Competency-Based Education:
An Introductory Primer

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The quality of American higher education is an issue of increasing concern to employers and policy experts alike. For some time now, employers have complained that recent college graduates lack the knowledge and skills necessary to compete in the workforce. Although these concerns are not new, they have taken on urgency given the increasing need for more Americans to have the skills required to compete and succeed in today's economy.

One way to ensure college graduates have the knowledge and skills needed to compete in the workforce is to embrace competency-based education (CBE). While there is no federal definition of competency-based education, September 2015 guidance from the U.S. Department of Education (the Department) for institutions participating in its experiments describes it in the following terms:

> In general, a CBE program is one that organizes content according to what a student knows and can do, often referred to as a "competency." CBE programs also generally have very clear claims for student learning, stress what students can do with the knowledge and skills they acquire and have assessments that provide measurable evidence of competency. Student progress is determined by mastery of each competency. Because CBE focuses on whether students have mastered these competencies, there is a focus on learning outcomes rather than time spent in a classroom.[1]

CBE distinguishes itself from traditional higher education by acknowledging a student's knowledge of a given topic without basing it on time requirements. Traditional higher education is time-based—a student gains a degree after earning a specific number of credit hours (these are usually based on the number of classroom hours per week through a term, sometimes referred to as "seat time"). Under this traditional credit hour−based system, time is constant (e.g., 120 credit hours earned over four years), and learning is variable (e.g., a student earns the same number of credits for a grade of C- as he or she does for an A+). CBE flips the traditional time-based model: Under a competency framework, learning is ideally constant (e.g., a student has either mastered the concept or not), and time is variable (e.g., students may progress quickly through material that they find easy or with which they have familiarity or slow down their pace and spend more time on material that is more difficult or less familiar to them).

Under a CBE model, students progress through their program of study, not by accumulating credit hours but by demonstrating their skills and knowledge of particular subject matter competencies through a set of assessments. Rather than being graded on a scale of A−F, students either do or do not demonstrate their mastery of competencies. In most competency-based programs, mastery of competency is equivalent to a grade of B or better.

Still, the majority of CBE programs rely on the credit hour for students to receive federal financial aid. To enable students to qualify, current federal regulations require institutions to equate competencies back into credit hour equivalencies except for a narrow subset of "direct assessment" programs.[2]

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[1] U.S. Department of Education. (2015, September). *Competency-Based education experiment reference guide.* Washington, DC: Author. Retrieved from https://experimentalsites.ed.gov/exp/pdf/CBEGuideComplete.pdf.

[2] U.S. Department of Education. (2013, March 19). *Applying for Title IV Eligibility for Direct Assessment (Competency-Based) Programs.* Washington, DC: Federal Student Aid. Retrieved from https://ifap.ed.gov/dear-colleague-letters/03-19-2013-gen-13-10-subject-applying-title-iv-eligibility-direct-assessment

Through CBE, students can draw upon, and receive credit for, their work experiences and prior learning. It is important to note, however, that there are distinct differences between CBE and prior learning assessments (PLAs). PLA is a formal assessment of college-level learning that occurs outside of the traditional college classroom. As defined by the Council on Adult and Experiential Learning, prior learning assessment is "the process by which many colleges evaluate for academic credit the college-level knowledge and skills an individual has gained outside of the classroom, including from employment (e.g., on-the-job training, employer-developed training), military training/service, travel, hobbies, civic activities and volunteer service."[3] Today, there are four methods of assessing a student's prior learning: (1) evaluation of military and corporate training and coursework; (2) standardized tests (e.g., Advanced Placement tests); (3) course challenge exams; and (4) student portfolios. Rather than using one of these four specific methods of assessment at the outset for PLA, CBE students can draw upon what they already know to help them progress through specific components of their learning, or competencies, more quickly. Importantly, the assessment fees for PLA cannot be paid for with federal student aid (outside of a limited Departmental experiment), while the coursework and learning for competency-based education does qualify for federal aid.

Origins of Competency-Based Education

The origins of competency-based higher education in the United States date to the 1970s. At the time, CBE programs were viewed as an attractive option for adult learners who entered college with knowledge and skills that would allow them to advance quickly through some material, but who needed additional time for newer material.[4] Although CBE programs have existed for some time, they remained a relatively unknown sector of American higher education until the development of Western Governors University (WGU), a nonprofit online university created by 19 western governors in 1995. As of December 31, 2019, WGU has enrolled over 120,000 full-time students (cumulatively) and awarded over 167,000 degrees in teacher education, business, information technology, and health professions.[5] Since WGU's establishment, many more institutions have begun offering or expanding their CBE programs.

