



# **Experimental Sites Concept Paper:** Competency-Based Education

*January 2014*

*A Joint Response to the U.S. Department of Education's Request for Information:  
Our Case for Experimental Sites That Waive Specific Provisions in Title IV Laws and Regulations to Test  
Approaches That Enable More Students to Benefit From Competency-Based Degree Programs*

This paper comprises three sections:

- Introduction and Overview
- Regulatory and Statutory Barriers
- Proposed Experiments

The following institutions are submitting this response:

- Alverno College
- Antioch University
- Brandman University
- Broward Community College
- Capella University
- Cardinal Stritch University
- Charter Oak State College
- Council for Adult and Experiential Learning (CAEL)
- Excelsior College
- Kentucky Community and Technical College System
- Lipscomb University
- Northern Arizona University
- Southern New Hampshire University
- SUNY Empire State College
- University of Maryland University College
- University of Wisconsin - Extension
- Westminster College



# Introduction and Overview

Within higher education, there is considerable—and growing—interest in approaches that hold learning requirements constant and allow time to vary using self-paced student engagement. Such competency-based programs hold significant potential for hastening a transition among colleges and universities to clearer expectations about what students must know, understand, and be able to do to earn degrees in specific disciplines or majors. Through quality programs that offer clearer, cost-effective pathways and foster creative, flexible approaches to teaching and learning, we believe that greater numbers of students can more rapidly and affordably prepare themselves for further education and employment.

Our institutions support the U.S. Department of Education’s interest in fostering responsible innovation and experimentation with these learning models. We believe competency-based models that meet the needs of students from all backgrounds can be tested in ways that protect both students and taxpayers. We welcome the opportunity to work in partnership with department officials to realize the benefits of better, more personalized pathways for students, and we are willing to commit to working to mitigate the potential pitfalls of exposing federal Title IV funds to institutions and providers with new academic delivery and business models.

There is clear need and strong public demand for the federal government to support this kind of learning-based innovation. For example, the 2012 Gallup/Lumina Foundation Poll found that Americans are convinced earning a college degree is important for financial security, but that many Americans lack an education beyond high school due to barriers in traditional, time bound higher education programs. Most Americans surveyed (87 percent) said they believe students should be able to receive college credit for knowledge and skills acquired outside of the classroom, and three-fourths of those polled said that if they could be evaluated and receive credit for what they know, they would be more likely to enroll in higher education. Among significant barriers to returning to school those polled cited family responsibilities (36 percent), cost of attendance (28 percent), job responsibilities (15 percent) and the time it takes to complete programs (11 percent). We believe these barriers could be addressed through more affordable, convenient competency-based models offered at lower costs by institutions.

Further, in 2010, McKinsey & Co. extrapolated results from analyzing eight highly productive institutions to conclude that widespread redesign of academic delivery could produce up to 26 percent more graduates by 2025. The firm suggested that the biggest productivity gains are likely to come from clear pathways to degrees that reduce “switching costs” and excess credit accumulation and from reduced per-student spending from redesigning, academic delivery and student supports while identifying business efficiencies. In summary, colleges and universities need to significantly lower costs and do a better job of graduating students. The best options for achieving these outcomes are to recast business and delivery models. Competency-based education offers promise for achieving these aims while better meeting the academic needs of many students.

In 2012, Bain & Co. weighed in, declaring the pace of change too slow and expressing concern that higher education leaders were struggling with how to achieve the required degree of change. Bain also

identified a growing number of institutions that are in real financial trouble. “If current trends continue, we will see a higher education system that will no longer be able to meet the diverse needs of the U.S. student population in 20 years,” the consulting firm stated. “The social and economic implications of that are staggering.” Bain recommended that institutions focus primarily on meeting student needs where they can add the most value, strategically reinvest in new forms of academic delivery, lower their overhead, and free capital invested in noncore assets.

Competency-based education is not new, but new models are emerging. Competency-based education has remained a niche offering in higher education primarily because such programs have been ineligible to accept federal student aid. Even with the release of the department’s “Dear Colleague” letter several months ago, many competency-based models still do not fit the established requirements. Because of a long history of credit-hour-based financial aid, federal officials have been far more comfortable funding programs in which enrollment status is determined by time spent in class and faculty interaction. In credit-hour-based programs, part-time enrollment generally constitutes six to 11 credit hours per term, and full-time enrollment is understood to be registration for 12 or more credit-hours during a typical 16-week semester. The traditional approach positions enrollment in a degree program as an outcome instead of viewing it as an activity. Conversely, competency-based education focuses on achievement of student learning as an outcome in the form of demonstrated proficiencies. The achievement of competencies can occur at variable speeds instead of in a set period such as a semester. In summary, competency-based education focuses on the demonstration and application of learning, rather than on the time spent taking courses.

