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CRACKING THE CREDIT HOUR

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NEW AMERICA FOUNDATION AND EDUCATION SECTOR

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Imagine a woman named Juliana. Like many 18-year-old high school graduates, she isn't sure what she wants to do when she grows up. Although neither of her parents went to college, they had long set the expectation that she would. Juliana and her family can't afford the expensive four-year college, so she enrolls in the local community college, working toward her associate degree.

There are bills to pay, so our hypothetical Juliana takes classes in the evening while working as a mail clerk at a local law firm. Though it's a lot to handle, she does well, earning A's and B's in her classes. In the summer after her first two semesters, however, her success derails. Her father has a stroke. She quits school to spend more time at home and works additional hours at the law firm to help make up for her father's lost income.

Fast-forward seven years. Juliana is still at the law firm. Because of her diligence, she has been repeatedly promoted. From mail clerk, she moved up to file clerk, then process server, then legal secretary, expanding her skills and knowledge with every promotion. Her colleagues know her as a fast learner and self-starter who is curious about the work of the lawyers and others at the firm.

The collegiate archetype—a well-prepared 18-year-old ready to move into a dorm and study full time for four years, all of it paid for by Mom and Dad—is the exception, not the rule.

Yet despite that, Juliana has hit a ceiling. A number of paralegal positions are opening up in the next year that offer a \$10,000 salary bump and more substantive involvement in the legal work she has grown to love. But her firm requires paralegals to hold a bachelor's degree and a paralegal credential. She won't even be considered.

Juliana's only option is to re-enroll in college.

And here's where things get difficult. The more affordable public university is an hour away, which wouldn't allow her to meet her work and family obligations. The nearby pri-

vate college is more accessible, but the higher tuition would mean Juliana would have to take on significant student loan debt. The private college, moreover, will only allow her to transfer credits for two of the eight classes she completed at community college, despite the fact that most of her community college classes were taught by adjunct faculty who teach at both institutions. Meanwhile, none of the things Juliana learned in her years working at the law firm seem to count for the purposes of getting a college degree certifying that she is prepared to work at a law firm.

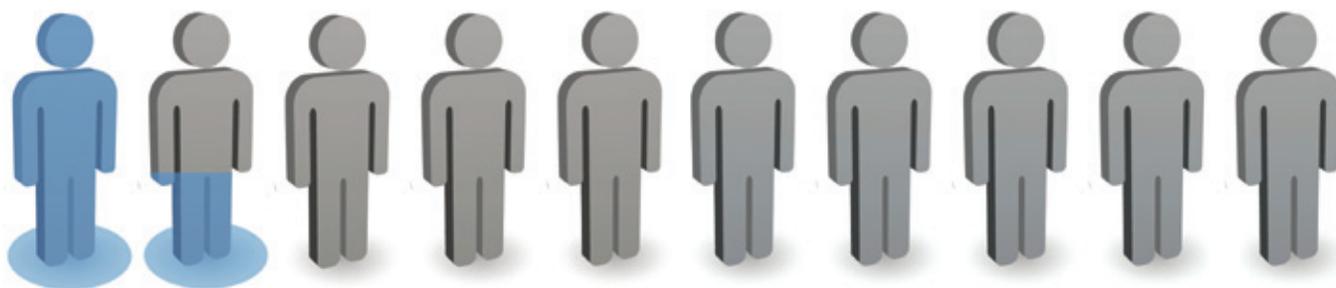
All of this makes going back to college a daunting and expensive proposition. But what other choice does she have?

Most American college students are like Juliana in some way. The collegiate archetype—a well-prepared 18-year-old ready to move into a dorm and study full time for four years, all of it paid for by Mom and Dad—is the exception, not the rule (see Figure 1).¹ An 18-year-old unsure of what she wants to study is probably looking for something very different than someone already in the workforce who needs a degree to advance in her career. If, as business and public leaders of all political stripes have repeatedly said, America needs to significantly increase the number of people with valuable college degrees, it must figure out how to help students like Juliana.

There are ways to do this; in fact, some solutions exist, right now. But only here and there, in a few places, for a few people. Most students are still stuck with an old, maddeningly irrational system and have few, if any, real alternatives. So they slog ahead, spending large amounts of time and money in pursuit of degrees that don't always yield the value promised. Many never even get that far, dropping out along the way with little to show other than debt that can haunt them for years.²

As a result, the nation's workforce and future prosperity are at risk. The percentage of adults with college degrees is

Figure 1: Few Students Have the ‘Traditional’ College Experience



ONLY 14% OF ALL UNDERGRADUATES ATTEND FULL TIME AND LIVE ON CAMPUS.

Source: U.S. Department of Education, National Center for Education Statistics, NPSAS: 2008 Undergraduate Students.

growing at a snail’s pace even as other nations race ahead. Labor market projections suggest that, over the next decade, American colleges and universities will produce millions fewer degrees than are needed to meet the demands of an information-intensive economy.³ As income inequality grows, the haves and have-nots are increasingly divided by college degrees. Yet students who need degrees the most, like Juliana, are stuck with a system ill-suited for their times.

Public policy is the key to solving these problems. The right policies will make success for students like Juliana the norm instead of the exception. They will create incentives for existing institutions to become much better, and for new higher education organizations to give students a quality education at a lower price.

This report explains where our irrational policies came from, and how to fix them. The answer begins with the basic currency of higher education: the credit hour. ❖

The Illusion (and Delusion) of the Credit Hour

The Birth of the Credit Hour

American secondary schools expanded dramatically around the turn of the 20th century, swelling the ranks of high school graduates. That meant a commensurate rise in the number of students applying to college, which created a dilemma for college admissions officers. It was hard to know what level of preparation, knowledge, and skill was really represented by all the new high school diplomas.⁴ In the late 1800s, the National Education

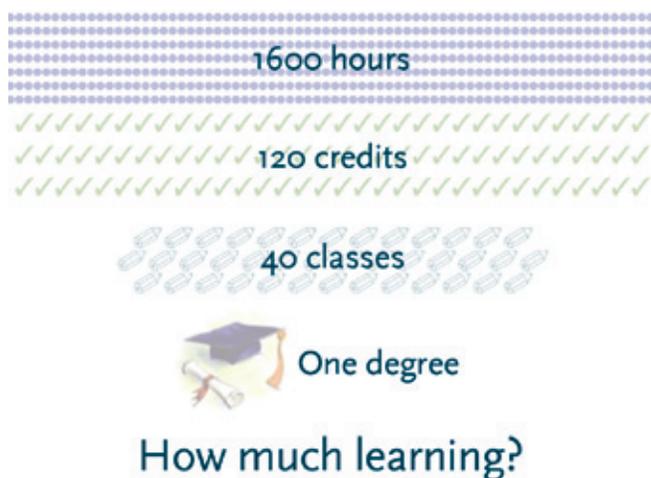
Association endorsed the concept of a “standard unit” of time that students spent on a subject as an easy-to-compare measure.

But the idea of standard time units didn’t stick until later, when Andrew Carnegie set out to fix a problem that had nothing to do with high school courses: the lack of pensions for college professors.

As a trustee of Cornell University, Carnegie was troubled by the poor compensation of faculty. Making too little to prepare for retirement, many professors worked far longer than was productive for them or their students. Carnegie decided to create a free pension system for professors, administered by the nonprofit Carnegie Foundation for the Advancement of Teaching. Colleges were eager to participate. The foundation decided to leverage this excitement to promote high school reform by requiring that any college wanting to participate in the pension program had to use the “standard unit” for college admission purposes. Colleges had nothing to lose and free pensions to gain, so the time-based standard unit (forever after known as the “Carnegie Unit”) became the de facto standard for determining high school graduation and college admissions requirements.

Carnegie’s pension system also spurred higher education to convert its own course offerings into time-based units, which were used to determine faculty-workload thresholds to qualify for the new pension program. Using the Carnegie Unit as a model, it was determined that faculty members who taught 12 credit units, with each unit equal

Figure 2: What is a Degree?



to one hour of faculty-student contact time per week over a 15-week semester, would qualify for full-time pension benefits. Soon, what became known as the “credit hour” would become the fundamental building block of college courses and degree programs. The move to time-based units, however, was unrelated to educational quality. And the credit hour was never intended to be a measure of, or proxy for student learning. In fact, the Carnegie Foundation for the Advancement of Teaching was quite clear about this in discussing the Carnegie Unit in its 1906 Annual Report, where:

[it] stated explicitly that in the counting the fundamental criterion was the **amount of time spent on a subject, not the results attained**; if, for instance, a year’s work in plane geometry would be covered by the way of two weekly hours, the subject should be counted as only 2/5 of a unit.”⁵ (emphasis added)

But colleges did not heed this caveat, and it’s easy to understand why. The standardized nature of credit hours makes them convenient for a number of critical administrative functions, including determining state and federal funding, setting faculty workloads, scheduling, recording coursework, and determining whether students are attending college full time.

