



Special Report

A quick look at 2019 trends in higher education for early career academics

Hillary Hutchinson

Also by Hillary Hutchinson

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EXECUTIVE SUMMARY

Looking into the near future, there are a few things that can be said about current trends and some of the most likely developments in the area of higher education pertinent to early career academics. These are summarized below.

- Challenges to higher education's current structure fueled by a public perception of its reduced usefulness in gaining well-paid employment. A shift in student demographics resulting in more female to male students may contribute to the devaluation of a college degree, as has happened in other areas which have seen this gender shift.
- New legislative initiatives offered by two opposing political parties may alter the governing framework previously provided under the Higher Education Act of 1965. The Republican proposal (PROSPER) seeks to roll back protective regulations for students and support occupational education by for-profit institutions. The Democratic proposal (AHA) seeks to continue expanding access to education by reducing financial barriers and maintaining regulatory protection.
- Smaller institutions facing a real existential threat of financial collapse looking for alternative funding structures to stay alive. Some of the proposed structures are new types of mergers between public and private institutions and new forms of cooperation through nontraditional consortium arrangements. The demand for academics to find outside funding will continue to increase, even as available public money shrinks.
- Traditional career pathways in to a career higher education continue to erode. Contingent faculty constitutes at least 70% of the workforce, and the number of tenured faculty continues to decrease. The number of faculty even on a tenure track may be as low as 10% in the near future, with most hired on a contingent contract basis.
- Shifting instructional models include increased online course offerings by both traditional and nontraditional educational institutions, and a move toward "stackable credentials" to provide employers proof of continuing professional education after graduation in specific skill areas without the need for higher level degrees.
- Open access and online journals as well as the need to stretch funding dollars through collaboration are changing scholarly publication. Fewer traditional peer-reviewed journals will likely result in fewer published academic articles, and may limit the ability of early career academics to build a publication record necessary to obtaining outside funding.
- Advances in mobile technology, artificial intelligence, and virtual reality are already impacting the delivery of higher education, and may soon change the form of interface between students and faculty. Possibilities include more immersive and interactive software as well as the use of chatbots to handle routine requests and information. Increased mobility may impact both where students learn and where faculty teach in the physical world.

PREFACE

Graduate students and early career academics are often so busy finishing their dissertations and simultaneously looking for work, that they frequently do not have time to consider the larger context for their work in academia. This special report provides a brief look at current changes in the landscape of higher education in the US, perhaps better described currently as the terra-forming of higher ed. Most of these trends discussed are also impacting higher education elsewhere in the world.

To set the stage, here is a very broad interpretive arc of higher education in the United States.

The seventeenth century mission was to create a literate elite class for clergy and governance. Late in the eighteenth century, the ideology shifted the educational mission to creating literate participants in the experiment of democracy, generating a slightly larger community of graduates through a roughly common curriculum based in the humanities. After the Civil War, in a large agrarian economy, the idea of education as necessary for the well-educated participatory citizen continued to expand and new land grant institutions supported the development of applied research in agriculture and science.

At the end of the nineteenth century, with the advent of the manufacturing industrial economy, both private and public institutions of higher education supported research in the humanities, science, and technology as the mission became one of creating literate productive citizens for employers. A college education remained available only to a small elite segment of society. In the twentieth century, after World War II and the advent of the GI Bill, one significant barrier to college education was lowered as individual costs were reduced through government funding. Higher education expanded enormously to serve this growing population, providing increasing access to a broad-based secular education for large segments of the public, and an increased emphasis on teaching and research in science, engineering and technology. At this point, the college degree was considered necessary to entering the economic middle class, and the emphasis on the productive citizen of a particular democracy remained.

Now, at the outset of the twenty-first century, with the advent of the post-industrial knowledge based global economy, various forces are colliding including a public perception that a college degree no longer offers the promise of enhanced employment opportunities resulting in a seismic shift in how and what knowledge should be provided by higher education with continuing changes in technology. The system has become increasingly fragmented as the previous support of education as a public good dissolves and funding disappears resulting in increased student debt. There is less emphasis on developing a “productive citizen” and more emphasis on how an education will create economic value for the degree holder. It remains to be seen what can be said about the overall arc of higher education through the remainder of this century.

If you are an early career academic, newly minted PhD, or soon-to-be minted PhD, this report is meant to help you identify the trends that may impact you in the near future. This is by no means meant to be a definitive guide. It’s simply a quick look at some current trends already impacting US higher education. The world of academia has the most rigid (and old) set of requirements for promotion of any industry sector I know, yet the approach to the delivery of higher education has been the same for decades, with professors in a classroom conveying content to students. This model is changing now. Some of these changes include more access to electronic resources and

Contact information

newly evolving forms for electronic publications, far beyond the traditional classroom experience of lectures, testing, and grading. I hope this short work will provide some illumination on those anticipated near-term changes.

This paper is available for download as a PDF, with hotlinks. You may also refer to all referenced links with the full internet address in the Endnotes.

Contact Me

Contact me by emailing hillary@transitioningyourlife.com with your suggestions, concerns, or desire to connect for a complimentary session. You are also welcome to telephone 843-225-3224 for a complimentary session, or sign up for a session by going to my [online calendar](#).

The future will be determined in part by happenings that it is impossible to foresee; it will also be influenced by trends that are now existent and observable.

~ Emily Greene Balch (from her Nobel Peace Prize acceptance speech, December 10, 1946)

2019 TRENDS IN HIGHER EDUCATION

Some of the most recent trends affecting new PhD graduates and early career academics in higher education include the low probability of being offered a tenure-track job, the reality that tenure in higher education is declining combined with ever-increasing numbers of contract workers and adjuncts making this an increasingly difficult arena in which to work. There are also significant changes in instructional delivery, mobile technology, scholarly publishing, and societal pressures stemming from the current political climate denigrating the usefulness and purpose of higher education. This special report is meant to provide a quick look at some of the most recent available information for the US on these selected topics.

Overview

There are some disturbing trends undermining higher education in the United States in both public and private institutions. In November 2017, according to statistics from the State Higher Education Executive Officers Association, published in the [Washington Post](#), “Adjusted for inflation, states spent \$5.7 billion less on public higher education [in 2016] than in 2008, even though they were educating more than 800,000 additional students.”¹ As we move to the end of the second decade of the 21st century, clearly old employment models are changing, including an ever-greater use of contract-based employment (adjuncts) and technology-driven delivery systems to meet basic institutional needs.

In 1994, just as the market for tenured academics began to contract, Congress allowed the special exemption for colleges and universities enforcing [mandatory retirement](#) of professors by age 70 to expire. Unsurprisingly, many professors who no longer had to retire chose not to do so. Reasons for staying on varied, from lack of financial means to a desire to continue a productive research life, despite a continued drop in funding for all types of projects.

One effect has certainly been to lower the number of new faculty entering institutions² of higher education. Another has been the increased work load with fewer resources for any career academic across the board. Professors in the humanities and the sciences are asked to fund ever more of their own research through research grants. Faculty must take on additional committee assignments such as curriculum revision or other administrative tasks when there are fewer people to share the workload.

The time and effort required for this reduces available preparation and instructional time for students, and adds to the stress of an already stressful job. Additionally, as Joel Norris noted: “As [competition for grant money](#) increases, success rates decline, and investigators respond by submitting a greater number of proposals. This, in turn, requires a greater number of mostly unpaid peer reviewers, who are drawn from the same community as the proposers. Universities respond by adding staff to help investigators develop bigger and more competitive proposals. The end result

is that the same number of awards is given, but much more effort is wasted in the preparation and evaluation of meritorious proposals that are not funded. As faculty members spend more time writing proposals, they have less time available for teaching, service, and actual research.³

Status of the Higher Education Act

The growth in higher education began after the end of World War II. At that time, a massive influx of students began attending institutions of higher education as returning soldiers exercised their GI Bill benefits (officially the Servicemen's Readjustment Act of 1944), pushing the need for many more professors. The population bulge of the baby boomers (born between 1946 and 1964) hit the college market a generation later and continued the professorial hiring trend. So, until the 1970s, if you had your PhD in hand, or were ABD and pretty near finishing, you would have found landing a job as a professor relatively easy. You would also have found it relatively easy to move laterally, with or without tenure.

The framework for the current structure of US higher education was crafted in the 1960s with the passage of the original Higher Education Act of 1965 (HEA). HEA [became law](#) “to strengthen the educational resources of our colleges and universities and to provide financial assistance for students in post-secondary and higher education.”⁴ The HEA has been reauthorized nine times, with the largest revisions in 2008. The Act undergirds many institutions of higher education in the US. It effectively serves to increase federal funding for universities by creating many student scholarship programs, loan programs for low-income students, and other financial aid like federally subsidized work-study programs. For example, the [Office of Federal Student Aid](#) now accounts for roughly \$120 billion in federal grants, loans and work study students with 13 million students and roughly 6,000 participating schools.⁵ Though the act was set to expire in 2013, it has continued to be reauthorized with all other contingent programs in the continuing budget resolutions of the federal government.

Since the act was formally revised over a decade ago, the [demographics of students](#) attending institutions of higher education have substantially shifted. No longer does the relatively young high school graduate go directly to college and attain a Bachelor's degree in four years. As Former Representative George Miller and Julie Peller write in an opinion piece for *The Hill*:

Working adults are enrolling in institutions of higher education in a labor market where postsecondary credentials are fast becoming table stakes for economic mobility in our information economy. Nearly 60 percent of students now work while in college, and 26 percent have children [4.3 million; of those 2 million are single mothers]. About 7.8 million students attend college part-time, as they balance their education with work and family obligations, or simply cannot afford the costs of being a full-time student.

One-quarter of today's students -- 6.3 million -- take at least one course online. That's more than 2 million more students than a decade ago.⁶

Two proposed new versions either replacing or changing the HEA currently under consideration in the US are the [Promoting Real Opportunity, Success and Prosperity through Education Reform \(PROSPER\) Act](#) (HR 4508) and the [Aim Higher Act \(AHA\)](#) (H.R. 6543).⁷ PROSPER was introduced by Republicans and advanced to the floor of the US House in December 2017. The Aim Higher Act was introduced by Democrats in January 2018, and has gone nowhere to date.

[Most observers feel](#) neither bill is likely to pass without a lot of revisions, and that nothing is likely to be in effect until at least 2020.⁸

[Provisions of the PROSPER Act include](#) rolling back regulations on for-profit colleges, preventing the US Department of Education from taking certain actions if vocational programs harm students, and increasing apprenticeship programs and other alternatives to traditional college education. It includes provisions for streamlining student aid and caps on amounts that parents and graduate students can borrow, as well as rolling back various loan repayment programs. It would attach graduation-rate outcomes for minority-serving institutions receiving federal funds.⁹ Finally, it also aims to cut Title IX provisions, originally set up to level the playing field for men and women sports programs, which would have the effect of making institutions' handling of [accusations of sexual assault](#) more difficult.¹⁰ Passage of the PROSPER Act indicates a fundamental overhaul of the views concerning educational access represented by the earlier HEA and reauthorizations.