In this paper, the term “competency-based” is used to describe any model or approach that, generally speaking, substitutes the assessment of student learning for time-based measures. However, it’s worth noting that many colleges and universities offering competency-based degree programs refer to their programs in other ways, including assessment or concept-based programs or personalized learning. Regardless of the language used, high-quality competency-based education programs employ robust curricular development to ensure the achievement of articulated learning requirements, and to enable scaffolding of knowledge, skills and abilities. Learning outcomes (competencies) are clearly defined and assessment is robust, including both objective and performance-based tools. Rigor and quality are of primary importance to ensure student learning.

Within the past year, the department, in response to formal applications, has taken a step toward making financial aid available for demonstrated learning in place of time-based credit—most notably by allowing programs using “direct assessment” of learning to receive Title IV funding. However, the full potential of the federal law authorizing this approach has not been realized, because federal regulations tie direct-assessment provisions to time-based measures such as academic year, clock hours and the credit hour. This limitation presents a number of challenges to using federal student aid for programs fundamentally rooted in the achievement of defined student learning outcomes.

For this reason, federally authorized “experimental sites” represent an important opportunity for colleges and universities to test the potential of competency-based education. New models are critically needed that offer affordable, high-quality, lower-cost education while maintaining or increasing the programmatic and fiscal integrity of the student financial assistance programs authorized by Title

IV of the Higher Education Act (HEA). These sites also enable testing of the hypothesis that, with barriers to innovation such as new approaches to teaching and learning removed, competency-based education could help students accelerate completion of academic programs, reducing the expense to students and taxpayers alike. This paper outlines several approaches that could be tested to explore in a structured and responsible way how Title IV changes could enable many more students to apply federal financial aid to competency-based programs. The goal of these new approaches is to improve student persistence and academic success by creating clearer educational paths, shorten time to completion, and reduce student loan indebtedness—particularly for adults, students from low-income backgrounds and those who struggle academically.

## The Benefits of Competency-Based Education for Students

Competency-based education focuses on the achievement of a series of comprehensive, integrated student learning outcomes and competencies—expressed as measurable skills, abilities and behaviors—rather than on the accumulation of credit hours. The traditional model focuses on time spent learning and treats the learning process and outcomes as variable. Competency-based programs focus on what students need to know, understand, and be able to do to earn degrees and other credentials, and treat time spent learning as variable. This alternative is both reasonable and appropriate. Within competency-based models, students are able to advance at their own pace, within reasonable limits, and earn degrees after they have demonstrated proficiency across a number of learning dimensions. The focus on proficiency assessed against defined learning objectives means students must demonstrate mastery of knowledge, rather than have their educational experiences defined by the accumulation of credit hours. In addition to providing students with flexible degree options, competency-based education provides students, parents, policymakers, taxpayers and future employers with clear descriptions of what graduates in specific degree programs know, understand, and are able to do.

We believe competency-based education represents a tremendous opportunity to better serve many students who are not well-served by traditional higher education, particularly working adults. Competency-based education also may hold promise for students from low-income families, first-generation college students, and racial and ethnic minorities, but further exploration and research are needed.

Potential advantages of competency-based education include:

- Clarity about expectations and enhanced student support
  - o Identifying and assessing competencies highlight the relevance of programs of study to the world of work.
  - o Creating curricular maps offers coherence and transparency for faculty members and students, all of whom better understand program sequencing, expectations and progress toward completion. (For students, knowing expectations reduces anxiety and increases confidence)

- o Meta-tagging of content and assessments (electronically marking certain content and assessments so data about student performance can be automatically retrieved) and using technology to capture when competencies are being mastered can facilitate assessments and individual student progression. Once data are collected, they can be converted into information that permits predictive modeling and identification of students who need special assistance.
  - o Personalizing programs often involves identification of what students still need to learn to complete academic programs and thus helps reduce learning redundancy and, in some instances, the accumulation of unnecessary credits.
  - o Creating and publishing grading rubrics informs students about what is going to be measured, further increasing their confidence.
  - o Differentiating faculty roles, with some faculty members serving in mentoring roles, increases focus on facilitating and directing student learning and progression.
  - o Acting as mentors, faculty members remain in contact with students throughout their studies and thus foster trust and confidence among students, which is especially important in the initial stages of adapting to new academic environments.
- Lower net price for students and families and institutional spending or costs
    - o Creating integrated, cross-disciplinary curricula can eliminate redundancies.
    - o Embedding assessments at the concept and competency levels can allow students to test out of smaller chunks of knowledge, skills and abilities than the credit-hour approach allows.
    - o Implementing advancement-by-mastery approaches can lead to more rapid completion for some students.
    - o Eliminating repetition of already-learned knowledge, skills and abilities and acknowledging mastery of smaller chunks of knowledge, skills and abilities than the credit hour permits can eliminate the costs to institutions of developing (and the expense to students of demonstrating) these knowledge, skills and abilities more than once.
    - o Making greater use of open educational resources (OER) and digital content, further reducing institutional costs and student expense.
- Improved program quality
    - o Moving to a competency-based approach often improves curricula through the considerable work spent identifying competencies, the right presentation sequence and how to best measure them.
    - o Creating learning experiences and assessments after competencies have been identified to ensure that competencies are effectively taught.
    - o Improving transparency about expectations requires considerable faculty work setting forth expectations for students and a commitment to continuous improvement of academic delivery processes.