Although WGU currently has the greatest name recognition as a competency-based education model, there are a number of other competency-based programs across the United States. Some of these programs are long-standing—such as Alverno College's program that began in the 1970s, Thomas Edison State University's program that began in the 1980s, and Charter Oak State College's program that began in the 1990s—to more recent programs including Southern New Hampshire University's College for America program in 2013.

[3] Klein-Collins, R. (2012). Competency-based degree programs in the U.S.: Postsecondary credentials for measurable student learning and performance. Washington, DC: Council for Adult and Experiential Learning. Retrieved from http://www.cael.org/pdfs/2012_CompetencyBasedPrograms.

[4] See Klein-Collins, R. (2012).

[5] Western Governors University (2020). WGU 2019 Annual Report. Retrieved from: https://www.wgu.edu/content/dam/western-governors/documents/annual-report/annual-report-2019.pdf

Barriers Impacting Competency-Based Education Recent Events

The two primary obstacles to greater adoption and creation of CBE frameworks are cultural and financial. For more than two centuries, higher education in the United States has primarily been delivered one way: students come to a campus and sit in a designated series of courses led by professors for a designated period of time. CBE models are often unsettling to those who work within the traditional model and met with skepticism by faculty and administrators who themselves are products of the traditional model. Some faculty and administrators raise concerns with how to best maintain academic quality within CBE models. Others have raised concerns about ensuring students are able to transfer across institutions, given that most of the higher education sector relies on credit hours and that employers will not recognize credentials that follow an atypical model.

With regard to financial barriers, the credit hour, which competency-based models are designed to disrupt, is more than just the current measure of progress toward a degree—it has become the basis for awarding student financial aid and determining institutional and departmental budgets. Even though competency-based models seek to break from the credit hour by allowing students to demonstrate mastery of competency rather than seat time, they must still include credit hour equivalences to enable students to qualify for federal financial aid. A 2005 amendment to the Higher Education Act created "direct assessment," a subset of CBE programming. This provision created the opportunity for institutions to participate in the federal financial aid programs and offer competency-based "direct assessment" programs not directly tied to credit hours. Specifically, this provision made the following changes to the term "eligible program":

> For purposes of this title, the term "eligible program" includes an instructional program that, in lieu of credit hours or clock hours as the measure of student learning, utilizes direct assessment of student learning, or recognizes the direct assessment of student learning by others, if such assessment is consistent with the accreditation of the institution or program utilizing the results of the assessment.[6]

This provision offers institutions the possibility of creating a CBE program that measures student learning through direct assessment rather than credit hours or seat time. If an institution's direct assessment program is approved by the Secretary of Education, students may pay for these programs using their federal financial aid dollars. However, the Department does require that any institution using direct assessment also "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," including the distribution of federal financial aid dollars.[7] No institutions applied to offer CBE programming under the "direct assessment" authority until 2013.[8] As of 2018, approximately 80 programs at eight institutions had been approved.

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[6] Deficit Reduction Act of 2005, Pub. L. No. 109-171.

[7] U.S. Department of Education. (2006, November 1). Federal Student Aid Programs; Final Rule. Washington, DC: Federal Student Aid. Retrieved from https://ifap.ed.gov/federal-registers/11-01-2006-summary-these-final-regulations-reflect-provisions-hera-affect

[8] Laitinen, A. (2012). Cracking the credit hour. Washington, DC: New America. Retrieved from https://static.newamerica.org/attachments/2334-cracking-the-credit-hour/Cracking_the_Credit_Hour_Sept5_0.ab0048b12824428cba568ca359017ba9.pdf.

CBE Regulatory Environment

Over the years, the Department has begun to provide a framework for expanded CBE and has allowed some institutions to offer direct assessment programs. In September 2012, the Department created a working group on direct assessment to review the 2005 provision and to provide technical assistance to institutions and others interested in how the use of the direct assessment provision impacts financial aid eligibility.[9] On March 19, 2013, the Department issued guidance, ***Applying for Title IV Eligibility for Direct Assessment (Competency-Based) Programs,***[10] which explains how institutions can have CBE programs approved under the current regulations, while also acknowledging that current law may not fully accommodate CBE programs. Later in 2013, the Department approved applications received from Southern New Hampshire University and Capella University to begin direct assessment programs in the fall of 2013 and 2014, respectively.