The alternative bill, the [Aim Higher Act](#), aspires to simplify student financial categories for loans, update several federal grant programs, move Title IV compliance reviews into the US Department of Education, and identify ways to help undocumented students, Native Americans, and underserved communities in US territories.¹¹ The act also seeks to protect students from nontraditional providers of federal student aid, and to prevent poorly performing institutions from receiving federal funding.¹² Finally, the bill purports to create free tuition for two years of community college, increase the annual Pell grant maximum by \$500, and retain the TEACH grant program for students prepared to trade aid with a promise to teach.¹³

For early career academics, it's important to recognize how Titles I through VIII of the HEA underpin many aspects of US higher education institutions. Under PROSPER, some of the changes proposed to Title I include denying institutions funding if they do not certify "free speech" areas for students, though what exactly this means and for whom, is still being debated. Programs or courses discussing the Middle East conflict could find funding and hiring limited if found to be "biased." Some of the changes proposed to Title III demand "career readiness" results, with particular percentages for completion of degree programs in order to continue receiving federal funding. Changes to Title VI include elimination of the Undergraduate International Studies and Foreign Language program, the Technological Innovation and Cooperation for Foreign Information Access program, the American Overseas Research Centers, the Science and Technology Advanced Foreign Language Education Grant program, and the Institute for International Public Policy. All these programs have traditionally been large employers of language professors inside specialized centers at universities, and connected to interdisciplinary programs in traditional instructional areas in the humanities and sciences.

If the PROSPER Act passes, there would be a fundamental overhaul of the views concerning educational access represented by the earlier HEA and reauthorizations. It would dampen the ability of colleges to hire permanent staff and instructors due to reduced federal dollars.¹⁴ The [bill passed out of the House Education and Workforce Committee](#) in February 2018, on a party line vote of 23 (Republican) to 17 (Democrat).¹⁵ On the other hand, federal dollars could potentially increase with passage of the Aim Higher Act. At this writing, what changes will be made to either proposed piece of legislation is unclear.¹⁶ A [new version of the Aim Higher Act](#) was introduced by Democrats on July 24, 2018 and was referred to the House Education and Workforce committee on July 26, 2018. There is very little information available at the present time concerning the rewritten version of this bill.¹⁷

Current Direction of Education Department Policies. Under Secretary of Education Betty DeVos, there are three major policy shifts that will impact higher education depending on how they play out: Phasing out predatory behavior protections for students, ending the gainful employment rule, and revising Title IX sexual assault guidelines previously in place. As writer Andrew Kreighbaum explained, “The borrower-defense rule was written to provide a single federal standard for loan forgiveness claims by defrauded students after the collapse of Corinthian Colleges. Gainful employment was crafted to try to ensure that career education and for-profit programs aren’t producing graduates with more debt than they can repay.”¹⁸ The Department of Education has now said it will [miss a November 1, 2018 deadline](#) for revision of both the borrower protection and the gainful employment rules, meaning no new rules could be implemented until July 2020 and making it unclear if the current administration can continue to block application of the earlier rules.¹⁹

These three trends are more fully described below:

First, current policies of the Education Department have [shifted to support of for-profit colleges](#) whether or not they engage in predatory behavior. Secretary DeVos has been working with the support of the for-profit education sector and congressional Republicans to stop the implementation of rules crafted in the Obama Administration to protect students, but has been delayed in part by the need to review over 38,000 submitted comments.²⁰ A [Federal District Court ruled against Secretary DeVos](#) saying in a 57-page opinion that setting aside rules put in place by Congress in 1994 was an example of [“arbitrary and capricious decision-making.”](#)²¹ Those rules were crafted as a result of the Federal government’s involvement in providing student loans to those wishing to attend for-profit institutions.

Secretary DeVos seems to believe private for-profit educational institutions are unfairly targeted for predatory practices. She [disbanded a team charged with investigating abusive practices](#) related to advertising, recruitment and job placement claims, leaving only three employees and charging them to focus instead on student loan forgiveness applications. Investigations into abuses by DeVry University (now Adtalem Global Education), Bridgepoint Education and Career Education Corporation were all closed.²² [College fraud claims increased](#) by 29% in 2017, and 98% of all complaints were directed at for-profit colleges.²³ The Century Foundation’s research indicates “The three nonprofit schools with the largest number of fraud claims are colleges that converted from for-profit several years ago but, evidence indicates, never actual shifted control from the owners to disinterested trustees.”²⁴

Second, the Department of Education is attempting to end the “gainful employment” (GE) rule particularly aimed at career education programs who overpromise students on work expectations following graduation from the for-profit entity, leaving them with large college debts to pay. A proposed rule published in the [Federal Register](#) on August 14, 2018 would rescind the GE rule on the basis of new research since the original enactment of those rules.²⁵ The public is invited to comment “on whether they should” require that all institutions disclose information, such as net price, program size, completion rates, and accreditation and licensing requirements, on their program web pages, or if doing so is overly burdensome for institutions.”²⁶ An [analysis by NASPA](#) notes that contrary to the intent of the rule to reduce burdensome data collection, it might actually result in increased requirements for data collection, in itself highly problematic due to a ban on student-level data collection.²⁷ Since 2015, data on information for graduation rates is only

collected in aggregate form under a program-level only for students receiving federal aid or a federal loan, so it also does not account for all potentially impacted students.

Third, there are proposed [changes to the rules on accusations of sexual assault](#) and how colleges should handle those accusations under Title IX. Many schools have adopted rules to require reporting of allegations of sexual misconduct; the intent of the proposed rules appears instead to instruct colleges to respond to allegations of sexual misconduct only when a formal complaint is filed with the officials in charge of Title IX on any particular campus.²⁸ Many observers feel that the primary purpose of the rule change is [to protect the accused](#) at the expense of the accuser.²⁹ This observation has been fueled by meetings of Secretary DeVos with [“men’s rights’ groups”](#) such as the National Coalition for Men (NCFM).³⁰ The emerging proposed rules would be the [first actual regulations under Title IX](#).³¹ In the meantime, college officials have been stymied by a lack of clear direction since the Education Department [rescinded the Obama Administration’s “Dear Colleague” letter](#) that had served colleges and universities as guidance in these matters.³²

Changing Perceptions of Higher Education

Attitudes toward higher education have an impact on everyone connected to it, from students, parents, professors, administrators, and researchers. It appears that in the United States, a real philosophical shift has taken place over the past fifty years constricting funding and affecting the type and number of hires in both public and private institutions. Despite the fact that most academics actually want to connect their research to the public (though they may find translating research results into digestible sound bites difficult), the ivory tower metaphor disparages academia as a place to retreat for intellectual pursuits. Academia is currently perceived by the public as completely out of touch with everyday Americans, part of the cultural zeitgeist that has recently engulfed the United States. Gallup has recently reported a [significant drop in confidence](#) around higher education from 57% in 2015 to 48% in 2018, regardless of party affiliation.³³ Public perceptions of academics’ inefficacy clearly affect those seeking a career at institutions of higher education, as well as the available money for funding academic positions.

In *The great mistake: How we wrecked public universities and how we can fix them*, Christopher Newfield argued that instead of emphasizing a broadly accessible, high-quality education, the emphasis has shifted to highlighting the economic advantages for an individual’s occupation after graduation.³⁴ He says many of the assumptions held by a variety of stakeholders with regard to public colleges are backward—that the lack of support for public institutions has destabilized the earlier model, increased student debt, left graduating students with only limited learning, and lost support for higher education’s research initiatives which cost more to administer than generally recognized by the general public. In [an interview](#) with Lee Gardner of *The Chronicle of Higher Education*, Newfield said:

...we as a society are avoiding talking about the thing that has made the big difference in reducing higher education’s effectiveness. And that is the relative poverty of public colleges. Not compared to other countries, but compared to what we used to have.³⁵

Another philosophical piece examining the impact of available monies argues that the biggest needs for American universities are guaranteed academic freedom for both teaching and research and to be “reliably funded.” In an interview about his book, *Wisdom’s workshop: The rise of the modern university*, Jim Axtell said, [“The most American aspect of our universities is public](#)

[service](#), beginning well before the federal funding of the land-grant universities in 1864.”³⁶ The lack of funding currently is an enormous issue, and a difficult one to raise with legislators who frequently rely on cutting money to state institutions as a way to decrease state spending budgets. Clearly, less available capital pushes against hiring additional faculty or replacing faculty when they leave, unless you are at an institution with a large endowment that can be used for faculty salaries. You can look up some of the numbers at [Inside Higher Ed's Capital Campaigns database](#).³⁷ However, even those monetary sources of funding are under assault, with [a new 1.4-percent excise tax](#) as of January 2018.³⁸

According to [a New America survey](#) of 1,600 Americans conducted in 2017, only 25% think higher education is currently functioning well, though 75% still believe a college degree helps with employment opportunities.³⁹ As reported by *The Chronicle of Higher Education*, [the most positive opinions in this survey](#) related to the role of community colleges in higher education, with 80% of respondents answering that community colleges contributed to a strong work force.⁴⁰ A large number of articles have been written on whether a bachelor's degree is worth the cost. For the most part, US public opinion still suggests the belief that college is worth the cost, though that perception could be changing, as student debt while earning a degree continues to mount. In July 2018, Columbia University's Teacher College released the results of [a public opinion poll of 3,000 adults](#) asking whether or not public investment in higher education was a good investment. Forty-four percent responded it was an excellent investment; 32%, a good investment; 17%, a fair investment; and 7%, not a good investment.⁴¹ Broad public support for higher education remains when it concerns one's own children.

Financial Implications

Overall, the financial future for traditional higher educational institutions is [gloomy](#). Distinguished Professor Emeritus of Economics at Ohio University and Director of the Center for College Affordability and Productivity, Richard Vedder, predicted 500 US colleges will close in the next decade. Undergraduate enrollment continues to decline. In the northeast region of the US, the *Boston Globe* reported that of 118 four-year private colleges, 20% of those colleges have had an [enrollment drop](#) of at least 10% over the past 20 years.⁴²

In January 2018, in a *Chronicle of Higher Education* article about the financial problems of small schools, Scott Carlson wrote:

For many years now, tuition-dependent institutions — notably small private colleges and regional public universities — have grappled with [literally] existential questions. Many find themselves in a difficult, complex market, with rising costs in operations, pressure to keep tuition down, increasing competition, an insufficient supply of traditional-age students, and national doubts over the value of college.⁴³

“S&P [Standard and Poor's] Global Ratings believes institutions with limited flexibility, whether that be in programming, financial operations, enrollment, resources, or student draw, could face credit pressure in the upcoming year,” [analysts for the rating agency wrote](#) on January 22, 2018, as reported by the *Chronicle of Higher Education*.⁴⁴ S&P specifically cited the recent federal tax overhaul with its 1.4 percent excise tax on endowments and the uncertainty surrounding the actual financial effect on institutions. “Whatever the magnitude,” the analysts expect it to be “negative in direction”⁴⁵ with “disparity between student expectations and [their] willingness to pay”⁴⁶ for

schooling, particularly damaging midlevel institutions. S&P's outlook aligns with that [Moody's Investors Service](#), a credit-rating agency that changed its outlook for the education sector in December 2017 from "stable" to "negative."⁴⁷ In a separate analysis, Moody's indicated that roughly one in five small private colleges are ["under fundamental stress."](#)⁴⁸ In March 2018, 28 states, or more than half, relied on tuition to fund public institutions, in a [continuing decline of higher education funding](#) by state legislatures.⁴⁹

And yet, Scott Carlson declares in a 2017 report by the *Chronicle of Higher Education*, titled *The future of work: How colleges can prepare students for the jobs ahead*, "The future of the American economy—and the jobs that will drive it—is inextricably tied to higher education."⁵⁰ [The report](#) predicted a US labor market needing people with at least 6,190,000 graduate and 13,510,000 undergraduate degrees by 2024.⁵¹ Unfortunately, the report did not tackle the issue of how many advanced degree holders will be needed in higher education to train that workforce, where they will get their degrees, or even what kind of degrees are going to be needed.