- o Developing grading rubrics often leads to explicit agreement among faculty members about what constitutes the most critical learning and how to assess it.
  - o Handling the assessment of learning with specially trained faculty or staff members can lead to continuous improvement.
  - o Engaging external constituents, including experts and employers, yields curricula that are more likely to ensure relevance and employability for completers.
- Improved metrics
    - o Using more granular data to track metrics at the program and institutional levels.
    - o Benchmarking of general competencies related to degrees at each level is possible when programs and institutions use the Degree Qualifications Profile (DQP).
    - o Tuning of discipline-specific learning outcomes and general competencies can enable more granular benchmarking.
    - o Producing useful data about how effectively students are performing at the concept and competency levels individually and in groups can improve program efficiency and cost-effectiveness.

Consider the following examples of students who could benefit:

- Maria has been an addictions counselor for eight years. Recent state regulatory changes require anyone in her field to hold a master's degree to retain or receive certification. Maria is among 22 hospital-based counselors with significant experience in counseling who have not earned bachelor's degrees. Despite having learned a great deal on the job, all 22 counselors will lose their positions if they cannot meet the new education requirement. In most traditional degree programs, their knowledge and skills, gained from years of experience and continuing education, will not translate into college credit. Maria and her colleagues will need to take an average of 66 credit hours of course work to earn their bachelor's degrees and an additional 36 credit hours of course work to earn master's degrees. For most, that would take eight semesters of full-time enrollment. Maria and most of her colleagues cannot afford to quit their jobs and attend college full time for four years. However, if there were an easier way for students to have their relevant on-the-job learning count toward a degree, they could save time, money and remain in their chosen field.
- Nicole, an 18-year-old living in a small farming town in the Midwest, just graduated from high school. Although she excelled in math and science, she was unable to take advanced courses because of the school district's size and budget constraints. These limitations didn't stop Nicole from learning, however. She read everything she could get her hands on and took several MOOCs, or massive open online courses (besting many other students nationally and around the world on the final exams). Unfortunately, because this learning is not recognized for credit—unlike AP exams, for example—Nicole will have to spend precious time and money in her first year of college sitting through material she already has mastered. Competency-based education would allow her to demonstrate mastery of certain learning that she has achieved, no matter where and how she acquired her knowledge and skills, so that she can move more quickly and more deeply into the content she has chosen.



- Alec is a 21 year-old, first-generation student who struggles financially to attend college and could best be described as a low-income, but high-achieving student. Because of his financial circumstances, Alec needs to work full time while going to college and is looking for ways to accelerate completion of his degree. From an early age, Alec has always been mathematically and analytically gifted. An educational model that enables Alec to move through program requirements at a pace consistent with his own learning and allows him to demonstrate his achievement of learning goals without sitting through full semesters of seat time is ideal. With a high level of personal motivation and a learning environment not constrained by required seat time, Alec will be able to demonstrate competencies and learning goals of general education and his major curriculum at his own pace, will complete his undergraduate program in less than four years, and will significantly reduce the cost of completing his undergraduate degree.
- Roderick has been working as an independent contractor in the construction industry for more than twelve years. He has a significant body of knowledge but lacks the formal education necessary to expand his business. As the sole provider for a family of four, Roderick needs an affordable education that will not sacrifice his family budget. In addition, because of Roderick's ever changing project schedule, he needs a degree program that can accommodate his variable availability. As an independent contractor, Roderick believes he has built a significant body of knowledge, particularly in the areas of field operations, billing and project management, and he would like to be able to apply that expertise in an educational environment. By enrolling in a flexible program that meets him where he's at and fits his schedule, Roderick can gain the knowledge and skills he needs to grow his company.

