-year completion rate at public schools

**22%**

Four-year completion rate at public schools for black and Hispanic students



**37%**

Employers who think students are well prepared for the workforce

## HIGHER EDUCATION IS FAILING STUDENTS



A broken business model



A broken regulatory system



A broken data infrastructure

## CONGRESS CAN BRING HIGHER EDUCATION INTO THE 21ST CENTURY



### Develop a regulatory framework to support online and competency-based education.

Congress should give institutions the flexibility to develop instructional models that take advantage of technology and are designed around the needs of the 21st-century student and workplace.



### Reform accreditation to measure outcomes, not inputs.

Accreditors should be encouraged to focus primarily on institutions' effectiveness in creating value for students, including employment upon graduation and tuition as a percentage of salary.



### Improve the data infrastructure.

Transitioning to an individual student record would enable institutions and regulators to track whether innovative efforts are moving the needle on student outcomes.

# NOTES

1. Carl Benedikt Frey and Michael A. Osborne, “The Future of Employment: How Susceptible Are Jobs to Computerisation?” Oxford Martin School, University of Oxford, September 13, 2013, [http://www.oxfordmartin.ox.ac.uk/downloads/academic/The\\_Future\\_of\\_Employment.pdf](http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf).
2. There is also growing evidence, however, that the U.S. preeminence in higher education is slipping. Recent global rankings show that U.S. institutions have been displaced as the top No.1 and No. 2 schools; the number of U.S. institutions in the top 100 has also fallen as other nations, notably China, invest in higher education. See Douglas Belkin, “U.S. Colleges Slip in Global Rankings,” *The Wall Street Journal*, September 5, 2017, <https://www.wsj.com/articles/u-s-colleges-slip-in-global-rankings-1504616400>.
3. National Center for Education Statistics, “Table 330.10. Average undergraduate tuition and fees and room and board rates charged for full-time students in degree-granting postsecondary institutions, by level and control of institution: 1963-64 through 2014-15,” U.S. Department of Education, *Digest of Education Statistics: 2015*, accessed October 12, 2017, [https://nces.ed.gov/programs/digest/d15/tables/dt15\\_330.10.asp](https://nces.ed.gov/programs/digest/d15/tables/dt15_330.10.asp).  
  
See also U.S. Bureau of the Census, “Median Family Income in the United States [MEFAINUSA646N],” accessed October 12, 2017, from FRED, Federal Reserve Bank of St. Louis, <https://fred.stlouisfed.org/series/MEFAINUSA646N>.
4. National Center for Education Statistics, “120 Years of American Education: A Statistical Portrait,” U.S. Department of Education, January 1993, <https://nces.ed.gov/pubs93/93442.pdf>.
5. Andrea Koncz, “Salary Trends through Salary Survey: A Historical Perspective on Starting Salaries for New College Graduates,” National Association of Colleges and Employers, *NACE Journal*, August 2016, <http://www.nacweb.org/job-market/compensation/salary-trends-through-salary-survey-a-historical-perspective-on-starting-salaries-for-new-college-graduates/>.
6. Lyndon B. Johnson, “603-Remarks at Southwest Texas State College Upon Signing the Higher Education Act of 1965,” November 8, 1965, accessed October 16, 2017, <http://www.presidency.ucsb.edu/ws/?pid=27356>.
7. National Center for Education Statistics, “Table 330.10.”
8. Ryan D. Hahn and Derek Price, “Promise Lost: College-Qualified Students Who Don’t Enroll in College,” Institute for Higher Education Policy, November 2008, <http://www.ihep.org/sites/default/files/uploads/docs/pubs/promiselostcollegequalrpt.pdf>.
9. National Center for Education Statistics, “Table 105.50. Number of educational institutions, by level and control of institution: Selected years, 1980-81 through 2013-14,” U.S. Department of Education, *Digest of Education Statistics: 2015*, accessed October 16, 2017, [https://nces.ed.gov/programs/digest/d15/tables/dt15\\_105.50.asp](https://nces.ed.gov/programs/digest/d15/tables/dt15_105.50.asp). See also Scott A. Ginder, Janice E. Kelly-Reid, and Farrah B. Mann, “Postsecondary Institutions and Cost of Attendance in 2016-17; Degrees and Other Awards Conferred, 2015-16; and 12-Month Enrollment, 2015-16: First Look (Preliminary Data),” National Center for Education Statistics, U.S. Department of Education, July 2017, <https://nces.ed.gov/pubs2017/2017075.pdf>.
10. “Heightened Cash Monitoring,” Federal Student Aid, an Office of the U.S. Department of Education, accessed October 16, 2017, <https://studentaid.ed.gov/sa/about/data-center/school/hcm>.
11. National Center for Education Statistics, “Table 326.10. Graduation rate from first institution attended for first-time, full-time bachelor’s degree-seeking students at 4-year postsecondary institutions, by race/ethnicity, time to completion, sex, control of institution, and acceptance rate: Selected cohort entry years, 1996 through 2009,” U.S. Department of Education, *Digest of Education Statistics: 2016*, accessed October 16, 2017, [https://nces.ed.gov/programs/digest/d16/tables/dt16\\_326.10.asp](https://nces.ed.gov/programs/digest/d16/tables/dt16_326.10.asp).