A very real question exists as to whether too many PhDs are being produced for the current number of available jobs in traditional academic fields. Getting current professors, departments and university administrations to acknowledge the realities of the shifting sands of academia is extremely difficult, in part because no one can predict for certain what knowledge will be needed in the future. It's far easier to focus on the near term, acting as if the way academic work has been performed for literally centuries will continue to look the same moving forward. It will not.

The Role of Tenure

Fewer and fewer schools of any size are offering tenure-track jobs. You may have heard some the statistics like these:

No [more than one-third](#) of all college and university faculty members are tenured. The reason? More and more colleges are relying on part-time or temporary nontenure-track faculty to teach undergraduates—part-timers constituted about 38 percent of the professoriate in 1987 and grew to 43 percent in 1992.⁵²

By 2011, the number of non-tenured [teaching instructors had grown to roughly 70%](#), or three adjuncts for every four full-timers.⁵³ In the [fall of 2015, only a third](#) of faculty members at all colleges were tenured or on the tenure track.⁵⁴ Though there is some variation by field as to the numbers actually either on a tenure-track or in a tenured position, if you start examining the roughly 30% found in full-time jobs, nearly half of those are actually contractual positions.

No discussion of trends in higher education would be complete without a discussion of the [ever-shrinking professoriate](#).⁵⁵ "From 1975 to 2011, the number of tenure track and tenured professors increased by only 35.6 percent nationwide, [while the number of part-time professors increased](#) by 305.3 percent"⁵⁶ or to reiterate [approximately 70%](#) of the total faculty providing instruction at nonprofit institutions in the United States.⁵⁷ It's generally perceived that part-time contract faculty are less costly than full-time faculty. Because the cost of hiring one full-time professor averages \$58,000 per year in the humanities, deans faced with a budget crunch are much more likely to fill classroom positions with adjunct labor roughly [averaging \\$3-4,000 per three-credit course](#).⁵⁸

The chances of even being offered a tenure track position or [getting tenure are continuing to decrease](#). In his posting on June 29, 2016, Jacques Berlinerblau, Director of the Center for Jewish Civilization at Georgetown University, wrote:

The likeliest future for tenure in the liberal arts is that everything will stay the same — and somehow gradually get worse. In 25 years, 10 percent or so of our Ph.D.s in the liberal arts will ride the tenure line. Thirty percent will hold full-time non-tenure-track positions — a category that has experienced a conspicuous growth spurt in recent years. The remainder will be adjuncts, exploited and expendable.

His shorthand for this situation is “10/30/60 (tenured/non-tenured/adjuncts)” as compared with a current breakdown of roughly “30/15/55.” He suggests the current numbers will be looked upon with nostalgia for the “Good Old Days” in the very near future.⁵⁹ Tenure-track and tenured positions are now the aberration.

Although I would argue that academia has always been based on a contingent labor market with professors and undergraduates reliant on the unpaid work of graduate students, there is now a wider understanding that the career academic work force is undergoing the same transformation to a gig economy model seen in other employment. This is sometimes referred to as the Wal-Mart approach, hiring many part-time workers without benefits and at a lower pay scale, rather than full-time employees with benefits, to keep employee costs down. In a *Chronicle of Higher Education Special Report* released February 2017, Katherine Morgan quoted [Rudy H. Fichtenbaum](#), Professor Emeritus of Economics at Wright State University, as saying, “Nearly three quarters of faculty members are contingent, most being part-timers earning little more than they would make serving fast food.”⁶⁰

Though a relatively new model for traditional white-collar jobs, [the gig economy](#) is evolving into two parts, one physically based (ride sharing apps, cleaning work), and the other web-based work not tied to a physical location (freelance editing, data entry, tutoring).⁶¹ Many gig workers are finding it difficult to make a living and may spend more time looking for work than actually working. The question is whether traditional academics will be forced into this kind of lifestyle without the support of a traditional institution for higher learning, if more and more educators are pushed into the gig economy. However, looking at the situation adjuncts currently face, you could say academics are already subject to the vicissitudes of the gig economy.

Many scholars have tackled the issue of how higher education has evolved to a more corporate model exploiting cheap labor. In discussing his book *Breakpoint: The Changing Marketplace for Higher Education* (2015),⁶² Jon McGee stated that universities must be understood as [“large scale business enterprises.”](#)⁶³ To do otherwise is to buy into a myth that colleges and universities do not operate in the same way as other big enterprises. The mission of higher education institutions may be vastly different than that of corporations, producing educated people rather than profits. In philosophical opposition to the “Wal-martization” perspective, McGee stated, “Scale and complexity are not synonymous with soullessness.”⁶⁴ Others would disagree: independent film producer Barbara Wolf has made two documentaries on the exploitation of adjunct professors, “Degrees of Shame” (1997) and “A Simple Matter of Justice” (2001). [Both films](#) demonstrate despite the increased numbers of adjuncts, there are huge problems in trying to make a living as contingent labor in academia. Frequently, adjuncts or part-time instructors try to scrape together a

living by teaching one or two courses in their field at two or more institutions, with all the commute time that entails. These economic issues are clearly not new.⁶⁵

Is tenure facing extinction? Before discussing whether or not tenure is facing extinction, let's take a quick look at what tenure is and the reasons behind its institutional adoption. The contemporary conception of tenure in United States higher education began with the [AAUP's 1940 Statement of Principles on Academic Freedom and Tenure](#), created in conjunction with the Association of American Colleges and Universities.⁶⁶ Contrary to common perception, tenure is *not* guaranteed employment for life but involves the right to due process in the event of a proposed dismissal. Faculty members are expected to act professionally and responsibly regarding controversial subjects, allowing discussion without inflaming emotions or encouraging antagonistic rhetoric in the classroom. The term, *academic freedom*, should not be translated as the right to say whatever one wants, but rather the freedom to pursue a research agenda based on the faculty member's own interests, rather than someone else's agenda. Tenure is meant to protect academics from dismissal based on unpopular research or findings, and to safeguard a faculty member's ability to undertake work that may take years to come to fruition. The ability to delve deeply and critically examine issues in one's field is supposed to be sacrosanct. Most challenges to dismissal of faculty with tenure revolve around this concern with ["due process"](#) and whether or not the dismissal is justified on non-academic grounds.⁶⁷

At least [one ethical argument for retaining tenure](#) has been espoused by Brian Leiter, Professor of Jurisprudence and Director of the Center for Law, Philosophy, and Human Values at the University of Chicago: to provide job security in the form of nonmonetary compensation, thus increasing productivity and engagement with the wider world. He wrote:

Long-term job security makes an enormous contribution to well-being and planning a life. There is a reason, after all, that economic recessions increase suicide rates. Employees who can be terminated only for cause are able to lead better lives—and they can also be better citizens, insofar as they can speak freely on matters of public concern without fear of losing their livelihood.⁶⁸

Outside of the world of education, however, many see tenure as a guarantee of employment, period. Critics see no justification for job protection in this economic sector when such protection does not exist for people in nearly every other sector of the economy. The negative perception is not helped when tenured professors stop teaching or producing but still collect their salaries. Resentment of perceived freeloaders runs high outside academia. Nor is the profession helped when faculty are not fired "for cause" (usually sexual misconduct) because the institution does not want the expense or notoriety that may result from a public dismissal. In higher education, as in the rest of public life, perception drives policy and funding.

Although college administrators say they value tenure, a majority expect to continue to depend on contract workers. [Scott Jaschik](#) summarized the results of *Inside Higher Ed's* "2017 Survey of College and University Chief Academic Officers," conducted in conjunction with Gallup. Some of the findings included:

- Seventy-one percent of provosts (more in the public than the private sector) reported that tenure "remains important and viable at my institution."

- At the same time, 61 percent of provosts would favor a system of long-term contracts over the current tenure system.
- Seventy-three percent also said that their institution relied "significantly" on non-tenure-track professors. And advocates for those off the tenure track frequently question the viability of the tenure system when smaller and smaller proportions of the faculty are on the tenure track.
- Most provosts don't think their reliance on adjuncts will change in the years ahead. If anything, they think their institutions will become more reliant on non-tenure-track faculty members.⁶⁹

This survey makes clear that the employment realities for professors belie the statements by university leaders on the value of tenure. As colleges and universities seek to become more nimble in the marketplace by redefining their missions to reflect specialty areas rather than the widest possible swath of majors, more and more university administrations will likely reduce tenured positions to keep expenses down. These reductions will continue to significantly impact those seeking tenure-track jobs.

While faculty members and college administrators generally express confidence in the central role tenure and academic freedom have had in establishing the United States as the global leader in higher education, many policy makers and governing boards do not. Recently, John Behling, the vice president of the University of Wisconsin System's Board of Regents, said, "Tenure may be the standard in higher education, but it is [out of step with reality](#)."⁷⁰ Behling's comment came on the heels of the removal of tenure protections from state law by Wisconsin legislators in 2014. Kentucky's General Assembly approved a budget for fiscal year 2019-2020, reducing appropriations for higher education and including language allowing governing boards to [fire tenured faculty](#) in the event of program elimination.⁷¹

Even those who support tenure understand that evaluating faculty based on research, teaching, and service is a 20th century model. In her book review of *Envisioning the faculty*, Colleen Flaherty reported 2016 research indicated "Tenured faculty and deans generally saw phasing out tenure as a very negative proposition. Other academic leadership groups and—interestingly—non-tenure-track faculty members saw it as attractive or neutral."⁷² One proposal has been the [creation of a two-track system](#) of full-time tenured employment for professors as put forth by Michael Bérubé and Jennifer Ruth in their book, *The Humanities, Higher Education, and Academic Freedom* (2015).⁷³ The proposed system consists of one track for those who research and teach only a small amount, and another track for those who teach but are not expected to do research. People in either track would be employed full time with benefits and would be contributing individuals in the academic community, with full participation in faculty meetings and administrative tasks.