Under existing law and practice, there are two ways in which students can receive federal financial aid for competency-based education. They can sign up for:

1. **A program that explicitly translates competency-based education to the credit hour.** This approach is most closely linked with the traditional credit-hour model. After a student has completed a competency or set of related competencies, the institution translates this academic work into equivalent credit hours. Western Governors University is an example of this time-based model. Students must be enrolled part- or full-time in WGU's six-month subscription model. Competencies are assessed on a pass/fail basis.
2. **A program the Education Department has approved to offer "direct assessment" of learning.** Under a change in federal law in 2005, institutions can receive approval from the department to use "direct assessment of student learning ... in lieu of credit or clock hours." While this language seems to indicate a desire on the part of Congress for an alternative to the time-based credit hour, the department's interpretation of the statute in regulation requires that institutions seeking the secretary's approval:

"must specify the equivalent number of credit or clock hours for a direct assessment program. ... The school must explain how it determined the equivalent number of credit or clock hours for the program."

With either approach, students are eligible for financial aid because the colleges and universities offering these programs do some kind of “cross walk” of their programs to the credit hour. However, the credit hour is neither necessary apart from Title IV requirements nor an accurate measure of student learning. Experimental sites could permit flexibility with some of the time-based statutes and regulations to test new approaches for using federal student aid to enable students to pay for competency-based degree programs. This would allow higher education institutions and the federal government to engage in responsible innovation and to learn which types of programs work best at improving learning outcomes. In addition, experimental sites would enable the department to test the effects on other policy goals such as increased student retention, program completion and college affordability. Members of the executive and legislative branches have expressed interest in competency-based education, and experimental sites offer safe spaces to test innovative ideas around the delivery of financial aid for competency-based programs.

## Important Features of Competency-Based Degree Programs

Competency-based models vary across institutions, but the following features are common:

- Curriculum planning and delivery
  - o Significant care is exercised in identifying and describing institutional, program and course-level learning outcomes and competencies that can be measured or assessed.
  - o External advisers, including employers, are engaged in development of program requirements and validation of competencies.
  - o Faculty or course-design teams develop integrated, cross-disciplinary curricula.
  - o Students are strategically and thoughtfully exposed to competencies multiple times at varying intensities and within different contexts throughout their programs.
  - o Meta-tagging of content and assessments (electronically marking certain content and assessments so data about student performance can be automatically retrieved) helps capture demonstrations of learning and allows for predictive modeling of student success.
  - o Professors and instructors use rubrics to assess learning consistent with well-defined program and course-level outcomes.
  - o Learning assessments are embedded in curricula so that student progress can be monitored, allowing real-time remedial instruction and other interventions.
  - o Achievement of competencies is assessed through extensive use of projects and observation of application using rubrics.
  
- Curriculum mapping
  - o Diagnostic assessments are used to determine admissions; identify prior learning and knowledge and skills gaps; and, in some cases, create personalized pathways to degree completion.
  - o “Program maps” ensure that students and faculty members are given clear explanations of the organization and flow of what will be learned and how it will be applied.
  - o The process of designing program maps, rubrics and embedded assessments

eliminates program redundancies while allowing thoughtful, repeated exposure to opportunities to demonstrate particular types of learning.

- o Absolute requirements (along with reduced elective choices) and flexibility in how students meet some expectations create a loose/tight approach.
  - o The coordinated and intentional use of program maps, rubrics and embedded assessments allows for predictive modeling as well as rapid intervention when students face challenges.
- Pacing
    - o Within parameters set by federal student aid rules, students can advance through programs of study at their own pace. For example, during a six-month academic term, each student must demonstrate mastery of a minimum number of competencies to remain eligible for aid, but students can go beyond the minimums.
    - o In advancement-by-mastery programs, students can accelerate progress toward their degrees.
- Learning outside of the institution
    - o Prior and “emergent” learning assessments are used to document achievement of competencies outside of instruction directly delivered online or in the classroom.
    - o Recognition of prior and emergent learning along with generous transfer policies provides substantial reductions in time to degree, especially for adults.
    - o Coupled with generous transfer policies, recognition of prior and emergent learning can substantially reduce time to completion, especially for adults.
- Faculty roles
    - o Faculty roles can look the same or can be unbundled and look quite different than in traditional credit-hour programs, because competency-based approaches lend themselves to further specialization of faculty roles.
    - o Some institutions separate subject matter-expert faculty who design programs and assessments from student-mentor faculty, who serve as the primary contacts with students. In addition, some programs have additional student supports and faculty who solely handle grading and assessments
- Connection to credit hours
    - o Some institutions maintain two transcripts, one in standard format with credit hours assigned and another to detail learning outcomes and how competencies were demonstrated.
    - o Academic program modules are sometimes created to combine the achievement of granular competencies (less than one credit) in ways that align better with credit-based representations.
- Connection to open educational resources
    - o Some institutions report that competency-based approaches decrease reliance on commercial textbooks and increase use of free or open educational resources that save students money.