12. Erin Dunlop Velez and Jennie H. Woo, “The Debt Burden of Bachelor’s Degree Recipients,” *Stats in Brief*, National Center for Education Statistics, U.S. Department of Education, April 2017, <https://nces.ed.gov/pubs2017/2017436.pdf>. See also Meta Brown, Andrew Haughwout, Donghoon Lee, Joelle Scally, and Wilbert van der Klaauw, “Looking at Student Loan Defaults through a Larger Window,” *Liberty Street Economics* (blog), Federal Reserve Bank of New York, February 19, 2015, [http://libertystreeteconomics.newyorkfed.org/2015/02/looking\\_at\\_student\\_loan\\_defaults\\_through\\_a\\_larger\\_window.html](http://libertystreeteconomics.newyorkfed.org/2015/02/looking_at_student_loan_defaults_through_a_larger_window.html).
13. Fifty-eight percent of employers surveyed see a need for colleges to improve in order for graduates to succeed in entry-level positions at their companies; 64 percent see them as needing to improve so that graduates can move into more advanced positions. See Hart Research Associates, “Falling Short? College Learning and Career Success,” January 20, 2015, <https://www.aacu.org/sites/default/files/files/LEAP/2015employerstudentsurvey.pdf>.
14. Karsten Strauss, “These Are the Skills Bosses Say New College Grads Do Not Have,” *Forbes*, May 17, 2016, <https://www.forbes.com/sites/karstenstrauss/2016/05/17/these-are-the-skills-bosses-say-new-college-grads-do-not-have/#59dece435491>.
15. National Center for Education Statistics, “Postsecondary Institution Revenues,” *The Condition of Education*, U.S. Department of Education, accessed October 16, 2017, [https://nces.ed.gov/programs/coe/indicator\\_cud.asp](https://nces.ed.gov/programs/coe/indicator_cud.asp).
16. As of July 1, 2017, the Federal Reserve reported \$1,486,213,900 in student loans outstanding. Board of Governors of the Federal Reserve System, “Student Loans Owned and Securitized, Outstanding, Q3, 2017,” accessed November 22, 2017, from FRED, Federal Reserve Bank of St. Louis, <https://fred.stlouisfed.org/series/SLOAS>.
17. National Center for Education Statistics, “Postsecondary Institution Revenues.”
18. For example, see “Policy Book,” Higher Learning Commission, November 2017, [http://download.hlcommission.org/policy/HLCPolicyBook\\_POL.pdf](http://download.hlcommission.org/policy/HLCPolicyBook_POL.pdf).
19. National Center for Education Statistics, “Postsecondary Institution Revenues.”
20. National Center for Education Statistics, “Table 303.10. Total fall enrollment in degree-granting postsecondary institutions, by attendance status, sex of student, and control of institution: Selected years, 1947 through 2023,” U.S. Department of Education, *Digest of Education Statistics: 2013*, accessed October 16, 2017, [https://nces.ed.gov/programs/digest/d13/tables/dt13\\_303.10.asp](https://nces.ed.gov/programs/digest/d13/tables/dt13_303.10.asp).
21. Paul Fain, “More Than a Third of College Students Transfer,” *Inside Higher Ed*, July 8, 2015, <https://www.insidehighered.com/quicktakes/2015/07/08/more-third-college-students-transfer>.
22. Marcella Bombardieri, “Hidden in Plain Sight: Understanding Part-Time College Students in America,” Center for American Progress, September 6, 2017, <https://www.americanprogress.org/issues/education/reports/2017/09/06/438341/hidden-plain-sight/>.
23. Alana Dunagan, “College Transformed: Five Institutions Leading the Charge in Innovation,” Clayton Christensen Institute, February 2017, <https://www.christenseninstitute.org/wp-content/uploads/2017/02/College-transformed.pdf>.
24. “Getting Connected: A Brief History of Online Education,” Online Schools Center, accessed October 16, 2017, <https://www.onlineschoolscenter.com/history-of-online-education/>.
25. Alana Dunagan and Julia Freeland Fisher, “Why Higher Ed Loves Hybrid Innovations,” *Inside Higher Ed*, March 29, 2017, <https://www.insidehighered.com/digital-learning/views/2017/03/29/why-higher-education-institutions-love-hybrid-not-disruptive>.
26. Alana Dunagan, “How to Flatten the Cost Curve of College,” *The Chronicle of Higher Education*, July 2, 2017, <http://www.chronicle.com/article/How-to-Flatten-the-Cost-Curve/240486>.