Leonard Cassuto has pointed out that [professionalizing the teaching track](#) calls into question how we educate our graduate students.⁷⁴ Universities may need to be more conscious about preparing PhDs to teach as well as to do research. Many four-year colleges already stress teaching over research. I have coached clients who prefer to work in those institutions because they do not enjoy doing research, as well as clients who do work there but wish they got more support for their research efforts from the institution. Whether large universities dependent on faculty research grants for overhead and prestige will ever opt for the two-track model [remains unclear](#).⁷⁵

As already noted, the percentage of tenured to non-tenured faculty has been steadily dropping. Anthropologist Clifford Geertz referred to the current educational employment condition as “[The Age of Adjuncts](#).”⁷⁶ A 2017 report from American Institutes for Research (AIR) indicated [the share of contingent](#), or non-tenure-track, faculty members at public bachelor's-degree-granting institutions increased from 45% to 62% from 2003 to 2013.⁷⁷ Other types of institutions for the same 10-year period also saw an [increase in contingent labor](#): 52% to 60% percent at private bachelor's-granting schools; 44% to 50% at public research universities; and 80% to 83% at community colleges.⁷⁸ As noted in the section “What are the chances of being offered a tenure-track job?” roughly 70% of *all* positions are now “provisional.”

In short, according to the AAUP's *Annual report on the economic status of the profession, 2015-2016*, [fewer and fewer institutions recognize tenure as important](#).⁷⁹ When presidents of institutions belonging to the Council of Independent Colleges, a nonprofit organization consisting of more than six hundred colleges and universities, compiled [a list of characteristics](#) that they deemed “essential” to their institutions and another list that identified “negotiable” characteristics, the draft document described tenure as “negotiable” rather than “essential.”⁸⁰ This is a far cry from [the original 1940 AAUP Statement of Principles](#) deeming tenure “essential” for the advancement of academic freedom in teaching and research for “the common good.”⁸¹

Surprisingly, [the same AIR report](#)⁸² noted that despite the increase in contingent faculty, when the compensation for all employees (including staff) was calculated, the actual savings to the institutions based on the use of contract hires was negligible. John Barnshaw, Director of Research and Public Policy at the AAUP, said the report demonstrated most of the savings at public four-year colleges went to [increase administrative spending](#).⁸³ Though institutions see contingent hiring as a cost savings, others would see it simply as “[cost shifting](#).”⁸⁴

The statistical trends on tenure numbers suggest it will not survive. A close look at a AAUP [2015-16 Annual Report on the Economic Status of the Profession](#) revealed the percent of full-time tenured and tenure-track faculty has dropped from about 45% in 1975 to about 29% in 2014 (the most recent year for which figures are available from that source). A few more unpleasant statistics for supporters of tenure from that report:

- In January 2016, *Inside Higher Ed* reported on the findings of a national survey of chief academic officers conducted by Gallup. Just 38 percent of respondents said that they strongly believed that tenure remained important and viable at their institution.
- Over the past 40 years, the proportion of the academic labor force holding full-time tenured positions has declined by 26 percent and the proportion holding full-time tenure-track positions has declined by an astonishing 50 percent.
- The majority (70 percent) of academic positions today are not only off the tenure track but also part time, with part-time instructional staff positions making up nearly 41 percent of the academic labor force and graduate teaching assistants making up almost another 13 percent (part-time tenure-track positions make up about 1 percent of the academic labor force).⁸⁵

Part-time instructors have no institutional voice, since they are not integrated into the workplace, and may be offered very few resources, such as office space, to do their jobs. They may not be able to spend time with students who need additional help. One of the more interesting findings of the AAUP's 2015-16 report is that increasing part-time faculty positions by 10% correlates with a

roughly 2.5% decrease in graduation rates.⁸⁶ It could be because adjuncts are not able to spend time with students who need additional help. Even when an early career academic succeeds in landing a full-time tenure-track job, that person is likely to be teaching introductory courses where students may need considerable assistance to make the transition from a high school environment to a college level one. The movement to adjuncts or part-time faculty positions can also strain the administrative work load for those remaining full-time, with fewer people to spread out the crush of demands for things like reports on enrollment for accreditation purposes.

Whether faculty is full-time, part-time, or adjunct, many institutions are moving to contract labor for a specified time period such as 1, 3, or 5 years rather than operating on an assumption of long-term employment. According to Jacques Berlinerblau's recent book, *Campus confidential: How college works, or doesn't, for professors, parents, and students* (2017),⁸⁷ contingent faculty members at colleges and universities are divided into the "contingent of hope" and the "contingent of the damned." The contingent of hope are people who might have a chance at one day getting on the tenure track, not necessarily achieving tenure, while the contingent of the damned are the instructors, lecturers, and adjuncts who have given up all hope of ever gaining tenure.

The *Chronicle of Higher Education Almanac* now includes non-tenure-track faculty positions and, at colleges with no tenure system, by sector and length of contract. Of the 917,244 faculty recorded in this category (2014 data published in August 2016), [nearly 50% were on less-than-annual contracts](#), or hired on a semester by semester basis.⁸⁸ Annual contracts accounted for roughly 34% of the total, while only 17% had multi-year contracts. Non-tenure-track faculty throughout higher education account for [approximately 70%](#) of the faculty providing instruction at nonprofit institutions nationwide,⁸⁹ [a figure confirmed](#) by the Government Accountability Office in 2017.⁹⁰

State legislative developments are also making tenure-track positions less likely. The State of Wisconsin's legislature voted in 2015 [to strike tenure from state law](#) as a way to reduce state budget expenditures.⁹¹ The situation for professors in Wisconsin continues to erode as the Wisconsin regents now want to give academic administrators the ultimate authority over [post-tenure reviews](#), the mechanism determining whether a tenured professor is meeting institutional expectations.⁹² While Wisconsin may be among the first to do this, other states with budget issues will likely follow. For instance, in January 2017, the North Dakota State Board of Higher Education recommended [cutting notice](#) for tenured faculty of their termination from one year to 90 days.⁹³

In a sign of the times, State Representative Rick Brattin in Missouri, and State Sen. Brad Zaun in Iowa, both introduced [bills in 2017 to eliminate tenure](#) at their state's public institutions after January 1, 2018. The Iowa bill stalled in committee January 18, 2018 and the Missouri bill stalled in committee February 28, 2018.⁹⁴ Brattin's Missouri bill contains provisions for institutions to specify the estimated price of a degree, anticipated employment opportunities for degree earners, and a summary of the job market for each degree. When asked how elimination of tenure might impact academic freedom, Brattin's response was, "...in what area do you have protection of your job for whatever you say, whatever you do, you're protected? You don't have that. Their job is to educate, to ensure that students are able to propel themselves into a work force and be successful. That's their job." Getting students to think for themselves or doing publishable research was certainly not an aspect of his assessment of professorial duties.

What are the possible [alternatives to tenure](#)?⁹⁵ Many acknowledge that the current situation of older tenured professors and younger non-tenured or contract teaching employees is not desirable,

creating a split workforce of have and have-nots, but what will replace the current system is not clear. One idea has been to [replace short-term employment contracts](#) with contracts renewable every 10-15 years, as a method of providing some stability and tenure-type protections for free speech.⁹⁶ An “anonymous academic” scientist has blogged about this as [a way to produce better science](#) instead of having scientists scrambling all the time for new research positions or additional, very scarce, grant money.⁹⁷

Four basic models for faculty outside of tenure-track positions are emerging as alternatives: adjunct professors, non-tenured faculty (full or part-time), online faculty (the majority of whom are adjuncts employed by for-profit institutions like Phoenix University), and adjunct clinical faculty at medical schools where faculty are expected to teach and have a private practice in their area of medicine. The adjunct professor model is already in place, with most adjuncts working on a semester-to-semester contract basis. The medical teaching hospital model with doctors simultaneously supplementing their income in a private practice is also already in existence, with one in ten working in private practice and at a teaching hospital.⁹⁸ None of these models provides any sort of guaranteed long-term employment. Full-time workers in other sectors of the economy are not expected to renew their employment agreements every three to six months after a probationary period. The academic working on a contract is in a far more precarious position than most other professionals who do not work for themselves, such as attorneys working in a large prestigious law firm, or analysts working at large multinational consulting businesses.

As I have already mentioned, there is a possibility two full-time employment tracks could be created, one for research and one for teaching, though the impact on tenure in this scenario is unknown. Some universities now use the title “teaching professor” as a nod to the respectability of hiring long-term contracted adjuncts, though this may ultimately foster more confusion without having the title distinction of tenured versus non-tenured.⁹⁹ One professor I know has worked as an adjunct in a graduate program at a small private college and has risen through the ranks from instructor to assistant, associate, and full professor, all untenured, over the past 30 years all while on semester to semester contract. However, benefits were not included in these promotions and no participation in departmental matters was offered. The early career academic will need to be open to vastly different forms of employment than the old model of long-term employment for faculty, with tenure protecting free speech.

New Models for Delivery of Higher Education

In this section, I’ll discuss some of the new possible models being explored by institutions of higher education and look at a few of the current trends that will impact hiring in higher education. They include continuing traditional models of delivery through independent colleges and universities with either public or private or a mix of funding; market driven educational services and delivery as seen in many of the for-profit online schools; a loosening of the connection between a degree bestowed by one institution to a degree bestowed via a network or consortium of educational institutions; and even the end of the traditional model as we know it. In one analysis [“...the formal tertiary education sector disappears](#). People learn throughout their life, at work, at home, for personal and professional motivations, more and more by themselves and by sharing their expertise with other people interested in the same field.”¹⁰⁰

So many new structural models for higher education are being suggested and tried that predicting which will stand the test of time is difficult. Mergers instead of closures, nontraditional consortia arrangements, microcampuses, incubator centers, and work-college networks are all permutations in higher education to deal with the negative financial climate predicted for this economic sector. All are aimed at salvaging higher education no matter how it was shaped in the 20th century.

In general, the best survival strategy for schools of all sizes and types appears to be focusing on being the best at something, whether a nursing program, a classics program, or an engineering program, then delivering education in an innovative way to attract the best and brightest students and faculty. Without [a unique niche or signature program](#), institutions dependent on tuition to meet costs are facing the biggest challenges for survival.¹⁰¹ Some [unusual examples](#) come to mind: Hartwick College in Oneonta, New York established a craft-beer center to connect to the local brewers, and Linfield College in McMinnville, Oregon established a vineyard program to connect with the local wine industry.¹⁰² To some extent, [how an institution of higher education markets itself](#) determines whether small colleges keep their doors open and what positions will be available for faculty. “For both public and private institutions, the most popular responses to enrollment and revenue shortfalls remained the same: Start attractive new programs, improve enrollment strategies, and pump up marketing,” writes Scott Carlson.¹⁰³

Mergers. In the short run, [mergers](#) may be the easiest way for beleaguered US colleges and universities to avoid closure, resulting in a slower growth of college faculties.¹⁰⁴ Smaller liberal arts colleges of 1,000 or fewer students are truly struggling financially, and may find [merging with larger institutions advantageous](#).¹⁰⁵ In 2014, Moody’s predicted the [rate of closures](#) for small colleges to triple by the end of 2017.¹⁰⁶ Since March 2015 through April 2017, [182 institutions](#) of higher learning closed, merged or lost accreditation.¹⁰⁷ Each of these closures represents less opportunity to be hired as faculty for new PhDs. After a proposed merger for Lassell and [Mount Ida College](#) fell apart, the University of Massachusetts stepped in to acquire Mount Ida.¹⁰⁸ Expect to see [more mergers of institutions with traditionally different missions](#) such as the one between Philadelphia University and Thomas Jefferson University, finalized in July 2017, to create financial stability.¹⁰⁹ As Liz McMillen wrote:

Last year Philadelphia University and Thomas Jefferson University joined forces and became the fifth-largest university in Philadelphia. Although a design- and textiles-oriented university and a health-sciences institution may seem an unlikely combination, the union has been a success, according to Stephen Spinelli Jr., who was president of Philadelphia and is now chancellor of the new institution, called Thomas Jefferson University. A key reason for the success is that both were so different yet commonly focused on professional education, he said on a recent visit to *The Chronicle’s* offices.