The problem is that over the years, the credit hour’s use has expanded beyond measures of time to serve as

a proxy for measures of learning. Most importantly, college degrees came to represent the accumulation of credit hours, typically 120 to earn a bachelor’s degree. But time and learning are not the same. Two people can spend the same amount of time in the same course and learn very different things (see Figure 2).

Time Does Not Equal Learning

It didn’t take long for the original architects of the credit hour to recognize the disconnect between time and learning. In 1938 the Carnegie Foundation published the results of a comprehensive 12-hour exam that included general culture, general science, foreign literature, fine arts, history, and social studies, administered to nearly 5,000 students, from freshmen to seniors, at 10 Pennsylvania colleges.⁶ The test was designed so that those scoring at the 80th percentile or above were deemed to have the equivalent of “baccalaureate-level knowledge.” Presumably, as students move through the college years from freshman to senior, an increasing proportion should reach or exceed the 80th percentile, culminating in 100 percent of all graduating seniors having obtained “baccalaureate-level knowledge.” In fact, the results told a very different story. About a quarter of the students *in each year* scored at the 80th percentile or above. In other words, one-quarter of the freshmen were already testing at the baccalaureate level, about the same percentage as seniors (see Figure 3).⁷

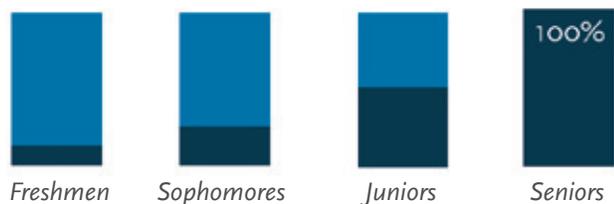
Walter A. Jessup, then-president of the Carnegie Foundation, didn’t mince words as to the study’s implications for the credit hour:

The study is a landmark in the passing of the system of units and credits, which, useful as it was a third of a century ago, is not good enough for American education today. ... American higher education appears to be well on its way to another stage of development in which promotion, at least in college, will be based upon **“the attainments of minds thoroughly stored and competent.”** (emphasis added).⁸

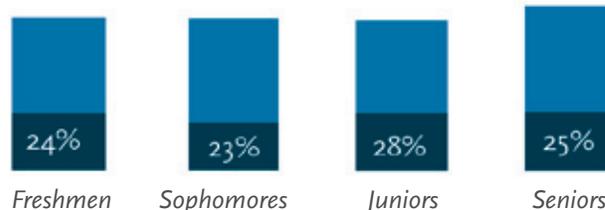
Unfortunately, Jessup’s predictions were not borne out. College degrees are still largely awarded based on “time served,” rather than learning achieved, despite recent research suggesting that shocking numbers of college students graduate having learned very little. The 2011 study *Academically Adrift* found that 45 percent of students com-

Figure 3: Are Time and Learning Related?

If time in college were related to learning then students would know more over time.....



But instead, student knowledge is relatively constant over time.



Percentage of students who scored 80th percentile or above on a comprehensive 12-hour exam designed to test “baccalaureate-level” knowledge.

Source: William S. Learned and Ben D. Wood, *The Student and His Knowledge: Summary of Results and Conclusions; a Report to the Carnegie Foundation on the Results of the High School and College Examinations of 1928, 1930, and 1932*. New York: Carnegie Foundation for the Advancement of Teaching, 1938).

pleting the first two years of college and 36 percent completing four years of college showed no statistically significant improvement over time on a test of critical thinking, complex reasoning, and communication skills.⁹

A 2006 study by the U.S. Department of Education’s National Center for Education Statistics found that the majority of graduating college students lacked the basic skills necessary to summarize opposing newspaper editorial arguments or correctly compare credit-card offers with varying interest rates. This study found alarming deficiencies in three key areas: document, prose, and quantitative literacy. Only 25 percent of college graduates had the document literacy necessary to understand and use information from noncontinuous texts, like interpreting a table about age, blood pressure, and physical activity. The results weren’t much better when it came to prose and quantitative literacy since only 31 percent of college graduates could take away lessons from a complex story or perform computations like comparing the cost of food items per ounce using numbers from printed materials.¹⁰

In theory, colleges supplement the credit-hour count of how much time students have spent being taught with an objective measure of how much they have learned: “grades.” But here again, the picture is troubling. Although grades are supposed to objectively reflect learning, it is hard to reconcile today’s grades with the research suggesting poor learning outcomes are widespread. Almost half of all undergraduate-course grades are A’s

(in 1961, only 15 percent of grades were A’s).¹¹ Grade inflation is cited as a “serious problem” in higher education by nearly two-thirds of provosts and chief academic officers at undergraduate institutions in the United States. (Perhaps unsurprisingly, only 30 percent believe it is a problem on their own campuses.)¹² Either college graduates have become much, much smarter over time—a possibility contradicted by all available research—or the function of grades in meaningfully differentiating and rewarding student learning has badly eroded.

There is a curious disconnect between the widely held belief that American universities are great and the growing recognition that their graduates are not.

Given these sobering findings, it is not surprising that employers are not particularly impressed with recent college graduates. When the Association of American Colleges and Universities recently asked employers whether graduates were well prepared to succeed in entry-level positions at their companies, one-third of them said “no;” and only about a quarter said colleges and universities are doing a “good job” in preparing students effectively for the challenges of today’s global economy.¹³ There is a curious disconnect between the widely held

belief that American universities are great and the growing recognition that their graduates are not (see Figure 4).

Varying Exchange Rates on the Credit-Hour Currency

Perhaps the strongest evidence of the credit hour's inadequacy in measuring learning can be found in the policies and choices of colleges themselves. If credit hours truly reflected a standardized unit of learning, they would be fully transferable across institutions. After all, a dollar in New York is still a dollar in Illinois. An hour in Texas is still an hour in Minnesota. But colleges routinely reject credits earned at other colleges. Given that only 41 percent of graduates attend a single college, 59 percent attend two or more, and 24 of those percent attend three or more, non-transfer of credits exacts huge costs from students and likely reduces their chance of completing a degree (see Figure 5).¹⁴

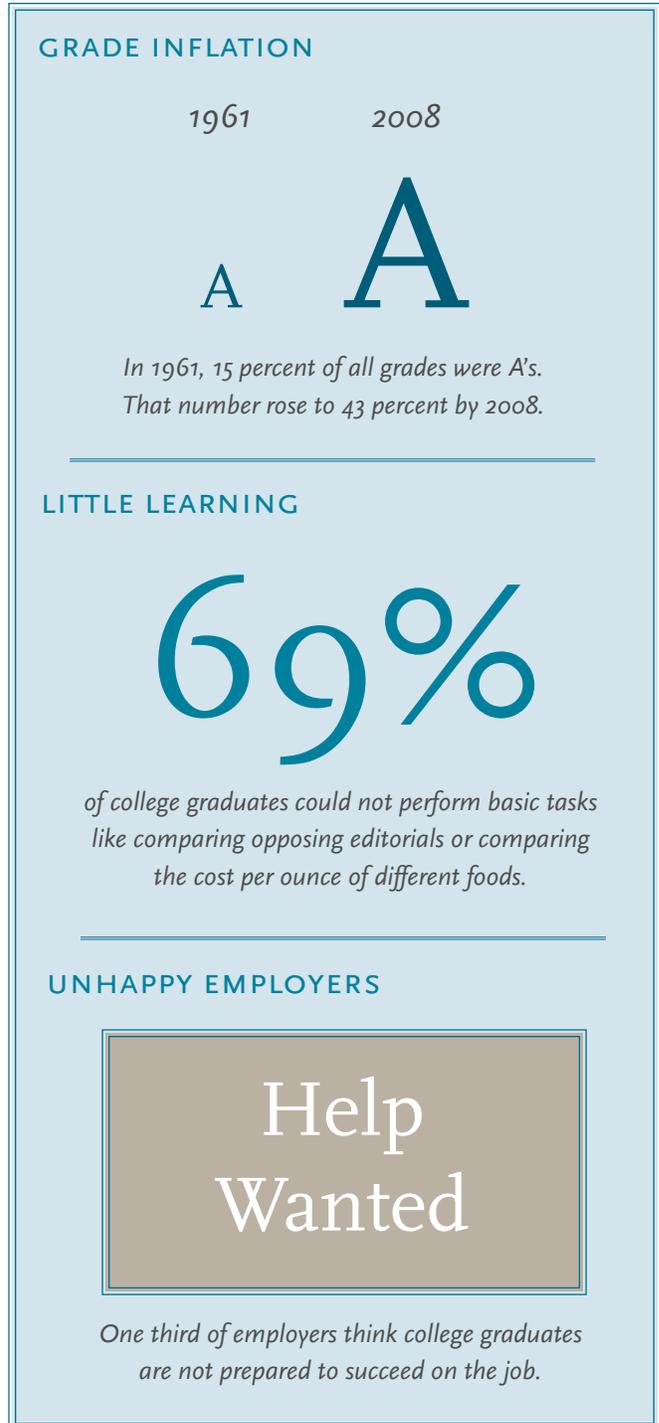
Through its everyday actions, the higher education system itself routinely rejects the idea that credit hours are a reliable measure of how much students have learned.