# Regulatory and Statutory Barriers

A major barrier to students using federal financial aid to participate in competency-based education programs is the strong tie in law—and even stronger ties in regulation—to the awarding of time-based academic credit.

- A. **Federal “academic year” requirements** (Academic Year: 34 CFR 668.3) are defined in terms of weeks of instruction and credit hours. For example, 34 CFR 668.3 states:
  1. “(1)(i) For a program offered in credit hours, a minimum of **30 weeks of instructional time**; or (ii) For a program offered in clock hours, a minimum of 26 weeks of instructional time; and,
  2. “(2) For an undergraduate educational program, an amount of instructional time whereby a **full-time student is expected to complete at least—(i) Twenty-four semester** or trimester credit hours or 36 quarter credit hours for a program measured in credit hours”
    - i. These regulations generally define a week of instructional time as any week (for example, any consecutive seven-day period) in which at least one day of regularly scheduled instruction or examination occurs. Instructional time includes activities such as submitted assignments, computer-assisted instruction, assigned study groups, online discussion, and student-initiated contact with faculty regarding coursework.
    - ii. Thus a week is a “week of instructional time” for purposes of the academic year definition if students are engaged in educational activities at least one day during the week.
- B. Title IV student aid is disbursed to institutions on a “payment period” basis. Payment periods are subdivisions of an academic year. (Payment period: 34 CFR 668.4) This regulation defines payment periods according to the institution’s academic calendar. The payment period for a program at an institution that measures student progress in credit hours and—
  1. uses standard terms (semesters, quarters, or trimesters) is the academic term; and,
  2. uses nonstandard terms or does not have academic terms is the period of time it takes the student to complete one-half the credit hours and one-half the instructional time in the academic year.
- C. If students do not attend courses for the required amount of time, including a change in attendance status (for example, from full to part time), aid must be recalculated.
- D. **“Direct Assessment” regulations** (34 CFR 668.10) require conversion of competencies to credit or clock hours to define the academic year. The regulation states: “All regulatory requirements in this chapter that refer to credit or clock hours as a measurement apply to direct assessment programs. Because a direct assessment program does not utilize credit or clock hours as a measure of student learning, **an institution must establish a**

***methodology to reasonably equate the direct assessment program (or the direct assessment portion of any program, as applicable) to credit or clock hours*** for the purpose of complying with applicable regulatory requirements. The institution must provide a factual basis satisfactory to the Secretary for its claim that the program or portion of the program is equivalent to a specific number of credit or clock hours.”

- E. The entire program must be provided by direct assessment; those offered partially with credit or clock hours as measures of student progress are not eligible direct assessment programs, according to Federal Student Aid Handbook. This eliminates from consideration programs that combine different approaches such as competency-based and traditional credit-hour courses.

In summary, students must be enrolled for a minimum number of credit hours, must be in attendance in the classes that represent those credit hours, and must demonstrate frequent interaction with faculty members in the form of some activity at least one out of every seven consecutive days. All of these requirements effectively tie everything related to Title IV student aid (academic year, term, payment period, etc.) to the concept of a week of time.

# Proposed Experiments

The department's use of experimental site authority to pilot and test alternative ways of paying for competency-based programs using Title IV student aid could result in substantial nonpartisan research and analysis to inform thinking among federal policymakers. In response to the department's request, this paper will outline several potential experiments for the U.S. Department of Education to consider cutting across one or more areas of federal policy in an effort to holistically address obstacles to scaling or spreading competency-based education.

Experiments should have to address a set of overarching policy concerns, including:

- How will each institution define success and measure outcomes? What data will be collected and shared to inform federal policy discussions?
- What is the effect of waiving a policy or set of policies on learning and progress toward completion?
- Which students seem to benefit most from competency-based programs that experiment with Title IV flexibility? To what extent does competency-based education help or hinder efforts to achieve equitable outcomes among all student groups, including low-income and first-generation students, racial and ethnic minorities, and adults?
- What information do students need to make the best choices regarding competency-based programs? What consumer protections are needed?
- To what extent will the experiment address net price and affordability? How will institutions define and track their spending or costs?
- What are the likely effects of each experiment on the federal aid budget? How can fraud and abuse be prevented?