Since the merger became official last July [2017], he’s heard from 30 presidents and trustees, including several at Roman Catholic colleges, wanting to know more about how the combined institution worked. “There’s been a real groundswell of interest,” Spinelli said. “Everyone’s nervous” about a coming consolidation in higher ed.¹¹⁰

Another merger model is online for for-profit entities merging with a nonprofit academic institution to acquire a certain gravitas. The recent acquisition of Kaplan Higher Education by Purdue University announced in April 2017 is an example. Purdue is known as a prestigious

science, technology, and engineering public institution; Kaplan is a for-profit education internet-based chain with 15 campus locations “on the ground” serving roughly 32,000 students. Purdue aims to control the academic side yet allow the relatively low bar to admission model used by most for-profit entities to create larger enrollment allowing the partnership to be financially self-sustaining.¹¹¹ If all regulatory issues are settled, the new entity will be called Purdue University Global. From an early career academic’s standpoint, these types of mergers are likely to offer fewer opportunities for traditional tenure-track employment.

Similarly, and facing all the same regulatory hurdles as Purdue, Bridgepoint Education, a [for-profit online program announced a planned merger](#) of its University of the Rockies with Ashford University in March 2018. Under the Ashford name, the combined institution will become a nonprofit.¹¹² In addition to these sorts of mergers, it is also clear that many online educational institutions are in the process of [consolidating with other online service providers](#), such as Strayer Education, Inc. and the Capella Education Company announced in October 2017, which will operate under the Strayer University moniker.¹¹³

Another model is consolidating all 2-year community college programs inside a state system into larger four-year university campuses. The University System of [Georgia proposal to consolidate four institutions](#) into two was approved by regulators in December 2017.¹¹⁴ The Louisiana Community and Technical College System approved the [merger of eight technical and community college](#) campuses in July 2017.¹¹⁵ Connecticut State Colleges and Universities system plans to [consolidate the state’s 12 community colleges](#) into one accredited institution by July 2019.¹¹⁶ The University of Wisconsin System has proposed [merging all 13 two-year institutions](#) under the aegis of UW with one of seven four-year campuses, to take effect in July 2018.¹¹⁷ The Pennsylvania State System of Higher Education [considered consolidation of 14 state universities](#) in July 2017 but so far this has not been approved.¹¹⁸ What remains to be seen is whether independent community colleges will be interested in merging with larger institutions. All of these mergers or potential [mergers are designed to address financial issues](#), sometimes representing several millions in savings, and all of these mergers will eliminate or reduce the number of available university jobs.¹¹⁹ Because mergers have become such an issue in higher education, [Inside Higher Ed recently released a special report](#) on the topic.¹²⁰

Some public universities are looking at whether their institutions would be better off privatized. The interim president at the University of Louisville, Greg Postel, told his Board of Directors in February 2018 that a combination of new losses in state appropriations and a declining donor base were [pushing toward privatization](#). Donor pledges were down 70% in 2017 compared to one year earlier. A lack of confidence in university leadership, declining enrollment from 30,000 to 22,000 over the past several years, and the need for lower tuition are all factors driving the discussion.¹²¹

Consortiums. The University of Arizona’s (UA) model proposes “[microcampuses](#)” by partnering with universities around the world offering dual-degree programs. The partner university provides the space and UA provides the credentials in a “branded” space, that is, a room designated as belonging to UA program, anywhere in the world. Law, business, and civil engineering degrees will be the first offered by UA for these partnerships.¹²² A similar intriguing idea being bandied about is [sharing administrative tasks](#) with nearby institutions’ back-office operations from accounting to program administration as a way for smaller institutions to save money.¹²³ This kind of sharing is much like office space rented to many individuals with shared infrastructure like secretarial support or equipment like copiers, sometimes called “[consortial arrangements](#).” For

instance, Augsburg University in Minneapolis, Minnesota partners with a local seminary to share library, IT, and human-resources services.¹²⁴

[Innovation or incubator centers](#), usually a result of reorganization, are a different structural delivery model for higher education. Such centers might promote interdisciplinary programs by merging separate disciplines like computer science, engineering, and business with the specific purpose of creating new marketable products. Carnegie Mellon University, Iona College, Brown University, the Iowa State Universities, the Rochester Institute of Technology, the Universities of Connecticut, and North Carolina at Chapel Hill are among the institutions that have either established or announced plans for these types of centers with multimillion-dollar investments.¹²⁵

Technology is used to both instruct students and launch entrepreneurs and somehow keep money flowing back to the institution, perhaps through an intellectual property claim. Cooperation between academic researchers and private entrepreneurs seeking commercial results can result in exceedingly messy partnerships. [Other efforts seek to combine](#) an institution's faculty development office or centers for teaching with new methods of subject delivery;¹²⁶ some programs seek to overhaul how large introductory courses are handled; some programs seek [to make a diverse curriculum like veterinary medicine more coherent](#). These innovation hub models generally do not lead to hiring new faculty, but instead are more focused on creating dialogue between established academic departments inside an institution.¹²⁷

An untested model is the creation of [“work-college networks”](#) in urban areas. At present, only eight colleges are in the approved list by the US Department of Education. These colleges require that all students work on campus regardless of their financial need or which academic program they are enrolled in. Paul Quinn College, a small historically black college located in Dallas, announced in March 2018 it would begin establishing a “presence” where students can “live, work, and take classes” but not necessarily on a traditional campus.¹²⁸ Initially, where the students would live was unclear, but the college broke ground in August 2018 for the [Trammell S. Crow Living and Learning Center](#), so the answer is “on campus.”¹²⁹ The proposed network would presumably interlink with the existing [Work Colleges Consortium](#) (WCC) to ensure regulatory compliance and help students graduate with less debt.¹³⁰

Which of these higher education models will be successful for institutions trying to survive through the 21st century is undetermined; therefore, the best employment sector for early career academics aspiring to be full professors is also not settled.

Instructional Trends

Some instructional trends already impacting higher education are:

1. Online course offerings forcing development of new teaching methods;
2. [“Alternative stackable credentials”](#) (aka, micro-credentialing or digital badges) added to an undergraduate or graduate degree through online offerings to display continuing professional development in a highly competitive job market.¹³¹
3. Demand for greater ROI (Return on Investment) by those financing degrees to include job placement of graduates;
4. Potential unionization of adjuncts; and
5. Emerging new technology.

Online courses. While MOOCs (Massive Open Online Courses) have lost their original luster, many non-profit colleges and universities of all sizes continue to seek increased enrollment through online programs. Usually this is done by creating supplemental materials for traditional classroom learning, rather than creating completely separate degree programs as offered by for-profit entities like University of Phoenix. However, simply adding online components to traditional educational models may be losing ground. In May 2017, 56% of online education administrators surveyed at 104 colleges and universities said the online education market has become “much more competitive” over the past five years. [Schools are now competing with corporate manufacturers](#) of educational technology producing propriety educational software.¹³² Yet 95% of those surveyed said their institutions [plan to launch more online programs](#) in the next three years.¹³³

Such distance education is gaining ground in the United States. The Babson Survey Research Group provided some statistics about the trends and patterns of such enrollments among US degree-granting higher education institutions. The findings show that the number of higher education students taking [at least one distance education course](#) in 2016 topped six million, about 31.6% of all enrollments, though enrollment growth was uneven across higher education sector. Roughly 5% of [distance learning] institutions account for nearly half of all distance-education students.¹³⁴

The [executive summary](#) of the second annual *Trends Report* from the *Chronicle of Higher Education* released in February 2016 reported on the “...rise of the instructional designer. As online learning and new classroom technologies spread, the demand for instructional designers — who develop courses that others may teach — is growing.”¹³⁵ The cross-domain skills mentioned by writer and venture capitalist Kai-Fu Lee is demonstrated in the need for designers with knowledge of “learning management systems” or experience converting a face-to-face classroom proficiency into either an online or hybrid course. Knowledge spanning more than one discipline can certainly assist in maintaining work as an early career academic in the current environment.

The explosion of online teaching with prefabricated teaching materials may actually work against increased hiring of new PhDs and early career academics. There are [two main schools of thought regarding online education](#): One sees it as a potential growth area and goldmine for schools, while the other sees online education as slowing down because it has become a standard offering at colleges and universities—maxing out its potential for growth and revenue for schools.¹³⁶ The second opinion has been espoused by Eduventures, an organization devoted to research on innovations in higher education. Eduventures recently created the [CHLOE \(Changing Landscape of Online Education\) Survey](#) to examine the past 20 years of online learning and unsurprisingly concluded online learning is here to stay. However, the report noted that the balance between innovation and consolidation both within institutions and across the field of distance learning going forward is far less clear.¹³⁷ An institution’s loss of students to online learning spaces could either create or deplete demand for faculty depending on where they are willing to work.

New technology is not just about teaching online courses. Some of the most important technical changes that may create new academic jobs include using cloud computing for presentations and course material, using augmented and virtual reality to explore topics of all sorts, applying expanded discovery tools (formerly called databases) for research, designing open content for

creative work, helping students develop open source software for their STEM projects, and employing new social networking tools for data gathering. As noted in *The Annual Report on The Economic Status of the Profession*, published in the March-April 2016 issue of AAUP's *Academe*, "Innovations in data management and information technology have enabled faculty to teach and conduct research in ways scarcely imaginable a generation ago."¹³⁸

Other forms of credentialing. "With [only two out of 10 U.S. adults thinking of attending in-person programs](#) at colleges and universities, we have both a need and an opportunity to reimagine all the ways higher education can be done," said Brandon Busteed, executive director of Education and Workforce Development at Gallup.¹³⁹ [Competency-based education](#) (CBE) continues to grow in popularity: 91% of public college provosts and 72% of provosts at private colleges favor awarding CBE credit.¹⁴⁰ In the past, these credentials have been mainly offered by large online learning platforms like Capella University, but some traditional institutions are adding the option to their curriculum. [PathwayConnect](#), a yearlong, 15-credit program created by Brigham Young University-Idaho is already adding CBEs through on-line education.¹⁴¹ At this point in time, [3-5% of college graduates have stackable credentials](#), meaning additional certified education after obtaining an undergraduate degree, but these credentials have not yet been correlated to higher earnings.¹⁴² If literacy and critical thinking are the deemed important skills for employment in the 21st century, CBE credentialing may become more accepted.

One drawback to the concept of digital badges to advertise newly-learned skills is the lack of knowledge or acceptance by potential employers. A new pilot project, called [#TeeUpThe Skills](#), to run through the Academic Year 2018-2019, is hoping to see what is needed to get employers to value the digital badges offered by traditional educational organizations. The name "refers to the concept of 'T-shaped workers'—employees who have technical skills as well as 'horizontal skills' that help them successfully collaborate, problem solve, communicate and empathize with and lead others."¹⁴³ Seven colleges and universities each paired with a large employer and coordinated by the nonprofit Educational Design Lab has to help investigate what resonates with hiring entities.