Many students are unaware of this problem and simply assume that their courses will transfer from one school to the next. But that is not the case. Until recent action by the Louisiana Legislature, for example, Louisiana community college students with an associate degree typically lost between 21 and 24 credits upon transferring to a four-year state school.¹⁵ That's a *year* of time and money lost. For many students, it may mean never finishing a degree.

The credit transfer problem is rooted in a lack of information about student learning. While students may assume that Calculus 101 is the same (or close enough) everywhere, there is often no easy and reliable way for institutions to determine what students with credits from another institution's calculus class know and can do. While some institutions have partnered to develop articulation agreements to allow students to transfer particular courses, these efforts are not typically systematic or transparent to students.

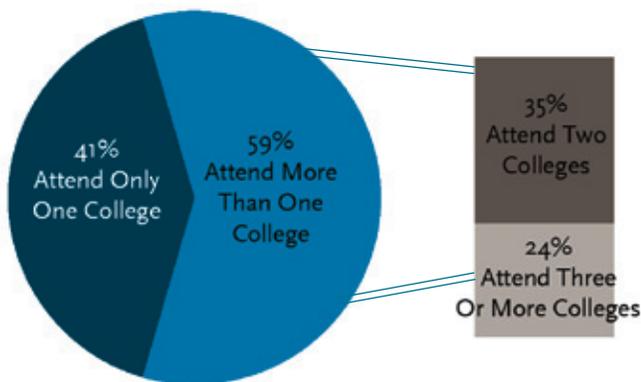
In other words, through its everyday actions, the higher

Figure 4: Unimpressive College Students



Sources: Stuart Rojstaczer and Christopher Healy, "Where A Is Ordinary: The Evolution of American College and University Grading, 1940-2009," *Teachers College Record* 114, no. 7 (2012); Mark Kutner, Elizabeth Greenberg, and Justin Baer, "A First Look at the Literacy of America's Adults in the 21st Century. NCES 2006-470," U.S. Department of Education National Center for Education Statistics, (2006); Peter D. Hart Research Associates, *How Should Colleges Assess and Improve Student Learning? (The Association of American Colleges and Universities, 2008).*

Figure 5: Ability to Transfer Credits Matters: Majority of Students Attend More than One College



Source: Katharin Peter and Emily Forrest Cataldi, “The Road Less Traveled? Students Who Enroll in Multiple Institutions,” U.S. Department of Education; National Center for Education Statistics, May, 2005.

education system itself routinely rejects the idea that credit hours are a reliable measure of how much students have learned. The consequences of this problem are far-reaching. Countless dollars and hours are wasted every year as transfer students are forced to retake courses or never given credit for what they have learned due to the flawed currency of the credit hour. ❖

The Federal Government Weighs In on the Credit Hour

Because public funds are spent to help students earn degrees, lawmakers have an interest in holding colleges and universities accountable for student learning. They also need to protect consumers and taxpayers from waste and fraud, while at the same time keeping the system open to innovation and new methods of helping students learn and earn credentials.

These are difficult goals to balance in any case. They are made far more difficult when the currency of higher education, the credit hour, doesn’t actually represent learning in any kind of consistently meaningful or discernible way. This dilemma has become more acute in recent years as policymakers have grappled with two important, growing, and intertwined trends: the growth of the for-profit higher education industry and the steady migration of higher learning to online platforms.

Online and For-Profit Education Strain the Limits of the Credit Hour

The number of students enrolled in for-profit colleges has grown significantly in the past decade, increasing more than 300 percent between 2000 and 2010.¹⁶ Although many students at for-profit schools enroll in online courses, the online world is not unique to for-profits. From 2002-2010, the percentage of students, across the public, private, and for-profit sectors, taking at least one online class rose from less than 10 percent to 32 percent.¹⁷ Taken together, the trends of increased for-profit and online enrollment have further shaken the creaky foundation of the credit-hour-based regime (see Figure 6). In a 2010 hearing before the U.S. House of Representatives, the Department of Education’s inspector general acknowledged this shift:

This issue has become even more significant as on-line education has exploded in recent years, making credit-hour assignment difficult, its comparison to traditional classroom delivery a challenge, and its value increasingly important in order to ensure that students and taxpayers get what they are paying for.¹⁸

One of the primary appeals of online classes to “nontraditional” students who are juggling work and family schedules is the flexibility these courses provide in terms of time. Online classes are often “asynchronous”—students don’t all gather in a room for the same amount of time every week. They can largely proceed through courses at their own pace. While a boon to working students, non-traditional online courses and programs are an awkward fit with the “seat time” basis of the classic credit hour. As more students enroll online, this misalignment between the way higher education is regulated and actually conducted has become increasingly problematic, particularly for the federal government.

Many online and for-profit courses (as well as colleges of all kinds) are heavily financed by federal student financial aid dollars. In 2012, the federal government disbursed more than \$187 billion in grants, loans, and other forms of student financial aid, an increase of over \$100 billion in annual aid in just the last 10 years.¹⁹ Traditionally, the federal government has relied on a combination of consumer choice, state and federal regulation, and self-regulation by the higher education industry to ensure that federal aid dollars are well spent.

Figure 6: Rapid Increases in Online and For-Profit Education Challenge the Credit Hour

The percentage of students taking at least one online class increased from

10% to 32%

between 2002 and 2010.

Enrollment at for-profit colleges increased

300%

between 2000 and 2010.

Sources: U.S. Department of Education National Center for Education Statistics, "The Condition of Education 2012" 2012; I. Elaine Allen and Jeff Seaman, *Going the Distance: Online Education in the United States*, 2011 (Babson Survey Research Group, 2011).

Self-regulation, or the accrediting process, is believed by many in higher education to be critical for maintaining institutional independence and academic freedom. Rather than having outsiders assure compliance with various rules and standards, colleges turn to nonprofit voluntary accrediting agencies that use teams of professors and administrators from peer institutions to monitor compliance. In the case of the credit hour, individual colleges and universities review their own courses, determine how much student work is involved in each, and assign what they believe to be an appropriate number of credit hours per course. If the accreditor signs off, the U.S. Department of Education will provide financial aid to eligible students at that institution. During their regular reviews, accreditors only check to see whether the *process* of determining credit hours is valid. As a rule, they do not pass judgment on course content itself. Until recently, how credit hours are defined had been solely in the hands of colleges and their accreditors.

The Department of Education Defines a Credit Hour

But in 2009, the U.S. Department of Education's inspector general found that three accreditors, which account for more than 70 percent of all federal aid awarded, were exercising inadequate oversight on their institutions' credit-

hour assignment processes. The inspector general singled out one accreditor for approving a for-profit institution that granted nine credits for a 10-week course.²⁰ (Traditional colleges typically offer three credits for 15-week courses.) When the accreditor noted that nine credits seemed excessive, the institution responded by simply breaking up the course into two five-week, 4.5-credit courses, without changing the underlying amount of work or learning. Yet the accreditor, who called the institution's credit-awarding policy "egregious," approved them anyway.

In response to the IG report, and to a growing concern over poor quality controls for federal financial aid eligibility, the Department of Education decided that there needed to be a consistent, standard definition of a credit hour. This created a dilemma for the Department. The entire massive multibillion-dollar federal financial aid system runs on credit hours. Credit hours are used to determine full- or part-time status, which changes the amount of aid a student can receive. Abusive interpretation of the credit hour could lead to fraud on a huge scale. But the credit hour is also archaic, a nonsensical basis for regulating online programs in which the whole notion of time in the classroom has no meaning. Define the credit hour too tightly, and innovation would be stifled. Define it too loosely, and taxpayers would get taken for a ride.

Many in the higher education community were not enthusiastic about the Department's decision to define the credit hour. Some saw it as government intrusion into the traditional decision-making realm of experienced college educators. Others worried that a new legal definition would reinforce a time-based measure of student learning that, in an age of increased online learning, was becoming increasingly obsolete. The Department heard all of these arguments—more than 1,200 official comments from interested parties were filed—and tried to balance them in its definition of the credit hour. This was the result:

A credit hour is "an **amount of work** represented in intended **learning outcomes** and verified by **evidence of student achievement** that is an institutionally established **equivalency** that is **not less than one hour** of classroom or direct faculty instruction and a minimum of **two hours** of out of class **work** for each week for approximately fifteen weeks for one semester... or the **equivalent amount of work over a different amount of time.**"²¹

While the rule correctly identifies what should be measured—learning outcomes—it proceeds to consider at least *three* different ways of measuring those outcomes. The first basically restates historic practice: credits are awarded based on time—time spent in class and time spent on work. The second is “evidence of student achievement,” which can mean a great many things, but should be the foundation of any process for awarding grades and credits. The third method is estimating the “amount of work represented” in achieving learning outcomes. This method nods toward the logic of asynchronous courses offered at a distance; colleges can’t very well base credits on the length of time students spend in class if there are no classes to spend time in.