Beginning in January 2014, the Office of the Inspector General (OIG) audited the Department's actions and found that it did not adequately address the risks that direct assessment posed to the federal financial aid program. The OIG found that the Department did not have processes in place to prevent students from using financial aid for "life experiences," which is not a permissible use of Title IV aid, and could not guarantee that direct assessment programs were not correspondence courses that lack "regular and substantive" student-faculty interaction.[11] To address these findings, the Department issued further guidance, ***Competency-Based Education Programs — Questions and Answers***, on December 19, 2014.[12]

In July 2014, the Department issued a ***Federal Register*** notice inviting institutions to participate in two experiments under the Experimental Sites Initiative related to CBE: CBE Split Disbursement and Limited Direct Assessment. The experiments also include the CBE Subscription Period experiment, which expanded institutional eligibility in 2015 to include institutions that charge a flat fee for tuition. The Split Disbursement and Subscription Period sites provide federal student aid to students enrolled in self-paced CBE programs.[13] The Limited Direct Assessment site allows flexibility for an institution to provide a mix of direct assessment coursework and credit hour coursework in the same program.[14] There were 13 institutions participating in the CBE Split Disbursement, 10 institutions participating in CBE Subscription Period, and 21 institutions participating in Limited Direct Assessment.

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[9] Office of the Inspector General. (2014, September 30). Direct Assessment Programs: Processes for Identifying Risks and Evaluating Applications for Title IV Eligibility Need Strengthening to Better Mitigate Risks Posed to the Title IV Programs. Washington, DC: U.S. Department of Education. Retrieved from http://www2.ed.gov/about/offices/list/oig/auditreports/fy2014/a05n0004.pdf.

[10] See U.S. Department of Education (2013, March 19).

[11] See Office of the Inspector General. (2014, September 30).

[12] U.S. Department of Education. (2014, December 19). Competency-Based Education Programs- Questions and Answers. Washington, DC: Federal Student Aid. Retrieved from https://ifap.ed.gov/dear-colleague-letters/12-19-2014-gen-14-23-subject-competency-based-education-programs-questions

[13] For the full list of participants, see https://experimentalsites.ed.gov/exp/pdf/ESIParticipants.pdf.

[14] For the full list of participants, see https://experimentalsites.ed.gov/exp/pdf/ESIParticipants.pdf.

In November 2019, the Department sent letters to participating institutions alerting them that both parts of the CBE-related Experimental Sites Initiative were to be terminated on June 30, 2020.[15] Institutions will retain access to federal financial aid through the 2020–21 academic year to enable students currently enrolled in these programs to complete their credential. The Department cited sufficient data from the programs to help inform an agreement with non-federal negotiators in a 2019 negotiated rulemaking session on a federal financial aid disbursement model for direct assessment and subscription-based programs as their rationale for ending the experiments. This final rule was published in September 2020 and is set to go into effect on July 1, 2021.[16]

The final Distance Education and Innovation Rule has several provisions related to the implementation of CBE programs. In this rule, the Department provides clarity to the "regular and substantive" requirement for Title IV eligibility. While courses must take place on a "predictable and scheduled basis," the "regular" component of "regular and substantive interaction," institutions must choose at least two of the following five criteria to meet the "substantive" component:

- Providing direct instruction;
- Assessing or providing feedback on a student's course work;
- Providing information or responding to questions about the content of a course or competency;
- Facilitating a group discussion regarding the content of a course or competency; or
- Other instructional activities approved by the institution's or program's accrediting agency.

The final rule affirms the time-based definition of a credit hour, while codifying into law pre-existing flexibilities that allow institutions to focus on student learning rather than seat time. These flexibilities, initially published through subregulatory guidance in 2010,[17] permit institutions to determine the appropriate amount of credit hours awarded for student work, including by permitting institutions to determine the balance between classroom time and out-of-class student work and by taking into consideration alternative delivery models and measurements of student work. In effect, the final rule codifies previous Department guidance.

Two additional provisions of the rule may apply to CBE. Under the new rule, only an institution's first direct assessment program at each credential level requires the Department's approval, whereas previously all direct assessment programs required approval. Once an institution has an approved direct assessment program, they may create as many additional programs as they desire and simply notify the Department, rather than seek prior approval.

The rule also expands federal financial aid eligibility for subscription-based pricing models, which some CBE programs use. In subscription-based models, students complete coursework at their own pace, and pay tuition based on the credit hours they anticipate completing. The rule implements a federal definition of subscription-based programs and establishes a definition of a full-time student in these programs for aid eligibility. It also requires students to hit certain completion benchmarks prior to subsequent aid disbursements.