It's hard to say which newly-created credentialing programs will succeed and which will not. Traditional educational institutions are in competition not only with each other but with organizations like the new partnership between We Work and 2U, which seeks to create a "global campus" offering actual degrees to adults. 2U recently leased the Flatiron School's [online learning platform Learn.co](#) "in perpetuity" for \$13 million.¹⁴⁴ Flatiron offers short-term bootcamps for computer coding for those already holding undergraduate degrees, usually to the tune of roughly \$1,000 per week. The WeWork-2U partnership provides what is billed as "Master Degree digital graduate programs" by partnering with 41 different universities in 15 different fields.¹⁴⁵ In combination with offering this [new sort of degree](#), the partnership plans exist to create a physical learning locale that will directly compete with traditional campus locations of universities. This type of degree program contrasts with non-degree credential programs as offered by Galvinize or General Assembly, targeting the tech sector and seeking to get employer payment for training. As usual, the role for early career academics remains to be determined.¹⁴⁶

Meanwhile, [Google launched its own online certificate program](#) in January 2018 to create more entry level IT jobs which they were having trouble getting filled. Initial enrollment was 40,000, with 1,200 actually completing the five-course curriculum within eight months by studying eight to ten hours per week. At this point, 25 community colleges and Northeastern University will offer

college credit for the certificate. Northeastern, a four-year institution, will offer certificate completers credits counting toward a Bachelor of Science degree for information technology. The Google certificate program is similar to those offered by Microsoft and Cisco, with Apple, Facebook and Amazon AWS Educate all following the same path of education on their particular platform and partnering with community colleges for credit. However, Google's differs from early "one-platform only" models by creating a consortium of 20 other employers, including the Bank of America, GE Digital, Hulu, Intel, and Sprint. All these companies are interested in hiring certificate completers. The Google set-up allows certificate completers to share information about themselves as a job seeker and their work with any member of the consortium.¹⁴⁷

Unionization. With regard to the potential unionization of adjuncts, the data is too fluid to offer any meaningful analysis. In 2016, the National Labor Relations Board "[certified 20 new collective-bargaining units at private colleges and universities](#)."¹⁴⁸ This represents only a 0.44 percent of roughly [4,500 higher education schools in the US](#).¹⁴⁹ The current political climate in the United States makes any prediction about likely faculty unionization untenable.

Artificial intelligence. There has been a plethora of articles on the continuing advances in artificial intelligence (AI) and robotics replacing workers in all areas of life. At this point, any person that engages in repetitive task work from factory assembly lines to tax preparation may find their job endangered. [Kai-Fu Lee sees current AI](#) as "more of an optimizer...not intelligent in the same sense as human intelligence. Human intelligence also includes inferencing, planning, cross-domain knowledge, common sense, and ability to argue, to understand humor and also self-awareness and passion." He feels that it is "important to think about the retraining of the people who will be displaced, through the education of our children and grandchildren to avoid becoming displaced...we need to create more human compassion jobs."¹⁵⁰

Joseph E. Aoun, currently president of Northeastern University, wrote about [how technology impacts higher education](#).¹⁵¹ In his 2017 book, *Robot-Proof: Higher Education in the Age of Artificial Intelligence*, he examined the issue of preparing students to handle complex issues, leaving the robots to handle mundane aspect of preparing legal documents, generating a list of tools for any task at hand from gardening to surgery, or providing graphic displays of big data with basic analyses. Schools, and therefore instructors, will have to provide a way to teach students to be simultaneously creative and able to manipulate data, as well use technology or human understanding to generate new things of value to society. Some analysts predict the use of robots to [replace administrators](#) in higher education for similar reasons,¹⁵² resulting in reduced tuitions or freeing money for [development of new curriculum](#).¹⁵³

Aoun calls this interface of human and robots "[humanics](#)."¹⁵⁴ the "integration of technical literacies...with uniquely human literacies..." necessitating better integration of all fields to meet changing demands of education. He said, "We're seeing educational content become commoditized. Therefore, the job of faculty members has to go beyond simply transmitting knowledge. More than ever, the priority for faculty is to create new knowledge and act as the catalysts to make their students robot-proof. Machine-based apps can help advise students on the school requirements, but human interaction is needed to help guide the choices, particularly if students want to change their educational direction. The personal connection between student and teacher cannot be replaced by a machine."¹⁵⁵ Presenting yourself as a "systems thinker" with the ability to synthesize information across fields previously felt to be widely removed like history

and engineering may be a useful way to present your unique value to an employer in higher education.

In the summer of 2016, Pew Research Center and Elon's Imagining the Internet Center asked 1,408 technologists, scholars, practitioners, strategic thinkers and education leaders to weigh in on anticipated changes to the work force by 2026. The report, "The State of American Jobs" (released in October 6, 2016) found [87% of workers surveyed saw a need to become lifelong learners](#) to stay competitive, with jobholders looking for non-traditional ways to enhance or supplement their knowledge for employers, even if they have to pay for it themselves. Some commentators specifically mentioned greater acceptance of online degrees, rather than a dismissal of them as less rigorous or intellectually demanding.¹⁵⁶

A [National Academy of Sciences report](#) (2017) stated, "Technology has been augmenting and replacing human labor in many tasks for hundreds of years, and we can expect this trend to continue. Increasingly, we will see robots used to automate more complex tasks in manufacturing, transportation, retailing, and many other industries, and AI to automate knowledge-based tasks" (p.138). The report then goes on to detail the key questions needing answers with regard to educational needs, delivery, access and incentives, and education policy, concluding this discussion with:

...it is unclear how best to take advantage of the new opportunities for online or other IT-enable training, how to construct the most effective online courses, and how to best incentivize students and workers to complete the courses they begin. Because education will largely determine the success of the United States in responding to the changing workplace, a better understanding of effective strategies is critical (p. 150-151).¹⁵⁷

One interesting idea to address these issues, and take advantage of the changing scene, has been proposed by Mark Hagerott: create a ["Cyber Land-Grant University"](#) and making the large social media companies pay for it. According to Hagerott, chancellor of the North Dakota University system (and formerly a cybersecurity fellow at New America in Washington, D.C., as well as serving as a professor and deputy director in the Center for Cyber Security Studies at the U.S. Naval Academy), such a system would have at least two excellent outcomes: providing access to education for those in rural areas that might not otherwise have access while helping provide resources rural institutions as well, and secondly, creating cybersecurity workers in a world that will need more and more of these employees.¹⁵⁸

Virtual reality. No discussion of current trends can overlook the continued expansion of virtual reality (VR) tools. Once only the purview of avant-garde gamers, virtual reality is now an actual reality in all of our lives. You may remember some scenes from various science fiction movies where a student interacts with a 3-D computer to learn anything from an alien language to histories of lost civilizations to physical combat training. This is fast becoming a reality, though current technological limitations make available modules feel both limited and stilted.

[AI teaching assistants](#) have been used at Georgia Tech in an undergraduate computing course, primarily to answer logistical questions around deadlines or assessment criteria, but not about content, which still must be handled by an actual human being.¹⁵⁹ In terms of grading, AI assistants can handle multiple choice tick the box questions, but not discerning answers to essay questions. Artificial intelligence is being used in low stakes counseling and advising using a [chatbot](#).¹⁶⁰ University administrators have experiments with using [mascot-based chatbots](#) to

provide basic information around access to health services, housing, financial issues, and immigration questions that might be embarrassing for a student to ask a person.¹⁶¹

Faculty at colleges and universities will need to retrain more often to find work or retain their jobs in the face of increased automation for what used to be considered high level skills, such as teaching law, humanities, and STEM. Academic medical schools are already using immersive 3-D computer programs to teach anatomy to reduce cost, smell and storage of physical remains. How automation will play out in these areas has yet to be understood; possibly basic introductory courses will be interactive computer modules, rather than taught by graduate teaching assistants or adjuncts, potentially limiting teaching experience for early career academics.

[The Mandarin Project](#), a collaboration between IBM and Rensselaer Polytechnic Institute uses VR to engage students in a Chinese world using an “immersive” circular room with floor to ceiling screens and a floating panda head as a guide.¹⁶² Students practice speaking and reading, sometimes hearing explanations overlaid in English giving cultural information or context. For instance, when learning to order Peking duck from a menu, you might hear, “Peking duck is a famous duck dish from Beijing that has been prepared since the Imperial Era.” Testing for the project began in Fall 2017. You can see for yourself what this actually looks like in the YouTube video [“How AI helps students learn Madarin at RPI.”](#)¹⁶³

Vivek Wadhwa, author of *The driver in the driverless car: How our technology choices will create the future*, saw education headed the same direction. Wadhwa predicted [human teachers working alongside artificial intelligence tutors](#), but using VR tools to educate. Learning simply feels like “building cool stuff, playing video games and living through history,” beginning in elementary school.¹⁶⁴ He sees part of the role of the human educators as helping to manifest various ideas in physical reality, whether building a model or setting up an experiment. How Wadhwa conceives the role of virtual reality specifically in the realm of higher education is not clear, but VR appears to be a technology likely to be increasingly available at all levels. Given student addiction to their electronic gadgets, VR might actually be a step toward real learning.

Societal Pressures

As always, money and how it is both acquired and distributed certainly play a huge role in what is happening in higher education. The academy is changing rapidly. The *HiEd Trends Report* [annually lists 10 items](#)¹⁶⁵ as changing within the next year based on changes in the previous year. In 2015, shifts included the need for greater student retention, bigger roles for career counseling, and growing governing-board tensions with institutions with more activist trustees. The [2016 update to the Trends Report](#) added information about a growing use of metrics to measure faculty productivity, more outsourcing for services, now including advising and teaching, and increased scrutiny of academic research.¹⁶⁶ [In 2017](#), a trend to help students to separate fact from fiction, pushes for greater cybersecurity, and continuing declines in government funding were predicted.¹⁶⁷ [In 2018](#), the *Trends Report* stated that American universities appear under siege with the need to be more resilient in weathering political firestorms, in dealing with losses in global prestige, and in handling more confusion over deregulation and funding.¹⁶⁸ Interestingly, the 2018 report specifically mentioned that universities will have to actively demonstrate the value of a PhD, within and outside of academia. The next update will likely be released in February 2019.

Public perception. In July 2017, the non-partisan Pew Research Center released the [results of a national poll](#) of 2, 504 adults indicating 58% of Republicans and Republican-leaning independents

believed that colleges and universities have a negative effect on the country, up 13% from the previous year, while 72% of Democrats and Democratic-leaning independents still say that colleges and universities have a positive effect on the country, a number that did not change significantly. The more conservative Republicans (65%) compared to moderate and liberal Republicans (43%) are more likely to have a negative view of higher education.¹⁶⁹

Higher education is seen by some as less relevant than it used to be. In *The case against education: Why the education system is a waste of time and money*, Bruce Caplan argued that higher education does not produce the outcome it claims: critical thinking and the ability to learn new things.¹⁷⁰ Yes, he agrees that a college degree shows persistence and the ability to follow-through on assignments, but the degree merely indicates to employers that a person can play by the rules and do the necessary boring work.¹⁷¹ To some degree, Caplan is bringing back the argument of the 1960s students, that what is being taught (art, language, history, etc.) are not relevant to most actual jobs. His solution for bored, unhappy students and employers who want new hires to add economic value immediately is more vocational education.