In the last part of the definition, the Department acknowledges that amounts of work spent learning and time spent attending class aren’t the same thing, suggesting that traditional 15-week semesters can be translated into “the equivalent amount of work over a different amount of time.” *Work* turned out to be the Department’s middle ground between *time*, an easily measured but poor proxy for quality, and *learning*, a difficult-to-measure but real indicator of quality.

The Department’s credit-hour definition above could be rewritten, with the same underlying meaning, as follows:

Colleges may award students a credit for any of the following reasons:

- 1) Experiencing one hour of class attendance or faculty instruction per week, for 15 weeks, in a course that requires two hours of additional work for every one hour of class attendance and/or instruction.
- 2) Performing the equivalent amount of work over a different period of time.
- 3) Demonstrating evidence of achievement, represented in intended learning outcomes, that is equal to an amount of work that is equivalent to experiencing one hour of class attendance or faculty instruction per week, for 15 weeks, etc.

This definition allows new colleges and programs seeking accreditation to define the scope of courses in terms of

evidence of achievement, learning outcomes, and student work, instead of time.

To further cloud the issue, the credit-hour definition was just one piece of a lengthy series of controversial regulations designed to reduce fraud and abuse in the federal financial aid program. Colleges and universities scrambled to understand the implications of all 143 pages, not just those devoted to the credit hour. Six months later, the Department tried to provide clarity on the credit-hour issue in a 15-page letter sent to institutions. For those interested in moving away from seat time, the letter should have been good news, since it said the newly defined credit hour was:

[C]ompletely consistent with innovative practices such as online education, learning-based credit, and academic activities that do not rely on “seat time;”

and

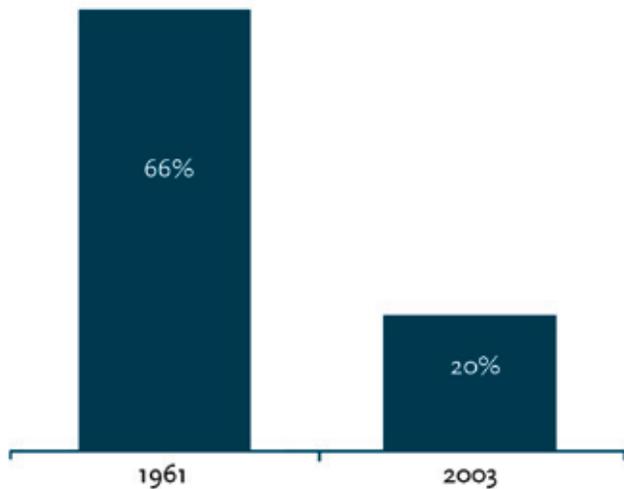
...does not emphasize the concept of “seat time” (time in class) as the primary metric....At its most basic, a credit hour is a proxy measure of a quantity of student learning.²²

Unfortunately, these words, meant to encourage innovation, came after a contentious regulatory process focused on reducing fraud and abuse in the federal financial aid program. It was clear that the Department felt there had not been enough quality control around access to federal financial aid. The credit-hour definition was born out of this concern. Yet it also attempted to leave the door open for innovation by allowing for learning-outcome- and work-based equivalencies.

Reaction to the New Credit Hour: Confusion

But given the impetus for the regulation, it was hard for some colleges to believe that the Department was simultaneously restricting and *broadening* access to financial aid. Accreditors, burned by the harsh scrutiny of the IG report, were fearful of reprisals from the Department, and resisted institutional efforts to move from seat time to learning. So, despite the Department’s attempts to assure institutions and accreditors that it was open to institutions pursuing non-time-based methods of certifying learning, many in the industry still believe that their safest bet, if they want to keep access to federal financial aid, is to do what they have always done: use time to determine credits.

Figure 7: ‘Full-Time’ U.S. Undergraduates Studying at Least 20 Hours a Week Outside of Class



Source: Philip Babcock and Mindy Marks, “The Falling Time Cost of College: Evidence from Half a Century of Time Use Data,” June 1, 2008.

The new definition has not changed how most students experience or receive credit for their classes. Yet institutions and accreditors, unhappy with what they see as the federal government’s attempts to impose on their academic freedom, continue to fight the credit-hour regulation. They have legislative allies. In early 2010, the House voted overwhelmingly to pass the “Protecting Freedom in Higher Education Act,” which would repeal the credit-hour definition along with other new rules.²³ While the Republican-controlled House voted overwhelmingly to support repeal, the Democrat-controlled Senate has not considered the issue. For the moment, at least, the new credit-hour definition is in force.

It’s easy to criticize the Department of Education’s mixed messages. But its inability to create a clean regulatory framework based on student learning outcomes is rooted in a simple fact: **No consensus definition exists of what those outcomes are or should be.**

The 15-week, one-hour-in-class-and-two-hours-out definition of a college course is not just easy to measure; it is a long-established practice and convention. The credit hour may be an illusion—studies suggest that typical students work nothing close to two hours out of class for every one hour in—but it is an illusion that everyone under-

stands and agrees to believe (see Figure 7).²⁴ There are, by contrast, few equivalent agreements around learning outcomes.

Although colleges and their accreditors claim that learning outcomes are already an integral part of an institution’s DNA, the research findings on poor learning outcomes and rampant grade inflation, combined with the difficulty of credit transfer, tell a different story. How can the federal government provide flexibility for institutions looking to move away from seat time while ensuring that students and taxpayers are actually paying for something of value—that is, learning?

Colleges or other higher education providers could attempt to build agreements around learning outcomes; but it is not clear how, or even whether, accreditors and the U.S. Department of Education would go about deciding that the learning standards are good enough. It’s a catch-22: Without regulatory certainty, colleges will be reluctant to have their programs evaluated on a basis other than time. But until more colleges build programs around verifiable student learning outcomes, it will be difficult for regulators to fully move away from time.

The credit hour may be an illusion—studies suggest that typical students work nothing close to two hours out of class for every one hour in—but it is an illusion that everyone understands and agrees to believe.

Fortunately, there are emerging models of measuring student learning as well as institutional examples that long precede the current controversies around online learning and for-profit colleges. ❏

Emerging Efforts to Measure Student Learning

The Degree Qualifications Profile and Tuning USA

Any attempt to systematically measure learning will need buy-in from college faculty. The Lumina Foundation has seeded two efforts to develop shared ideas about learning outcomes with explicit leadership from faculty and scholarly

groups. They are the Degree Qualifications Profile (DQP) and Tuning USA.

The DQP is a framework for what students should know and be able to do with a degree, regardless of discipline, whether it's an associate, bachelor's, or master's degree. The DQP highlights five key areas (broad, integrative knowledge; applied learning; intellectual skills; specialized knowledge; and civic learning) that should be part of any degree program, and articulates differences in depth and sophistication of each key area as one moves up the degree ladder. The idea of the DQP came from qualifications frameworks developed by European nations looking to improve transparency, consistency, and quality in their disparate higher education systems. A beta version of the DQP was released in 2011 and is currently being tested in more than 30 states and 100 institutions. Participating institutions bring together faculty from a cross section of disciplines to consider curriculum planning in light of the DQP framework and determine if and how improvements could be made in defining and assessing student learning.²⁵

Tuning USA is a faculty-driven process that also seeks to articulate learning outcomes at the discipline level. This is often less an exercise in *creating* minimum outcomes than an effort to articulate what is already in practice, allowing groups of experts to collectively fine-“tune” their expectations, and make these expectations transparent to students, other institutions, and employers. While much of the tuning work is being done at the institutional level, there are also state and national-level efforts under way. The state of Texas has been a leader in tuning, bringing together faculty, students, recent graduates, and employers to establish common learning outcomes by degree level for eight disciplines, and it is working on an additional four. Tuning is also being implemented at the national level; the American Historical Association has begun a three-year process to define learning outcomes for associate, bachelor's, master's, and doctorate degrees in history.

While promising, these efforts to forge agreement on student learning outcomes are currently limited in scope. Once widely adopted, however, they could provide a foundation for crediting on criteria other than seat time. ❏

Innovations and Institutions We Can Learn From

Other useful examples were developed much earlier, at

specific colleges and universities. In the late 1960s and early 1970s, the Carnegie Foundation emerged once again as a central player in developing new approaches to higher education. As adults supported by the GI Bill entered or returned to school and as more women entered higher education or went back after taking time to start families, it became clear that higher education needed to accommodate adult learners.

Unfortunately, existing time- and place-dependent colleges were often ill-suited to the task. Carnegie produced a series of reports emphasizing that adults were not simply older 18-year-olds; they had skills, knowledge, and educational needs that traditional students did not.²⁶ Institutions needed a different approach for adult students that started with recognizing, measuring, and awarding credit for the high-level knowledge and skills adults had acquired through life and work experience.