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[15] Federal Student Aid (2019, November 22). Re: Conclusion of Experiment. Retrieved from https://www.documentcloud.org/documents/6586446-CBEltr.html

[16] U.S. Department of Education (2020, September 2). Distance Education and Innovation. Retrieved from: https://www.federalregister.gov/documents/2020/09/02/2020-18636/distance-education-and-innovation

[17] U.S. Department of Education, Office of Federal Student Aid (2011, March 18). DCL ID: GEN-11-06 Subject: Guidance to Institutions and Accrediting Agencies Regarding a Credit Hour as Defined in Final Regulations Published on October 29, 2010. Retrieved from: https://cdn.ymaws.com/www.ncher.us/resource/collection/9243F7D2-0FA5-4FE4-AF49-68FBF3013D3F/GEN-11-06.pdf

Given the growing demand for CBE programs, colleges and universities have recently shown tremendous interest in this type of programming. The 2019 National Survey of Postsecondary Competency-Based Education found that 64 institutions were operating 588 CBE programs, an increase from 57 institutions and 512 institutions in 2018.[18]

The WGU AUDIT

In September 2017, the OIG released findings of an audit completed of Western Governors University, the nationally recognized CBE model mentioned above. Among its findings, the OIG concluded that WGU was not eligible to participate in the federal student financial aid program because it did not ensure that enrolled students had "regular and substantive interaction" with instructors. As a result, the OIG found that WGU should no longer be eligible to participate in the federal student aid program and that it should be required to return federal financial aid dollars received in the amount of more than $700 million. WGU objected to these findings arguing that its programs are designed to ensure that students receive "regular and individualized academic support from faculty who serve in disaggregated, or specialized, roles." The Department, which is not required to accept the OIG's recommendations, has not made a public statement outlining how it plans to respond to the OIG's findings.

(Sources: https://www.chronicle.com/article/What-You-Need-to-Know-About/241263; https://www2.ed.gov/about/offices/list/oig/auditreports/fy2017/a05m0009.pdf)

Accreditation

Together, the Department, institutions, and accrediting agencies determine whether a program constitutes a CBE or direct assessment program. Accreditors must evaluate an institutions' plan for translating CBE courses into equivalent credit hours and determine whether there is substantive faculty-student interaction to ensure the institution is eligible. However, under a new rule that went into effect on July 1, 2020, accreditors are no longer required to evaluate institutions' policies on what constitutes a credit hour.

Accreditors' reviews of CBE programs have faced some criticism. A 2015 OIG report cited a regional accreditation organization's review of CBE programs. The report, ***The Higher Learning Commission Could Improve Its Evaluation of Competency-Based Education Programs to Help the Department Ensure the Programs Are Properly Classified for Title IV Purposes,*[19]** found that the regional accreditor did not properly evaluate credit hour equivalencies, determine faculty-student interaction, or review programs that may have had substantive changes.

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[18] American Institutes for Research (n.d.). State of the Field: Findings From the 2019 National Survey of Postsecondary Competency-Based Education. Retrieved from https://www.air.org/sites/default/files/National-Survey-of-Postsecondary-CBE-Lumina-October-2019-rev.pdf

[19] Office of the Inspector General. (2015, September 30). The Higher Learning Commission Could Improve Its Evaluation of Competency-Based Education Programs to Help the Department Ensure the Programs Are Properly Classified for Title IV Purposes. Washington, DC: Department of Education. Retrieved from http://www2.ed.gov/about/offices/list/oig/auditreports/fy2015/a05o0010.pdf.

In June 2015, the Council of Regional Accrediting Commissions developed guidance for   its member accreditors of competency-based education, including direct assessment programming.[20] Also in September 2015, the Department issued detailed guidance that sought to provide increased clarity and consistency for CBE accreditation. To ensure clarity moving forward, some have suggested creating an accreditation organization or oversight/advisory body specializing in competency-based education.[21]

In the same rulemaking session that produced the Distance Education and Innovation Rule discussed above, the Department published a new rule regarding accreditation of competency-based education, effective July 1, 2021. Several provisions of this rule, discussed in depth in a previous section, relate to accreditation of CBE programs, including a more defined interpretation of "regular and substantive interaction." The rule also codifies into regulation previous flexibilities granted to institutions around the definition of a credit hour. Additionally, institutions are only required to receive Department approval for their first direct assessment program, whereas previously each program required Department approval. Because of this, the review of an institution's direct assessment programs is mostly left to accreditors through their substantive change policies.