27. National Center for Education Statistics, “Table 311.22. Number and percentage of undergraduate students taking distance education or online classes and degree programs, by selected characteristics: Selected years, 2003-04 through 2011-12,” U.S. Department of Education, *Digest of Education Statistics: 2015*, accessed October 16, 2017, [https://nces.ed.gov/programs/digest/d15/tables/dt15\\_311.22.asp?current=yes](https://nces.ed.gov/programs/digest/d15/tables/dt15_311.22.asp?current=yes).
28. “What is Competency Education?” CompetencyWorks, accessed October 16, 2017, <https://www.competencyworks.org/about/competency-education/>.
29. Michelle R. Weise and Clayton M. Christensen, “Hire Education: Mastery, Modularization, and the Workforce Revolution,” Clayton Christensen Institute, July 2014, <https://www.christenseninstitute.org/wp-content/uploads/2014/07/Hire-Education.pdf>.
30. WGU is affordable, with an average cost-to-degree of \$15,000, but it also has a track record of demonstrably increasing the salaries of its graduates. “Tuition & Financial Aid,” Western Governors University, accessed October 16, 2017, [https://www.wgu.edu/tuition\\_financial\\_aid/overview](https://www.wgu.edu/tuition_financial_aid/overview).

This focus on creating value for students has also created value for taxpayers: in recently released student loan cohort default rates (CDR), WGU’s CDR of 4.6 percent is significantly less than half of the national average of 11.5 percent. “Official Cohort Default Rates for Schools,” Federal Student Aid, an Office of the U.S. Department of Education, accessed October 16, 2017, <https://www2.ed.gov/offices/OSFAP/defaultmanagement/cdr.html>.

31. Lisa Raisor and Carlo Sapijaszko, interview by Alana Dunagan and Richard Price, August 11, 2017.



## About the Institute

The Clayton Christensen Institute for Disruptive Innovation is a nonprofit, nonpartisan think tank dedicated to improving the world through Disruptive Innovation. Founded on the theories of Harvard professor Clayton M. Christensen, the Institute offers a unique framework for understanding many of society's most pressing problems. Its mission is ambitious but clear: work to shape and elevate the conversation surrounding these issues through rigorous research and public outreach.

## About the author



Alana leads the Institute's higher education research and works to find solutions for a more affordable system that better serves both students and employers. Her research includes studying business model innovations, public policies, and investment strategies that can give rise to new and sustainable postsecondary models. Alana holds a BA in Economics and Political Science from Macalester College and an MBA from the Harvard Business School.