Regents College Then, Excelsior College Today

In response, several new programs and institutions were created to address the needs of self-directed adult learners. A pioneer in these efforts was Ewald Nyquist, New York State's commissioner of education and president of the University of the State of New York during the 1970s. In his inaugural convocation address to an audience of 2,000, including Governor Nelson Rockefeller, 125 college and university presidents, 70 superintendents, and other educators and luminaries, Nyquist said:

If attendance at a college is the only road to these credentials, those who cannot, or have not, availed themselves of this route, but have acquired knowledge and skills through other sources, will be denied the recognition and advancement to which they are entitled. Neither the State nor the Nation can afford such waste, nor should they tolerate such inequity. The costs of traditionalism are too high.²⁷

Nyquist proposed a degree program that would give those unable to attend traditional college courses the opportunity to earn a degree. Rockefeller called it “a bold step...to extend the enriching experience of higher education to ever-increasing numbers.” The Regents degree program was born, using exams and validation of credits earned at other institutions to help students more quickly and inexpensively earn their degree. In 1972, the first associate degrees were

awarded. Students who had never previously met, as they were spread out across the country during their “time” at Regents, assembled in New York on graduation day to walk across the stage and receive degrees. Eighty percent of the first graduating class of 77 worked full time and included many active and former military members who had attended multiple colleges but had no degree.

If attendance at a college is the only road to these credentials, those who cannot, or have not, availed themselves of this route, but have acquired knowledge and skills through other sources, will be denied the recognition and advancement to which they are entitled. Neither the State nor the Nation can afford such waste, nor should they tolerate such inequity. The costs of traditionalism are too high.

— *Ewald Nyquist*

New York State Commissioner of Education, 1970

The program soon became a college and eventually became Excelsior College, a private, regionally accredited institution whose motto is “What you know is more important than where or how you learned it.” In the beginning, Excelsior students earned the majority of their credits either via transfer or from standardized exams. Exam-based credits are not entirely unfamiliar to traditional higher education—3.7 million high school students took Advanced Placement (AP) exams in 2012 in the hopes of “testing out” of courses for which they’ve already mastered the material.²⁸ But the AP exam and its College-Board-administered cousin, CLEP (College-Level Examination Program), are the only test-based processes to enjoy widespread acceptance. Excelsior allows students to accumulate substantial numbers of credits through multiple, normed assessments.

Over the years, the college has broadened the ways in which students can earn credits and degrees. Today’s Excelsior students can earn credit through assessments, demonstration of prior learning through a portfolio of projects and work that is verified by an outside organization, or by taking in-person or online classes. Students also benefit from

a Credit Bank, which helps the large numbers of students who have attended multiple institutions make their academic history less confusing for future employers or academic institutions. For a \$50 fee, Excelsior takes credits from multiple institutions (the average Excelsior student has previously attended five institutions) and transcribes them onto one official transcript.

Excelsior continues to adapt to the needs of its students; in early 2012, amidst increasingly public concern about rising college costs, Excelsior announced a modern, and inexpensive, twist to some of its degree programs. For \$10,000 or less, students can earn a bachelor’s degree by using free online courses and materials available in the public domain, and demonstrate their mastery of the subjects on exams designed by subject-matter experts from across the country.

Despite these innovations, Excelsior remains a relatively unknown commodity and there are few schools like it (see “Public Pioneers Against ‘Seat Time’” on page 14 for similar institutions). This is in part because students who enroll in competency-based programs typically have not had a key benefit available to students at most other accredited institutions and programs: access to federal financial aid. While students in Excelsior’s online classes are eligible for federal financial aid, students in its competency-based exam programs—including the largest nursing program in the U.S.—are not eligible for aid. The U.S. Department of Education considers these programs “independent study” experiences that lack traditional faculty-student interaction. In other words, the courses have no foundation in *time*.

The concept of “regular faculty-student interaction” has been at the heart of many federal aid policies, largely to protect students and taxpayers from unscrupulous diploma-mill operators. If students learning at a distance can’t spend time in class, the thinking goes, their time interacting with faculty can be measured instead. In 1973, the Veterans Administration (now the Department of Veterans Affairs), which had previously provided benefits to Regents students, adopted regulations that required “interaction either by mail, telephone, personally or by class attendance between student and the regularly employed faculty of the university or college.” This meant that Regents, despite having national and regional accreditation, would no longer be eligible for VA benefits. Regents officials weren’t about to allow their students to lose access to these critical

dollars without a fight, so they went to court and sued the VA and the U.S. Treasury.

Fighting the federal government is rarely an easy battle, and this case was no exception. The case proceeded slowly, up until 5 p.m. the day before the trial was scheduled to start, when the VA requested a last-minute venue change. Fortunately for Regents College, the new judge assigned to the case had personal experience with the very “faculty-student interaction” issue upon which the VA based its denial of benefits. Drawing from his Columbia Law School days, Judge Charles L. Brieant Jr. asked the VA lawyer whether “sitting in a large hall with four hundred students and listening to a professor lecture once or twice

a week was what the VA meant by ‘faculty student contact.’” When the lawyer essentially responded “yes,” the judge immediately adjourned the proceedings and found in favor of Regents College.²⁹ Students who qualify for VA benefits, including the GI Bill, can still use these benefits today at Excelsior College. But the vast majority of college students have not served in the military and are, therefore, not eligible for these benefits.

Excelsior and a handful of other institutions founded in the 1970s have long been the only real option for adults interested in obtaining degrees based on defined, objectively measured learning outcomes instead of defined amounts of time. Other innovations have come more recently, includ-

Public Pioneers Against ‘Seat Time’

The early 1970s was a time of experimentation in many parts of American life, and higher education was no exception. Connecticut, New Jersey, and New York each founded a public institution during this time to provide adult students with alternative paths to a degree. These institutions are still thriving today, serving thousands of students. Prestigious alumni from these institutions include high-ranking elected officials in the New York Legislature and the U.S. Congress, MacArthur award winners, journalists from the *New York Times*, CEOs of major corporations, professional athletes, and Broadway actors.

Charter Oak State College (Connecticut) *Degrees Without Boundaries*

Founded in 1973 to fit the needs of women returning to college after pauses related to marriage or careers, Charter Oak provided many of the same options as Regents: generous transfer policies, credit-by-exam, and credit through assessment of prior learning. Instruction was added to the mix in 1998, and now the majority of its 2,000 students earn credit through online classes. Tuition is about \$5,600 for Connecticut residents and \$7,400 for non-residents.

SUNY Empire State College (New York)

Part of the State University of New York (SUNY) system, Empire State College was established in 1972 to provide non-traditional students the opportunity to earn a college degree through guided independent study and other modes of learning, including assessing credit for prior learning. The college offered its first online course in the late 1980s and today educates over 20,000 students online and onsite at 35 locations throughout the state and at eight international locations. Degrees are offered at the associate, bachelor’s and master’s level. Tuition is about \$5,600 for in-state residents and \$14,800 for non-residents.

Thomas Edison State College (New Jersey) *What matters is that you possess college-level knowledge—not how you acquired it.*

Created in 1972, Thomas Edison State College allowed students to earn credit by examination, demonstration of prior learning, or transfer of credits from other institutions. Early adopters of online learning, they introduced online as a pilot in 1987 and as a general option in 1990. Thomas Edison currently enrolls over 18,000 students and is the only public college in New Jersey to offer degrees at the associate, baccalaureate, and graduate levels. The school offers full-time students the opportunity to earn up to 36 credits a year for a flat fee of \$5,500/year for New Jersey residents and \$8,100/year for non-residents.

ing an institution that promises an education that is “*Online. Accelerated. Affordable. Accredited*”: Western Governors University (WGU).

Western Governors University

In the mid-1990s the Western Governors Association, a nonpartisan group of governors from 19 western states, was grappling with how to best prepare its residents to meet the workforce needs of those states. The governors needed to provide access to education for a population spread over sparsely populated stretches of the West. Rapidly growing urban areas in states like Nevada and Arizona, meanwhile, needed more higher education capacity, which would be expensive to build using the traditional brick-and-mortar model. Creating hundreds of new institutions was not a realistic solution, nor was expecting that working adults would leave their jobs and families to attend an institution hundreds of miles away. So, long before the ubiquity of Google and smartphones, the governors decided that the answer lay in a fully online institution.

Online education would afford students across the western states access to higher education. But how could they be sure that what they were learning was what employers needed and valued? The answer was clear—measurable competencies. For each degree program, a group of faculty, scholars, and industry experts would define and make transparent the competencies that each student with a

WGU degree would be able to demonstrate. This approach not only provided a consistent benchmark for the quality of the degree, it also allowed students to move through the material at their own pace.

Like the earlier models from the '70s, WGU officials recognize that students who come to college know different things and learn at different rates and believe that students should be able to demonstrate what they know and spend time learning what they don't. Education is highly individualized at WGU: students are initially assessed to determine which, if any, competencies they already have; and a learning plan is then created to help students master the competencies they don't. Unlike at traditional universities, students at WGU don't need to sit through courses of material they've already learned. Students move on when they demonstrate mastery of a competency, whether it takes a week or a year. Tuition is \$2,890 for six months of enrollment, during which time students can master as many competencies as they are able. Graders unconnected to the students determine whether or not a student has met WGU standards.