Social media may be part of the public perception that higher education is biased toward liberals and no longer reflective of American values. Social media is a platform where opinion dominates, whether or not the opinion is offered by someone with a great deal of expertise in a particular topic, or simply someone spouting an opinion without any facts to back it up. The more extreme or ridiculous a claim, the more likely it is to go viral and capture the nation's attention. The brevity required by forms of social media communication like Twitter means misinterpretation is both easier and more likely to occur.

Social media also makes it infinitely easier to incite violence on either side of an issue. In an article titled, [“Intimidation is the new normal on campus,”](#) Jonathan Haidt writes that the call to violence by people on the left against people on the right is a new development on campus, and that this is a dangerous precedent.¹⁷² On the other hand, it should be noted that many people on the left have felt, or actually been, victims of violence by the right.¹⁷³ The belief in education as a pathway to a better life, and therefore access to it, has been a major concern of minorities in the US for at least two centuries. In the past, those feeling shut out have traditionally sought redress through the courts to fight perceived and real discrimination and gain access to education. Highly visible confrontations over a variety of issues, from renaming campus buildings, to shouting down speakers on both sides, or figuring out the fair way to allow both sides to air their views in a way that provides for calm rebuttal of differing viewpoints when shown as truncated visual clips, can all influence negative perceptions of campus life.

One theory regarding the claims that higher education is rife with liberal biases has to do with a theory of “self-selection” for those entering the academy. Neil Gross and Catherine Cheng, then graduate students, published the results of their research in *Diversity in American Education* (2011) in a chapter entitled “Explaining professors’ politics: Is it a matter of self-selection?” (pp. 178-194).¹⁷⁴ As quoted in an *Inside Higher Ed* article, [43% of the political differences](#) is explained by characteristics associated with being politically liberal “because professors are more likely than others:

- To have high levels of educational attainment.
- To experience a disparity between their levels of educational attainment and income.

- To be either Jewish, nonreligious or a member of a faith that is not theologically conservative Protestant.
- To have a high tolerance for controversial ideas.”¹⁷⁵

In a recent book, [*Passing on the Right: Conservative Professors in the Progressive University*](#) (2016) authors Jon Shields and Joshua Dunn interviewed 153 conservative professors in economics, political science, sociology, history, philosophy and literature and found that conservative professors were succeeding in academia, and did not feel silenced by their liberal colleagues nor prevented from attaining promotion. In fact, one surprising result was that “Many right wing academics, in fact, actually first began drifting toward conservatism in the academy itself—through their coursework, friendships with right-wing students, and even their research.”¹⁷⁶

All in all, the research shows a bias toward the self-selection of liberals creating a majority with those political views without a concomitant suppression of minority conservatives in the professoriate and their point of view.

Yet some [right-wing commentators like Sam Clovis](#),¹⁷⁷ former economics professor at Morningside College, would like to demolish the current model of higher education altogether. He would like to dispense with government lending to students as the total current amount of student debt is estimated at \$1.3 trillion. This cut in loans would immediately impact enrollment of students receiving financial aid. Clovis would also like to see the elimination of any push to make college free, and stop colleges and universities from being involved in diversity programs and civil rights issues, along with limiting the role of Title IX in regard to sexual harassment.¹⁷⁸ If such changes were enacted, many positions in higher education would be eliminated, and student enrollment would likely also be reduced.

The so-called alt-right groups, emboldened by feeling their own agendas have been sanctioned, are coming to the forefront in the effort to demonize academia. Nearly three times the number of incidents of [propaganda stemming from white supremacist groups](#) were reported on campuses across the country for the time period January 2016 through the December 2017. Most consisted of posters believed to have been distributed by off-campus groups. Of 346 reported incidences of right-wing propaganda distribution, 333 occurred after the 2016 presidential election.¹⁷⁹ In [a 2018 interview](#), George Ciccariello-Maher claimed, “This gets to the bigger question of what really is going on in the world that the university cannot divorce itself from — the rise of these right-wing sectors that are pushing on faculty and on universities.”¹⁸⁰ [Ciccariello-Maher resigned](#) his positions as an associate professor of politics and global studies at Drexel University after much public controversy saying he could no longer work as an academic given the constant threats of violence or death.¹⁸¹

Early career academics need to be aware that higher education seems to be at risk in terms of [public perception](#). In academic job interviews, new PhDs or those seeking to move laterally may be asked very pragmatic questions like “How does your field/area of research help our graduates get jobs?” or “How would you handle controversial issues in your classroom? On social media?” These questions may touch on how you personally perceive the issue of “academic freedom,” and whether you are comfortable discussing or defending it.¹⁸² The ability to clearly articulate the value of your research may become more imperative in the face of funding cuts and public denigration of academic pursuits in the world of sound-bite media.

More women than men. For those who have studied economic history, it is no surprise that when work sectors shift from majority male to majority female, pay decreases and the work becomes devalued.¹⁸³ As women left rural America for jobs in the city at factories or offices in the early 20th century and began to dominate these employment sectors, once high-prestige jobs like personal assistant, librarian, or teacher were devalued as women were either expected to leave the work force after marriage or were considered to be earning “[pin money](#)” (i.e. for extra expenditures not necessities in a family setting).¹⁸⁴ It is well-known that women tend to either sort themselves, or be sorted by societal pressure, into academic studies resulting in lower paying work upon graduation.¹⁸⁵ Fields dominated by women employees is sometimes referred to as “pink collar,” a term coined in the 1970s by Louise Kapp Howe, describing jobs are neither white collar nor blue collar.¹⁸⁶ These are jobs in nursing, teaching, secretarial work, waitressing, or child care, traditionally considered “women’s work.”

The same historic forces may be pushing to devalue a college degree as more women than men actually attain degrees. This has happened before: In 1890, twice the number of girls were graduating high school to boys,¹⁸⁷ though concern about male displacement in the job market did not materialize as rapid industrialization brought new opportunities. Women did not stop marrying or having children which often led to them dropping out of the paid work force early in life, thus not threatening male positions over the long term. As of 2017, [women constitute 56-57%](#) (roughly 11 million women to 8 million men) in overall enrollment, outnumbering men at most colleges.¹⁸⁸ This compares to 58% male students in 1970. [Women are also graduating at higher rates](#) than men: in 2017, 34.6% of women enrolled completed a four-year degree, while only 33.7% of men did so.¹⁸⁹ The US Department of Education [projects by 2027](#) an increase in enrollment rates for women of 4% with only a 2% increase in enrollment for men.¹⁹⁰ It is also the case that more women from [low-income and minority](#) families are both enrolling and graduating from college at rates exceeding their male counterparts.¹⁹¹ Some colleges are already addressing the reality of “[men as the new minority](#)” on campus in their recruitment by adding sports teams and increasing pictures of males on campus in their advertising materials.¹⁹²

Writers on both sides of the political spectrum worry about the difference in educational attainment and what it will mean for American society. Some conservatives worry about [what will happen to marriage](#) when women are more educated than men;¹⁹³ some commentators want to [stop funding women studies](#) departments because there is no longer a need to bring women up to educational parity with men;¹⁹⁴ while some more liberal commentators worry that the increase in women’s degree attainment will lead to a [devaluation of a college degree](#) as income gains for completing a college degree gradually shrink and possibly disappear altogether for women as an “unintended consequence” of the numbers of workers with college degrees increasing.¹⁹⁵

Nancy S. Niemi, author of *Degrees of difference: Women, men, and the value of higher education* (2017) writes “[Men are leaving academe](#) as a place for less powerful people to spend their time, money, and energy”¹⁹⁶ adding:

Three factors appear to be key: cultural anxieties about gender equity; the reality that having a college degree does not make up for other disadvantages; and Americans’ comfort with a two-track educational system in which all are theoretically welcomed, but not all are likely to succeed.

Historically, when women get close to equaling men's achievements, a crisis ensues. Anxieties about gender fuel debates about other issues, primary among them education policy¹⁹⁷... For the past three decades, the tech industry has been the location of so much cultural innovation that it may now be playing the role that universities used to own: sites where the brightest minds explore and create. These minds are primarily male, and they are tempted by the examples of men-who-made-it-big without college — Bill Gates, Mark Zuckerberg, and Steve Jobs.

Postsecondary certificates also constitute an increasingly viable alternative to a college degree — for men.¹⁹⁸

In other words, women may need to get a college degree to compete with men in the workforce who have no college, or education attained in non-traditional non-college pathways. Jessica Smith, orientation leader for Carlow University put it this way: “As opposed to a four-year college, they [\[men\] could go to an 18-month \[vocational-education\] program](#) and make just as much money.”¹⁹⁹ [Women holding college degrees still earn only 80%](#) of what their male counterparts earn even once they have completed college, even accounting for number of hours worked, college major, occupation and employment sector, and the disparity worsens over the years as child-bearing and child-rearing intervene.²⁰⁰

Free college. There is also an emerging political movement to provide free college, though most proposals are actually only tuition free, and often means only for community colleges, not traditional four-year institutions. Tuition free does not impact the cost of housing, academic materials, fees for campus buildings, athletic facilities, health services or access to libraries. Essentially, someone picks up the cost of instruction (teachers) via government payments (taxes), while all of the remaining costs could still require students to go into debt to attend college.

Free college programs have been pushed by nearly [10 Democratic gubernatorial candidates](#) over the past two years, as well as candidates for Congressional office. In 2018, the states of Florida, Maryland, New Jersey, Ohio, Washington, and Wisconsin have all introduced proposals to make tuition free for all; other states and cities already implementing free tuition policies, include Chicago, Illinois; Detroit, Michigan; New York; Oregon; Rhode Island; San Francisco, California; and Tennessee.²⁰¹ There have been some successes reported in degree completion at community colleges when tuition is waived: [Tennessee's Promise program](#) showed an 60% increase from 2014 to 2015 in students earning a degree or certificate within five semesters, and first-time freshmen at community colleges increased by 24.7%.²⁰² However, it is not clear whether or not such programs help all students equally, or whether income distribution impacts students more than access.

The impetus has been driven in part by new concerns about affordability and mounting student debt in obtaining a college degree. Even in states that have enacted free college legislation such as New York, Oregon and Tennessee, these programs are really more of a [“last-dollar” solution](#), where the state covers the costs *after* a student has exhausted all other federal aid options.²⁰³ As Tamara Hiller, deputy director of education at Third Way, a center-left think tank, says: “Free college sounds really good on a bumper sticker, and it’s a really great way for a candidate to fire up their base, especially on the progressive side as a campaign promise,” she said. “That doesn’t mean it’s going to translate into some sort of viable policy agenda in the next year.”²⁰⁴ Especially when these proposals are projected to cost billions of dollars if enacted nation-wide.