Potential areas for experimentation include:

## **Experiments: Explore New or Alternative Federal Definitions of "Attendance" and "Satisfactory Academic Progress"**

In an effort to prevent fraud, existing federal policies assert that students must be regularly engaged in substantive educational activities and that they must make adequate progress through their degree programs to continue to receive aid. Given the structures of competency-based programs described earlier, these requirements raise several issues that could be addressed through experimental sites.

Federal regulations specify that a student must be in attendance to qualify for federal financial aid. An academic year comprises of weeks of instructional time, and a week of instructional time is a seven-day period in which a student engages in a substantive educational activity during at least one of every seven consecutive days. The department provides a list of permissible educational activities, almost all of which are consistent with traditional, credit-hour-based programs.

The existing definition of attendance poses two potential problems for competency-based degree programs. First, many of these programs are defining their academic year as two six-month periods.

Given the nature of competency-based education, these programs often have rolling start dates for student enrollment and are not arranged around a traditional academic calendar with a winter break, a spring break and summer vacation. Requiring students in these programs, who tend to be working adults with families, to engage in continuous, weekly educational activities during each six-month period may not be flexible enough for those who have to juggle their work and family schedules. Competency-based education is a self-paced endeavor by its very nature, and such programs usually do not require students to engage in activities such as attending class. What is important is whether students can demonstrate that they are learning. A major advantage of competency-based education is that it allows working students to arrange studies around their work and personal lives, rather than the reverse. Requiring students to engage in some kind of weekly activity to “punch the clock” so they can maintain eligibility for financial aid is neither efficient nor effective. This approach increases monitoring costs for institutions, because they must track these activities for auditing purposes.

Another challenge within the existing regulatory approach, which is oriented toward “instruction” instead of experiences that develop students’ knowledge and skills, is the list of activities that qualify as substantive:

- “physically attending a class where there is an opportunity for direct interaction between the instructor and students;
- “submitting an academic assignment;
- “taking an exam, completing an interactive tutorial, or participating in computer-assisted instruction;
- “attending a study group that is assigned by the school;
- “participating in an online discussion about academic matters; and,
- “initiating contact with a faculty member to ask a question about the academic subject studied in the course.”

*Federal Student Aid Handbook 2013-14, P. 5-59, 5-60.*

Many of these activities rule out the possibility of self-paced learning.

Federal regulations do allow a set of activities more closely related to the structures of many competency-based degree programs, but only for those degree programs that qualify under the direct-assessment rule:

“Educational activity in a direct assessment program includes regularly scheduled learning sessions, faculty-guided independent study, consultations with a faculty mentor, development of an academic action plan addressed to the competencies identified by the institution, or, in combination with any of the foregoing, assessments.”

*Federal Student Aid Handbook, 2013-14, P. 2-22.*

Although dozens of competency-based degree programs are offered across the country, so far only two have received the department’s approval to offer programs using the direct-assessment rule. Other competency-based programs must structure their offerings to comply with the same substantive educational activities as traditional credit-based degree programs.

## *Experiment*

Institutions would request and receive a waiver from policies defining “attendance” as weekly substantive educational activities. These institutions could develop alternative ways to measure educational activities that count as “substantive,” in terms of time periods, frequency of student engagement in educational activities, and activities more appropriate to learning-based models.

In addition to answering the overarching policy questions, this experiment could yield answers to several questions:

1. Do students and institutions find such approaches to redefining attendance less burdensome and time-consuming compared with existing methods?
2. Are students able to handle approaches that do not require weekly activities? How is student progress affected by such approaches, and what is the student success rate at demonstrating proficiencies using alternative approaches?
3. What types of activities do institutions offering competency-based education believe should count as “substantive”? Would stakeholders and informed observers agree?

Besides attendance, students must demonstrate “adequate satisfactory progress” through their degree programs to maintain eligibility for federal financial aid. The current satisfactory academic progress rule has two parts: a) students must complete enough coursework at a pace such that they will graduate within 150 percent of official program length, and b) students must achieve a grade-point average of at least a C or the equivalent.

This definition of satisfactory academic progress creates two challenges to students wishing to use federal student aid to pay for competency-based programs. First, the typical calculation for academic progress involves dividing the number of credit hours completed by the number of credits earned; this percentage is typically around 60 percent to 70 percent.

Competency-based programs typically have a different structure. Students progress through these programs at their own rates and usually can demonstrate as many competencies as they are capable of demonstrating during a given academic term. However, if students are overly ambitious and begin work on too many competency areas while only completing some of them, they could fall short of the federally required completion percentage. This could happen, even if more than enough competencies were completed to keep them on track for on-time graduation.