Unlike the Excelsior model, WGU students have regular interaction with faculty, but not in the traditional sense. The WGU faculty members with whom students regularly interact are mentors, not teachers. These mentors have experience in a student's field of study and work with stu-

Southern New Hampshire University: Four Years of Learning in Three

Regents/Excelsior, Charter Oaks, Thomas Edison, Empire State, and WGU were all created from the ground up to provide competency-based education to working adults. But students at *all* types of institutions can benefit from an approach that focuses more on what students know and can do, rather than how many hours, semesters, or years they have been in school. At least, that's the experience of students at one small, private university in New Hampshire who receive a bachelor's degree after only three years.

With a grant from the federal government, Southern New Hampshire University (SNHU) designed a competency-based bachelor's degree. Unlike “accelerated” three-year degree programs that squeeze four traditional years of courses into three years by offering additional courses on nights, weekends, and summers, SNHU restructured the entire curriculum of its residential bachelor's in Business Administration to fit four years' worth of competencies in three regular college years. Faculty members came together to identify the competencies of the program and determine the appropriate sequencing. In some cases they eliminated duplicative competencies; in others, they intentionally re-exposed students to competencies to ensure greater mastery. In the process, SNHU removed an entire year's worth of time and cost (up to \$40,000 for the student). Students in this program score as well or better than their counterparts in the traditional four-year program.

dents from day one to help them access the resources they need to move through the program and get their degree.

For students, WGU provides a relatively inexpensive and quick way to get a degree; the average graduate gets a bachelor's degree in 30 months and pays about \$14,000. Although WGU was originally built to serve students in the western states, the demand for relatively low-cost, competency-based higher education has grown: today WGU serves students across the country, states are contracting with WGU to create their own state-branded versions of the school, and WGU enrollment is growing by 35 percent a year.³⁰

Government Policy Can Make or Break Innovation

While Excelsior and WGU can help students like Juliana, the vast majority of colleges are not set up to do so, and the current regulatory framework offers few incentives for the right kind of new programs to be created or for existing programs to improve. Government policies can make an enormous difference in creating or stifling new higher education models. Without political capital from the State of New York, Regents/Excelsior College would never have come to be. WGU owes much of its success to significant financial and political investment by state and federal

governments. For-profit and online higher education has boomed since 2000, in large part due to a change in federal policy that removed a requirement that at least one-half of an institution's students must be enrolled in face-to-face courses in order to be eligible for financial aid.

If the U.S. is to reclaim its position as the most-educated nation in the world, then federal policy needs to shift from paying for and valuing time to paying for and valuing learning.

The right policies can produce huge changes in the higher education market. If the U.S. is to reclaim its position as the most-educated nation in the world, then federal policy needs to shift from paying for and valuing time to paying for and valuing learning. What's needed is a new regulatory framework that not just allows but *encourages* the creation of higher education programs based on learning instead of time. Many of the tools needed to make this shift are available to federal policymakers right now. ▣

Recommendations: Cracking the Credit Hour by Moving from Time to Learning

The examples above show that higher education can be successfully organized on a basis other than time. Indeed, learning-focused programs are a hallmark of educational models that best serve nontraditional students like Juliana. But competency-based higher education remains relatively uncharted territory. In an era when college degrees are simultaneously becoming more important and more expensive, students and taxpayers can no longer afford to pay for time and little or no evidence of learning. Federal policy should encourage traditional institutions to think differently about how they deliver and award credit for learning and also create a space for nontraditional institutions and organizations to prove their ability to help students achieve real, objectively verified learning outcomes.

In an era when college degrees are simultaneously becoming more important and more expensive, students and taxpayers can no longer afford to pay for time and little or no evidence of learning.

Lawmakers and regulators may be understandably reluctant to upend an imperfect, but well-known, system for an unknown one, particularly with hundreds of billions of dollars and millions of students' futures at stake. Luckily, we don't need a radical restructuring to start the move from time to learning. The Department of Education has three tools at its disposal right now that could allow for careful, controlled, and intentional experimentation with awarding federal financial aid based on learning, rather than time. These tools can seed innovative, lower-cost approaches

Three Tools the Federal Government Can Use Now to Pay for Learning, Rather Than Time

- 1) *The Credit Hour*
- 2) *Experimental Sites*
- 3) *Direct Assessment*

to help students, and create the evidence base needed to expand a learning-based regulatory framework to higher education at large.

1) Innovate within an Existing Frame: The Credit Hour

The first tool the Department can use to move away from historic, time-based notions of a credit hour is the recently defined credit hour. Although the credit-hour definition was designed to curb federal financial aid abuse, it also created opportunities for institutions to use non-time-based measures of learning to qualify for federal financial aid. The Department can help institutions and accreditors translate alternative measures of learning into the equivalent credit-hour framework that people already use and understand. Lest this sound too abstract, the Department can point to an existing institution that uses the credit hour, rather than seat time, to access federal financial aid. One that Education Secretary Arne Duncan says he wants "to be the norm," rather than the exception: WGU.³¹

It may be surprising to learn that WGU's competency-based model uses, and receives federal aid for, credit hours. It wasn't supposed to. In fact, when WGU was in its infancy, it worked with the Department and Congress to come up with an entirely different way of awarding federal financial aid, one that would bypass credit hours altogether. This new method would allow for the "direct assessment" of student learning, rather than seat time. While Congress codified direct assessment into law in 2006, WGU ultimately chose not to use this new authority, working instead with the Department to creatively translate its competencies into commonly understood credits.³² Not coincidentally, the number of "competency units" that students are required to master is 120, the standard number of credit hours required for a bachelor's degree.

Although the final product is articulated in terms of credit hours, WGU's learning process is not based in time. Robert Mendenhall, president of WGU, describes the learning and conversion process this way:

We don't award three credit hours when people spend a certain amount of time learning something; we award three competency units when they master learning, independent of time. If a student can pass 40 competency units in that term, which would be equivalent to 40 credit hours, that's how much they can earn.³³

The Department made explicit in its credit-hour definition and guidance that the credit hour need not be based on seat time. It now needs to work with accreditors and institutions to show that it means it. Accreditors still need to sign off on the credit-awarding process and will only do so if they believe the Department will accept this approach. Although the Department may think it sent a clear message in its 2011 Dear Colleague Letter, the message was not widely received or believed. The Department should highlight the fact that WGU was eligible for financial aid before and after the adoption of the credit-hour definition to underscore that the regulation is not a primary barrier to innovation.

Despite the flexibility offered by the new credit-hour definition, the credit hour is laden with history and practice that measure education in terms of time. And “hour” is still in its name.

The Department must also recognize that the regulatory environment has created a significant level of uncertainty, which is, itself, a barrier to innovation. It must create a more encouraging climate repeatedly holding up innovative, quality practices that meet its definition of the credit hour. It should also publicly ask institutions and accreditors to use the credit hour in innovative ways to move from seat time to learning. While the Department may be obligated, given current law, to use the term credit hour, it could begin to simultaneously refer to credit hours in non-time-based terms, such as credit units or credit measures to signal its willingness to move from time to learning.

Despite the flexibility offered by the new credit-hour definition, the credit hour is laden with history and practice that measure education in terms of time. And “hour” is still in its name. The federal government should do everything it can to help push the historical boundaries of the credit hour, but it should also use other tools at its disposal—tools that are not anchored, either in history or name, to time.

2) Innovate through Experimentation: Experimental Sites

While there may be a great deal of flexibility under the new credit-hour definition, some innovations remain ineligible for financial aid due to language in the federal

Higher Education Act, which governs financial aid. The Department may be reluctant to open the doors of the financial aid system too broadly, which could allow dishonest actors to take advantage of new flexibilities.

Fortunately, Congress has given the Department of Education a powerful tool with which to test and refine policy ideas. This rarely used provision of the Higher Education Act states that:

The Secretary is authorized to periodically select a limited number of additional institutions for voluntary participation as experimental sites to provide recommendations to the Secretary on the impact and effectiveness of proposed regulations or new management initiatives.³⁴

With this language, the Department can create a small, controlled, voluntary virtual laboratory of “experimental sites” on which it tests particular learning-based financial aid policies to see if they work, how they work, for whom they work, and under what conditions they work. It can get a sense of how the policy could be abused and create parameters that would prevent such abuse. It can then take the results of these experiments to Congress, so that lawmakers can adopt policies to encourage the growth of the most successful experiments at a larger scale.

The Department should use this experimental authority to try out radical new ways of assessing and paying for learning. The Department should put out a notice asking institutions to both identify federal financial aid barriers to innovation and propose creative solutions that will allow institutions to award more, cheaper, and *better* degrees based on learning outcomes. The Department can then choose a number of experiments that it believes will help move institutions, accreditors, and the federal government away from time and to learning.

Here are three types of experiments the Department could pursue:

a) Pay to assess learning that occurs outside of a classroom toward a degree/credential.