The argument for free college is a bit of a double-edged sword: if it's free, is there any real value or need for a college degree? It's become a partisan debate with Republicans increasingly opposed to financing higher education, and Democrats leading the push for free college to public four-year institutions. As Ryan Craig, author of *A new U: Faster + cheaper alternatives to college* (2018), wrote in an opinion piece:

The upshot is that that Republicans are bailing on college as an institution. According to a [Pew Research Center survey](#) released at the end of July, three-quarters of Republicans now think higher education is headed in the wrong direction. And based on a [New America poll](#) in May, some of this divide can be traced to the free-college debate. While 76 percent of Democrats now agree that “government should fund higher education because it is good for society,” only 34 percent of Republicans say the same. Meanwhile, 52 percent of Republicans agree that “students should fund their own education because it is a personal benefit,” compared with only 13 percent of Democrats.²⁰⁵

It appears that the issue of free college will remain on the political agenda, though the actual form of educational cost relief may end up varying from state to state. Some may only provide tuition free programs at the community college level, while others may extend this to four-year institutions. Some may provide tuition free programs only to those with a family income below \$150,000 per year; others may provide financial assistance in the form of scholarships to eligible students, though some of these may convert to loans if the student fails to finish a degree program.

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Changes in Scholarly Publication

Changes in [the way scholarly publication will evolve](#) must also be considered. Sophie Goldsworthy quoted Michael Bhaskar as stating that, “Publishing, famously, is always in crisis”²⁰⁷ in discussing his book, *The content machine: Towards a theory of publishing from the printing press to the digital network*. People who want to work in academia should know what is happening in their own fields related to what is currently acceptable in terms of content and platforms to get their work published. The [scholarly record](#) used to be largely defined by formally published monographic and journal literature but with the advent of the digital record and new methods of research and collaboration, some see this model as largely defunct.²⁰⁸

For the early career academic, one of the most important trends is a greater emphasis on [collaborative research](#) then published by a team of authors.²⁰⁹ For schools, collaboration is a way to stretch the funding dollars over many contributors. Collaborative research is two-edged: On one side, participation demonstrates a capacity for collegial work with others, including a willingness to share publication credit, which may be a compelling quality for a hiring committee. On the other side is the issue of [how much more time is spent](#) coordinating research and writing in collaborative research that may not provide the weight of a single author publication. A panel at the American Historical Association in January 2016 titled “Is collaboration worth it?” offered “a lukewarm but hopeful consensus: it may not count, but it is, in some sense, worthwhile.”²¹⁰ As long as publish or perish holds sway and schools demand publications even prior to hiring, getting your name published as part of a team makes collaborative research worthwhile.

[Open access journals](#) are one new model competing with traditional peer-reviewed journals. Currently, faculty, regardless of status as full or part-time, tenured or untenured, trust traditional

peer-reviewed (49%) articles more than open access journals (8%), but this may change as digital publication gets normalized.²¹¹ What is interesting to note is that some open access journals are actually seeing a drop in material published: [PLOS ONE](#), the largest scholarly journal in the world, continues to shrink. The open-access mega-journal's output, measured by how many articles it publishes a year, fell in 2017 to 22,054—it's lowest since 2012 and down about 30 percent since its peak in 2013. The most precipitous drop so far came in 2016: *PLOS ONE* published 6,052 fewer articles than it did in 2015—a decline of about 22%.²¹² While this may simply reflect increased competition in the open access market, it may be attributed to raising the submission costs for authors.

Two new services, [Open Access Button](#)²¹³ and [Unpaywall](#),²¹⁴ allow researchers to find articles for free, rather than paying a \$30.00 access fee for delivery. Open Access has been endorsed by the Association of College and Research Libraries as a tool facilitating interlibrary loan programs.²¹⁵ If these services eventually hurt the finances of publishers, it may impact the number of articles publishers are willing to accept. Acceptance of fewer articles may in turn have an impact on an academics' ability to publish to meet the demands of the academic job market.

Rise of Mobile Technology

Mobile technology (MT) of every sort, including it used for delivering online classes and the proposed use of drones to deliver library materials, is now indisputably an integral part of higher education. Because the internet has made geographically separated asynchronous communication possible, MT has the potential to completely disrupt the notion of learning that takes place in a fixed location at a particular institution during a certain period of time. Professors and other instructors may find they must be proficient in online course delivery, as well as making it palatable for MT platforms, just to get hired initially. Many adjuncts and full-time professors already teach online summer classes to supplement their income when they are not on campus, but generally do not have to deal with MT issues directly.

“[An Internet-enabled revolution in education](#) will spread more opportunities, with less money spent on real estate and teachers,” predicted Google economist Hal Varian in a Pew Research Center report *Digital Life in 2025* (2014).²¹⁶ New forms of technology, including wearable equipment or embedded computing could potentially allow people to access hitherto inaccessible information immediately. Discussing all the anticipated changes in the next 5-10 years, Udo Gollub called what is coming “The Exponential Age and the 4th Industrial Revolution.” Gollub noted implications for education mirroring the Pew report: “[By] 2020, 70% of all humans will own a smartphone. That means, everyone has the same access to world class education. No matter where you are in the world, no matter your economic status, because cellphones are already so cheap, almost anyone can afford one, and every Apple smart phone has the computing capacity 2.7 times greater than the processing power of a 1985 supercomputer.”²¹⁷ However, education is more than information and more than critical thinking. Most academics feel that for a lab or field scientist or for a social worker or psychotherapist, education involves knowledge, techniques, and skills that must be taught and practiced, and not just what you can call up on your telephone using a browser.

Thus, one new challenge for education will come from changing the content mobile technology delivers while figuring out exactly now to use MT as a teaching tool. As a learning platform for higher education, MT may allow more courses to be interactive with others around the globe studying the same issues or it may introduce the possibility of new forms of internships and

pairings outside of the educational institution delivering the degree. Consider the [College for America](#) program at Southern New Hampshire University, where one such Associates of Arts program began with a 2012 grant from EDUCAUSE. For \$2,500, students engage in a “competency based, self-paced, on-line program,” with “measurable learning (mastery) of 120 competencies.”²¹⁸ Companies using this program to provide college degree programs to workers include Anthem Blue Cross Blue Shield, ConAgra Foods, McDonald’s and Comcast. Another use for mobile technology might be “[microlearning](#)”²¹⁹ providing bite-sized content and short-term learning activities, lasting just 3-7 minutes, to reach learners who will no longer sit through a 1-2 hour classroom format, but who are willing to absorb condensed bits of information on their phones.

It should be noted that although this transition has taken place incredibly quickly, there remain many questions around whether the use of MT actually enhances learning. Most research has focused on how mobile technology is used in classrooms from kindergarten through high school rather than in higher education at any level. At the lower academic levels, lack of teacher training in the best use of these devices is a common theme, as is the idea that this equipment lends itself more to [rote learning than to teach critical thinking skills](#).²²⁰ Others see a possibility for “[differentiated learning](#)” making material more accessible for learning no matter where the device is located.²²¹ One writer also suggests the [ability to interact with students in real time](#) and projecting this immediate type of interaction use by Generation Z employers.²²² Some professors are already polling students in the classroom, and asking for feedback on assignments via mobile devices. Generation Z love using mobile technology, as well as expressing the desire to text for appointments or other information rather than use email.

One article reviewing published literature between 2010-2016 on the use of mobile devices in higher education found:

- The majority of the studies focused on the impact of mobile learning on student achievement.
- Language instruction was the most often researched subject matter domain.
- Of the studies, 74% involved undergraduate students.
- Of the studies, 54% took place in a formal educational context.

In the last line of the article abstract, the authors conclude, “Higher education faculty are encouraged to consider the opportunity to [expand their learning possibilities beyond the classroom with mobile learning](#).”²²³

“The future belongs to nerds, geeks, makers, dreamers, and [knowmads](#),” said John Moravec.²²⁴ For those of you who are interested, see the electronic book, written by nine collaborating authors coining the term [Knowmad Society](#) (first released in 2013).²²⁵ “Knowmads” as defined by Dr. John Moravec, a scholar on the future of work and education, are “creative, imaginative, and innovative people who can work with almost anybody, anytime, and anywhere.”²²⁶ He sees knowmadding as an emergent form of employment in the 21st century. Millennials are especially drawn to this [lifestyle](#).²²⁷ Early career academics used to working on their own are potentially ideally suited to this work style, too, especially during times of field research. Given the rise of mobile technology and its continuing improvement in quality, along with the emphasis on life long learning and online course, it could be that this is a lifestyle suited to long-term employment in academia—provided the academic stays up on new technological developments.

CONCLUSION

Higher education in the US, like every other sector of the economy, is undergoing seismic shifts due to a combination of changing perceptions, novel technology, and new policies. In addition, the student body composition continues to change. “Higher education is facing a major shift in student [demographics](#). According to the Lumina Foundation, 38% of today’s college students are older than 25, 26% are raising children, and 47% are financially supporting themselves,” writes Liz Dietz, Vice President of Workday.²²⁸ The 58% of current enrollment of women to 47% men will also affect what happens in higher education.

A continuing pressure to change the educational delivery model to incorporate the vast numbers of technological changes in the field is present, including a drive to automate using artificial intelligence many of the teaching functions have been handled by early career academics in the past. There is also a continuing drive for alternative forms of educational credentialing to demonstrate continued accumulation of expertise in a specific area. Online courses will continue to be in demand, and new ways of presenting content like virtual reality are already in experimental use. Whatever the mode of delivery, participation in higher education can still create greater discernment no matter what information is presented.

In addition, there has been a perception fueled by current political discussions that academia is both liberally biased and out of touch with the needs of today’s students. In terms of policy, there are genuine philosophical disagreements around affordability, accessibility, and quality in higher education. There are also genuine disagreements on the value of a college education notwithstanding the move to a post-industrial economy, where the production of manufactured goods is replaced by consumer services (everything from retail clerks to highly trained doctors). Technology and the infrastructure handling information flow is rapidly becoming of paramount importance, with new knowledge driving innovation. The assumption that a knowledge-based economy would require more college graduates no longer seems a foregone conclusion. Scholarly publication is subject to these same forces of change. All these issues may heavily impact both available funding for institutions of higher education in the US and how it is structured.

As one biologist said, “Everything I learned as an undergraduate, 25 years ago, is [out of date](#). The same will be true for my students in 25 years.”²²⁹ This is probably the case for most content sensitive topics, but perhaps not as true for courses based on particular sources in literature, history, philosophy or skills derived from engineering and mathematics. The ability to help students learn to think critically, communicate their ideas clearly, and participate in the affairs of their immediate communities or in the larger world by helping to frame the bigger perspectives, so far remains a uniquely human capability.

In the final analysis, it is not clear moving into the third decade of the 21st century whether or not employment in the higher education sector will be available to those holding a PhD who want to work there. The denigration of some graduate degrees has contributed to reduced opportunities for both those seeking employment in the academy and early career academics that would like to move laterally. Huge numbers of contingent laborers compete for any position that may have been considered permanent in the past, with more and more employment being determined on a contract basis without the opportunity for tenure. Early career academics need to consider all these trends and be ready to address them both philosophically and in terms of their own preparation for rapid change in this arena.

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