Within traditional course- and credit-based models, controlling for failure is necessary because student eligibility to have financial aid disbursed to their colleges and universities is based only on enrollment activity. For competency-based programs, eligibility for financial aid disbursement is based on demonstration of competency acquisition through valid, reliable assessment of learning. There should be no effort to control for failure in the disbursement of aid for students in competency-based models, because federal funds would be released only for demonstrated learning. Failure to demonstrate



proficiency would not result in aid disbursement in a competency-based model as it does under traditional course- and credit-based models. In traditional credit-hour programs, payment is made for enrollment activity alone, including courses students fail.

The achievement of competencies differs from time-based courses, because competencies are directly demonstrated and assessed. Grade-point calculations are not a factor in competency-based programs.

Southern New Hampshire University's direct-assessment application for College for America, a competency-based associate degree program approved earlier this year, offers a potential solution. College for America defines satisfactory academic progress as mastering three-fourths of the competencies the program requires to maintain full-time enrollment status. This definition does not rely on the proportion of competencies attempted; rather, satisfactory progress is based on the number of competencies completed during an academic term at a rate that will enable students to graduate on time. College for America's definition also avoids the GPA rule described above, because if students are making adequate progress in the program, they are doing so by consistently demonstrating their acquisition of defined bundles of knowledge and skills. Students move forward only if they have mastered the competencies.

### *Experiment*

Colleges and universities offering competency-based programs could propose definitions of "satisfactory academic progress" that conform with the regulation's spirit of maintaining student progress and academic achievement while tailoring these definitions to the design of their degree programs. In addition, institutions could consider whether measuring satisfactory academic progress is necessary when financial aid benefits are paid only after students have demonstrated achievement of a competency or set of competencies. Using this approach, satisfactory academic progress could be viewed as an artifact of disbursing financial aid based on periods of enrollment during which learning might or might not occur. Were aid disbursed only to students demonstrating knowledge and skills milestones necessary to earn their degrees, there would be little downside to the student aid program if students took longer to complete.

In addition to answering the overarching policy questions, this experiment could answer questions such as:

1. Can definitions of satisfactory academic progress that are unique to competency-based programs ensure that students graduate in a timely manner?
2. Is satisfactory academic progress a necessary construct if payments are made only for demonstrated learning?
3. In the long run, what natural engagement patterns would emerge if time-based measures were abandoned (including desired program lengths) and "learn as you earn" models became more common?

## **Experiment: Decouple Federal Financial Aid From Time-Based Measures**

The current approach to awarding federal financial aid to students requires institutions they attend to define an academic year, with federal aid disbursed as students demonstrate satisfactory academic progress through that academic year. With aid tied to academic years and terms within these years, the government provides aid for direct costs, such as tuition, and indirect costs, such as living expenses.

A key advantage of competency-based education is that learning can be held constant while time can be variable. Because such programs often have no formal, structured class meetings, there is no need for demonstrations of knowledge and skills to take place within a specific time frame. But the lack of defined time periods makes the provision of federal financial aid for students in these programs problematic.

First, federal policies require institutions to provide a methodology that equates the achievement of competencies to credit hours. This forces institutions to create competency-based programs that remain tethered to a traditional time-based framework, stifling innovation that could better tailor education to meet students' needs while saving students and taxpayers time and money.

Second, federal policies also require that students register for certain numbers of competencies per term to ensure aid is not "wasted" on students who are doing minimal work. For many competency-based programs, this has required defining a full-time student. However, such a requirement would be unnecessary if federal student aid were disbursed based solely on the demonstration of learning.

Third, most students enroll in competency-based education because they are working full-time jobs and they need the flexibility that these programs provide. These students only require aid to cover their direct costs, but they could end up overextending themselves financially by taking out loans for which they qualify but do not actually need based on indirect costs such as living expenses. This leads to negative outcomes for students and greater financial aid spending by the government.

### ***Experiment***

Colleges and universities offering competency-based programs would receive waivers from several sets of regulations concerning federal financial aid. Instead of tying aid to credit hours attempted and earned, as federal policy does for traditional higher education programs, federal aid would be disbursed to institutions on behalf of students on the basis of competencies demonstrated during a period. Institutions could charge tuition by the competency rather than charging a flat fee to take as many competencies during a period as students are able to. (Several institutions use the latter approach.) As an option, federal aid could be disbursed for direct costs only.