In a learning-based system, an associate or bachelor’s degree should mean that you know and can do specific things. Why should it matter where Juliana learned, as long as she knows and can do what is expected? A tremendous amount of learning is currently being left uncredited,

including learning acquired outside of a classroom and learning that occurs in non-credit college courses. This is a significant loss—nearly 40 percent of all community college students are enrolled in non-credit courses.³⁵ Many of these courses are workforce-oriented, designed to meet the specific needs of employers. The fact that these courses are not offered for credit often has less to do with their being credit-worthy than with employers wanting to bypass the slow process of having creditable courses approved through institutional processes. So employers get the benefit of having their workers educated quickly and students receive the benefits of the training. What these students don't receive, however, is college credit for their training, credit necessary to earn the all-important degrees.

The Department can create a small, controlled, voluntary virtual laboratory of “experimental sites” on which it tests particular learning-based financial aid policies to see if they work, how they work, for whom they work, and under what conditions they work.

A variety of Prior Learning Assessment (PLA) processes exist to help students with diverse experiences translate college-level learning into credit. A person like Juliana could use these tools to draw on both her work experience and learning from free online courses to pass a nationally recognized test in legal theory and business law. She could get credit for legal research and immigration law by submitting a portfolio of work that demonstrates both her procedural and content knowledge. Her portfolio could include motions she's written as part of litigation, petitions she's submitted on behalf of clients, and legal memorandums she wrote as a result of her research. This alone could easily save a semester's worth of time and money.

Students who earn credits through PLA are more likely to stay in and complete college than those who don't, so it should be in everyone's interest to help students like Juliana get credit for their prior learning.³⁶ Unfortunately, although many institutions “allow” for some form of PLA, the variety is often limited, and too few advisers, admissions counselors, and faculty members even know what the institution's PLA policies are. In practice, this makes the PLA option

unavailable to millions of students who could use it. This is probably due in no small part to the fact that students cannot use federal financial aid to pay for PLA.

An experimental site could allow financial aid to be used to cover the cost of assessing prior learning. This amount would be less—in many cases much less—than what is awarded for traditional credits, since no funds are needed to underwrite instructional costs, living expenses, etc. Guidelines would have to be carefully crafted to ensure that bad actors are not simply awarding credit for life experience, in an effort to get their hands on a piece of the financial aid pie.

b) Pay after learning outcomes are demonstrated.

In this experimental site, students would receive all or some portion of their aid (and institutions would agree to be paid) only after learning outcomes are mastered. This approach could allow the federal government to experiment with moving away from seat time while reducing the possibility of fraudulent use of federal aid. New York State uses this outcomes-based financial aid model for low-income students in competency-based programs (including Excelsior students). This approach would require contending with some difficult questions, such as what percentage of financial aid would need to be given at which points in the learning process and how to support students who are working hard but haven't yet mastered the material.

c) Pay for learning toward a degree acquired outside of traditional faculty and institutional boundaries.

While traditional faculty interaction will continue to play a critical role in the majority of institutions and programs, some innovative models don't use faculty in traditional ways (such as WGU's mentors), or don't use faculty at all. Carnegie Mellon's Open Learning Initiative (OLI) offers

Possible Financial Aid Experiments

- a) Pay to assess learning that occurs outside of a classroom.
- b) Pay after learning outcomes are demonstrated.
- c) Pay for learning outside of traditional faculty and institutional boundaries.

free, self-paced computer courses that are heavily informed by learning science. Students engage in interactive activities that promote learning; feedback loops and assessments are embedded in the program to diagnose problems, and, based on information gathered from tens of thousands of students, the program acts as a digital tutor, providing real-time support to help students during the learning process.

The results from this model are impressive. Tens of thousands of students have taken OLI courses and studies show that OLI students learn as much or more than students in the traditional courses while taking substantially less time to finish. This is in part because OLI diagnostic programs assess what students already know, so the learning experience is focused on what they don't know. This level of personalization is often difficult to find in traditional introductory-level courses, which tend to have large numbers of students per faculty member. An experimental site could allow students who are pursuing degrees to receive financial aid for high-quality classes that lack faculty interaction, like those offered by OLI.

Another area ripe for experimentation is an emerg-

ing movement in elite public and private institutions: Massively Open Online Courses, or MOOCs. These courses are designed by faculty at traditional universities, such as MIT, Stanford, and Harvard. But to date, no college has offered credit for MOOC-attained learning. An experimental site could provide financial aid to assess and credit learning from these courses.

These are only a few examples of what could be done with experimental sites. There are many unknowns, which is why Congress gave the Department of Education authority to conduct experiments. The federal government should ask institutions to offer suggestions for experiments that would help higher education move from seat time to verifiable learning as well as guidelines that would ensure quality in these experiments (see “Guidelines for Moving Beyond Seat Time” on page 20).

3) Innovate Free from the Credit Hour's History: Direct Assessment

The third tool the Department has at its disposal is the one created for, but never used by, the politically connected WGU: direct assessment. This little-known, never-before-

Guidelines for Moving Beyond Seat Time

The Department should ask institutions and accreditors to provide input on guidelines broad enough to allow for innovation but stringent enough to prevent abuse. At a minimum, these guidelines should insist upon:

Externally Validated Learning Outcomes

Institutions and programs interested in moving beyond time-based measures should shift from the current practice of lone professors setting their own standards and measuring student performance against them. This is not to suggest that the federal government should set the standards—it shouldn't. But the standards must be validated by those who have a real stake in ensuring that the knowledge promised by passing a course actually means something. This could be done in any number of ways and involve various groups of experts, including faculty, disciplinary bodies, industry groups, or employers.

Transparent Learning Outcomes and Assessments

Different institutions and regions value different things, so learning outcomes should not be the same across the board. But everyone should *know* what students are getting. Institutions should make public, at a fairly granular level, what students in specific courses are expected to learn, and what they actually learn. This does not mean merely posting syllabi on the Internet. The competencies, validators, and assessments must be public, too. Graded student work (with the identities of the students shielded for privacy purposes), including papers, projects, and tests, should be made publically available so that others can see how students are assessed against the set of learning outcomes.

used provision in the Higher Education Act allows financial aid to be made available to students in a program that

... in lieu of credit hours or clock hours as the measure of student learning, utilizes direct assessment of student learning...³⁷

Although this was created for WGU, it could be used by any college. So why don't institutions unhappy with the credit-hour definition just use direct assessment? Since direct assessment has never been used, there is little guidance around what it would or should look like, other than that institutions would need pre-approval from both the Department and their accreditor to be eligible.

Regulators should set a high bar for direct assessment, to avoid the grade inflation and weak academic standards endemic in the existing, time-based system. Taxpayers and students must be protected from unscrupulous operators with designs on billions of financial aid dollars. If crafted well, direct assessment could open space for high-performing, innovative institutions and accreditors to create a better model for how we measure and pay for learning. While the new credit-hour definition opens up many possibilities, it is linked to time in both name and history. Direct assessment is a blank slate. It could provide the opportunity to experiment with an alternate quality-assurance process, one that privileges learning over time and tradition. If a small, select, and forward-thinking set of institutions can develop different but valid ways of measuring learning, they could influence a much larger set of institutions and accreditors (See "Guidelines for Moving Beyond Seat Time," page 20).

If crafted well, direct assessment could open space for high-performing, innovative institutions and accreditors to create a better model for how we measure and pay for learning.

It is likely that many established institutions would balk at this increased level of transparency and accountability if applied to their traditional time-based courses. And that's fine. Colleges would not have to use direct assessment and those that chose to use it wouldn't have to do so across

the board. They could decide which (if any) programs they wanted to have approved for direct assessment. Those that choose to meet this high bar, however, could lead the field in creating new, valid, and reliable ways of establishing and measuring student learning outcomes.

While direct assessment has the most potential to radically change how the federal government pays for—and, therefore, how institutions measure—student learning, it should be approached with caution. The Department, institutions, and accreditors can learn a lot from opening up the credit hour and using carefully constructed experimental sites. The results of these ongoing experiments can inform and improve direct assessment to ensure that everyone understands what students are getting, in terms of both expectations and achievement. ▣

Future Policy

If the federal government encourages institutions to move from seat time to learning by thoughtfully, carefully, and creatively using the credit hour, experimental sites, and direct assessment, the result should be innovations that produce improved student learning outcomes. If institutions are clear in determining what they want students to know, what students already know, and how to credit what students do know, they can spend their time focusing on what students do not yet know. This could result in not just better outcomes, but faster and less expensive outcomes.

But while these three policy tools could be extremely valuable in accelerating the completion of meaningful, learning-based degrees, they have limits. No matter what eventually might be covered by these three federal policy tools, they only apply to accredited institutions, the only ones eligible for financial aid. This means that non-institutional providers of learning, no matter how good their outcomes, will remain ineligible. A biotech company could create a high-quality work-based training program whose "graduates" would best most students with an associate degree in science, but unless this training is attached to an accredited institution, the learning outcomes won't "count." A 15-year-old computer genius in her pajamas might develop a low-cost program that helps students master Calculus 101 in record time, but these outcomes—no matter how well documented—won't count toward a degree, either. If we accept that college-level learning can occur outside of traditional institutions, then why shouldn't we accept that

college-level credit could be granted outside of traditional institutions? For now, the law is very clear on who can grant credit and who can receive federal financial aid: institutions and institutions only. Perhaps after a few rounds of experimentation with the credit hour, direct assessment, and experimental sites, policymakers will see value

in awarding credit for learning, irrespective of how long it took, where it happened, or who provided it. The iterative process of experimentation around competency-based education will provide opportunities for congressional action, during the upcoming reauthorization of the Higher Education Act and beyond. ❏

Notes

- 1 U.S. Department of Education, National Center for Education Statistics, NPSAS: 2008 Undergraduate Students.
- 2 Mary Nguyen, “Degreeless in Debt: What Happens to Borrowers Who Drop Out,” *Education Sector*, February 2012, http://www.educationsector.org/sites/default/files/publications/DegreelessDebt_CYCT_RELEASE.pdf.
- 3 Anthony P. Carnevale, Nicole Smith, and Jeff Strohl, “Help Wanted: Projections of Jobs and Education Requirements Through 2018,” *Georgetown University Center on Education and the Workforce*, June 2010: <http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/HelpWanted.FullReport.pdf>.
- 4 Jessica M. Shed, “The History of the Student Credit Hour,” in *How the Student Credit Hour Shapes Higher Education: The Tie That Binds*, ed. Jane V. Wellman and Thomas Ehrlich (San Francisco: Jossey-Bass, 2003).
- 5 John Harris, “Brief History of American Academic Credit Systems: A Recipe for Incoherence in Student Learning,” (2002): <http://eric.ed.gov/PDFS/ED470030.pdf>.
- 6 Richard J. Shavelson, *A Brief History of Student Learning Assessment* (Washington, DC: Association of American Colleges and Universities, 2007): <http://eric.ed.gov/PDFS/ED470030.pdf>.
- 7 William S. Learned and Ben D. Wood, *The Student and His Knowledge: Summary of Results and Conclusions; a Report to the Carnegie Foundation on the Results of the High School and College Examinations of 1928, 1930, and 1932* (New York: Carnegie Foundation for the Advancement of Teaching, 1938).
- 8 *Ibid.*, xii-xiii.
- 9 Richard Arum and Josipa Roksa, *Academically Adrift: Limited Learning on College Campuses* (Chicago: University of Chicago Press, 2011).
- 10 Mark Kutner, Elizabeth Greenberg, and Justin Baer, “A First Look at the Literacy of America’s Adults in the 21st Century. NCES 2006-470,” *U.S. Department of Education National Center for Education Statistics*, (2006) <http://www.eric.ed.gov/ERICWebPortal/detail?accno=ED489066>.
- 11 Stuart Rojstaczer and Christopher Healy, “Where A Is Ordinary: The Evolution of American College and University Grading, 1940-2009,” *Teachers College Record* 114, no. 7 (2012): <http://www.tcrecord.org> ID Number: 16473.
- 12 Scott Jaschik, “Mixed Grades: A Survey of Provosts,” *Inside Higher Ed*, January 25, 2012: <http://www.insidehighered.com/news/survey/mixed-grades-survey-provosts>.
- 13 Hart Research Associates, *Raising the Bar: Employers’ Views on College Learning in the Wake of the Economic Downturn* (The Association of American Colleges and Universities, 2010); Peter D. Hart Research Associates, *How Should Colleges Assess and Improve Student Learning?* (The Association of American Colleges and Universities, 2008).
- 14 Katharin Peter and Emily Forrest Cataldi, “The Road Less Traveled? Students Who Enroll in Multiple Institutions,” *U.S. Department of Education; National Center for Education Statistics*, May, 2005: <http://nces.ed.gov/pubs2005/2005157.pdf>.
- 15 Joe D. May, Submitted to the House Subcommittee on Higher Education and Workforce Training, “Keeping College Within Reach: Exploring State Efforts to Curb Costs,” Hearing, July 18, 2012: http://edworkforce.house.gov/UploadedFiles/07.18.12_may.pdf.
- 16 U.S. Department of Education National Center for Education Statistics, “The Condition of Education 2012” 2012: <http://nces.ed.gov/pubs2012/2012045.pdf>.
- 17 I. Elaine Allen and Jeff Seaman, *Going the Distance: Online Education in the United States, 2011* (Babson Survey Research Group, 2011): <http://www.onlinelearningsurvey.com/reports/goingthedistance.pdf>.
- 18 House Committee on Education and Labor, “The Department of Education Inspector General’s Review of Standards for Program Length in Higher Education,” Hearing, June 17, 2010: <http://www.gpo.gov/fdsys/pkg/CHRG-111hrg56835/html/CHRG-111hrg56835.htm>.
- 19 For 2012 numbers: “Federal Higher Education Programs- Overview,” New America Foundation, accessed August 8, 2012: <http://owl.english.purdue.edu/owl/resource/717/05/>; For 2002 numbers-Deborah

Kalcevic, “CBO March 2003 Baseline Projections for the Student Loan Programs,” Memorandum, March 7, 2003; Department of Education, “Budget History Table: FY 1980-FY2012 President’s Budget,” (2011): <http://www2.ed.gov/about/overview/budget/history/edhistory.pdf>; Executive Office of the President, “Analytical Perspectives: Fiscal Year 2002,” (2001): <http://www.cfo.doe.gov/budget/02budget/appendix/bal.pdf>.

20 Wanda A. Scott, “Letter to Dr. Sylvia Manning,” *U.S. Department of Education*, May 24, 2010: <http://www2.ed.gov/about/offices/list/oig/aireports/x13j0003.pdf>.

21 National Archives and Records Administration, “Department of Education: Program Integrity Issues,” *Federal Register* 75 (209) (October 29, 2010): <http://www.libraries.iub.edu/index.php?pageId=2558>.

22 Eduardo M. Ochoa, “Guidance to Institutions and Accrediting Agencies Regarding a Credit Hour as Defined in the Final Regulations Published on October 29, 2010,” U.S. Department of Education (2011).

23 Ibid.

24 Philip Babcock and Mindy Marks, “The Falling Time Cost of College: Evidence from Half a Century of Time Use Data”, June 1, 2008: http://www.econ.ucsb.edu/~babcock/college_time_use_6_08.pdf.

25 Lumina Foundation, *The Degree Qualifications Profile*, (2011) http://www.luminafoundation.org/publications/The_Degree_Qualifications_Profile.pdf.

26 See especially, Carnegie Commission on Higher Education, *Toward a Learning Society: Alternative Channels to Life, Work, and Service* (New York: McGraw Hill, 1973); ---, *Less Time, More Options: Education Beyond High School* (New York: McGraw Hill, 1971); ---, *New Students and New Places: Policies for the Future Growth and Development of American Higher Education* (New York: McGraw Hill, 1971).

27 Donald J. Nolan, *Regents College: The Early Years*, (Virginia Beach, VA: Donning Co., 1998).

28 College Board, “AP® Reading Draws 11,000 College and High School Faculty to Score More than 3.7 Million AP Exams,” Press release, June 11, 2012: <http://press.collegeboard.org/releases/2012/ap-reading-draws-more-11000-college-and-high-school-faculty-score-more-37-million-ap-exams>.

29 Nolan, *Regents College*.

30 Western Governors University, Annual Report 2011: http://www.wgu.edu/about_WGU/annual_report_2011.pdf.

31 Tamar Lewin, “Official Calls for Urgency on College Costs,” *The New York Times*, November 29, 2011: http://www.nytimes.com/2011/11/30/education/duncan-calls-for-urgency-in-lowering-college-costs.html?_r=1.

32 Sally Johnstone: Vice President of Academic Advancement, Western Governors University, November 23, 2011 phone interview with author.

33 Doug Lederman, “Credit Hour (Still) Rules,” *Inside Higher Ed*, April 30, 2012: <http://www.insidehighered.com/news/2012/04/30/wgu-example-shows-chilly-policy-climate-competency-based-education#ixzz2oqAusig3>.

34 *Higher Education Opportunity Act*, Public Law 110–315, GPO, August 14, 2008: <http://www.gpo.gov/fdsys/pkg/PLAW-110publ315/pdf/PLAW-110publ315.pdf>.

35 American Association of Community Colleges, Community College Fact Sheet, (2012): <http://www.aacc.nche.edu/AboutCC/Documents/FactSheet2012.pdf>.

36 The Council for Adult and Secondary Learning, “Fueling the Race to Postsecondary Success: A 48-Institution Study for Prior Learning Assessment and Adult Student Outcomes” (2010): http://www.cael.org/pdfs/PLA_Fueling-the-Race.

37 *Code of Federal Regulations*, Direct Assessment Programs, Title 34, Sec. 668.10.



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