The major challenge in such an experiment would be determining the amount of financial aid each student should receive. Pell Grants, for example, are awarded as an annual amount that varies depending on the number of credit hours students attempt (i.e., part-time vs. full-time status) and the accrual of a certain number of credit hours during an academic year (satisfactory academic progress). In other words, the federal government provides a specific dollar amount of aid in exchange for a specific

amount of academic achievement on the part of the student represented in terms of credit hours completed, regardless of learning achieved.

One way to calculate how much financial aid should be disbursed per competency achieved would be to take the number of competencies required to earn a specific degree and then divide this amount by 150 percent of the typical program length for the degree. For example, an associate degree is customarily viewed as a two-year degree, so 150 percent of program length would be three years. If an institution were to require the achievement of 60 competencies to award an associate degree and charged \$100 per demonstrated competency, students completing the degree program within three years would pay \$2,000 per year in tuition, plus other direct costs such as textbooks. In such a case, the annual Pell Grant would be \$2,000, disbursed in \$100 increments as competencies are demonstrated rather than \$1,000 per six-month term.

In addition to answering the overarching policy questions, this experiment could yield answers to several questions:

1. Can aid be disbursed on a per-competency basis rather than a per-term basis and, if so, how do you price it? This would represent a fundamental shift in how federal aid is provided to students.
2. Would this approach reduce the potential for fraud, because aid would be parceled out in smaller amounts compared with a per-term disbursement?
3. Can aid be disbursed only after a competency is demonstrated?
4. Does this approach reduce the risk of fraud because aid would be disbursed based on demonstration of student learning rather than on the activity of merely enrolling in a certain number of credit hours?
5. If aid were disbursed only upon completion of competencies would this approach reduce the amount of R2T4 funds for which institutions are responsible?
6. Would providing Title IV student aid only for direct costs reduce the amount of student borrowing?

## **Experiment: Hybrid, or Mixed-Modality, Programs Using Competency-Based Education**

Existing federal policy allows the award of federal financial aid to students only if the degree programs in which they are enrolled are either credit-hour-based or competency-based. Colleges and universities cannot offer degree programs that use both modalities and still qualify for federal financial aid. Students are free to take courses from both types of programs, but they can receive financial aid for only one type. For example, students enrolled in traditional credit-hour programs might take competency-based courses, but the students could not use federal aid to pay for those courses, even though a mix of approaches might be what works best for students. The restriction on mixing approaches creates problems for students and institutions.

This policy stifles institutional innovation. Creating entirely competency-based degree programs from scratch represents a significant hurdle for most institutions. Conversely, many institutions easily could create several competency-based course options for students, especially from among popular courses. Allowing students to use federal financial aid to pay for hybrid programs would encourage institutions to develop and offer competency-based courses and improve efforts to define educational quality in terms of measurable individual student learning.

The lack of hybrid options also creates unnecessary obstacles for many students in traditional degree programs. Students could progress faster through programs if they had opportunities to satisfy some degree requirements in the form of self-paced, competency-based modules. Existing federal policies discourage such approaches by prohibiting students from receiving federal financial aid to pay for them. Making federal aid available to pay for hybrid programs could shorten time to degree and generate financial savings for students, parents and taxpayers.

Federal aid policies discourage students in competency-based degree programs from taking courses offered in the traditional credit-hour format. Some students in competency-based programs might do better in traditional credit-based courses in certain subject areas. For example, students who struggle with mathematics might thrive in credit-based courses in which there is significantly more direct contact with instructors. Allowing students to choose the instructional or learning modality that best suits their learning styles could reduce the amount of repeated course-taking and also shorten time to degree and save money.

### ***Experiment***

Colleges and universities offering competency-based programs would receive waivers from policies restricting hybrid or mixed-modality offerings. This would allow students in traditional credit-hour programs to take competency-based modules and students in competency-based programs to take traditional credit-hour courses. The main complication would be defining satisfactory academic progress for students taking both types of courses, because definitions of satisfactory academic progress can differ between traditional degree and competency-based programs. Because the use of competency-based courses varies widely across institutions, the department could request that institutions propose methods of determining satisfactory academic progress suited to the structures of their specific degree programs, much as colleges and universities seeking permission to offer the

direct assessment of learning. Alternatively, limits could be established. For example, students in traditional programs might be allowed to use federal aid for up to one competency-based course per semester, with satisfactory academic progress calculated only on their credit-based courses.

In addition to answering the overarching policy questions, this experiment could yield answers to several questions:

1. What is the level of demand among students in traditional and competency-based programs for hybrid programs?
2. Will allowing funding for both types of courses decrease or increase time to degree? If so, by how much and for which types of students?
3. How much money could students save using this method? How much money could the federal government save?
4. Is it necessary or useful to maintain a rigid separation between traditional and competency-based programs? What is the underlying rationale?