Data Collection and Research

With CBE, neither rigorous data nor comprehensive evaluations currently exist. Data sets that are currently available do not allow researchers to disaggregate students enrolled in CBE programs from students enrolled in traditional credit hour–based degree programs.[22] Realizing this, an association of institutions is collaborating to collect data on its members' CBE programs. This group, known as the Competency-Based Education Network (CBEN), is composed of 30 colleges and universities and four public systems with 82 campuses.[23]

Looking Ahead

Competency-based education is seen by many as a means to increase the number of individuals with a high-quality degree or credential by offering a cost- and time-effective approach to higher education. Although the cultural barriers to the use of CBE will likely persist for some time, proponents of these strategies are hopeful that the reauthorization of the Higher Education Act will serve as an opportunity to begin to break down barriers to CBE program development. Reducing the federal financial aid barriers to these reforms, coupled with rigorous research and data made publicly available, may give the reforms the legitimacy they need for more rapid acceptance and adoption among traditional higher education.

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[20] Lacey, A. and Murray, C. (2015, May). Rethinking the regulatory environment of competency-based education. Washington, DC: AEI. Available at http://www.aei.org/wp-content/uploads/2015/05/Rethinking-the-CBE-regulatory-environment.pdf and Council of Regional Accrediting Commissions. (2015, June 2). Available at https://www.insidehighered.com/sites/default/server_files/files/C-RAC%20CBE%20Statement%20Press%20Release%206_2.pdf.

[21] See Lacey & Murray.

[22] Kelchen, R. (2015, January). The landscape of competency-based education. Washington, DC: AEI. Retrieved from https://www.aei.org/wp-content/uploads/2015/04/Competency-based-education-landscape-Kelchen-2015.pdf.

[23] Competency-Based Education Network. Retrieved from: http://www.cbenetwork.org/about/.

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[1] U.S. Department of Education. (2015, September). Competency-Based education experiment reference guide. Washington, DC: Author. Retrieved from https://experimentalsites.ed.gov/exp/pdf/CBEGuideComplete.pdf.

[2] U.S. Department of Education. (2013, March 19). Applying for Title IV Eligibility for Direct Assessment (Competency-Based) Programs. Washington, DC: Federal Student Aid. Retrieved from https://ifap.ed.gov/dear-colleague-letters/03-19-2013-gen-13-10-subject-applying-title-iv-eligibility-direct-assessment

[3] Klein-Collins, R. (2012). Competency-based degree programs in the U.S.: Postsecondary credentials for measurable student learning and performance. Washington, DC: Council for Adult and Experiential Learning. Retrieved from http://www.cael.org/pdfs/2012_CompetencyBasedPrograms.

[4] See Klein-Collins, R. (2012).

[5] Western Governors University (2020). WGU 2019 Annual Report. Retrieved from: https://www.wgu.edu/content/dam/western-governors/documents/annual-report/annual-report-2019.pdf

[6] Deficit Reduction Act of 2005, Pub. L. No. 109-171.

[7] U.S. Department of Education. (2006, November 1). Federal Student Aid Programs; Final Rule. Washington, DC: Federal Student Aid. Retrieved from https://ifap.ed.gov/federal-registers/11-01-2006-summary-these-final-regulations-reflect-provisions-hera-affect

[8] Laitinen, A. (2012). Cracking the credit hour. Washington, DC: New America. Retrieved from https://static.newamerica.org/attachments/2334-cracking-the-credit-hour/Cracking_the_Credit_Hour_Sept5_0.ab0048b12824428cba568ca359017ba9.pdf.

[9] Office of the Inspector General. (2014, September 30). Direct Assessment Programs: Processes for Identifying Risks and Evaluating Applications for Title IV Eligibility Need Strengthening to Better Mitigate Risks Posed to the Title IV Programs. Washington, DC: U.S. Department of Education. Retrieved from http://www2.ed.gov/about/offices/list/oig/auditreports/fy2014/a05n0004.pdf.

[10] See U.S. Department of Education (2013, March 19).

[11] See Office of the Inspector General. (2014, September 30).

[12] U.S. Department of Education. (2014, December 19). Competency-Based Education Programs- Questions and Answers. Washington, DC: Federal Student Aid. Retrieved from https://ifap.ed.gov/dear-colleague-letters/12-19-2014-gen-14-23-subject-competency-based-education-programs-questions

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[16] U.S. Department of Education (2020, September 2). Distance Education and Innovation. Retrieved from: https://www.federalregister.gov/documents/2020/09/02/2020-18636/distance-education-and-innovation

[17] U.S. Department of Education, Office of Federal Student Aid (2011, March 18). DCL ID: GEN-11-06 Subject: Guidance to Institutions and Accrediting Agencies Regarding a Credit Hour as Defined in Final Regulations Published on October 29, 2010. Retrieved from: https://cdn.ymaws.com/www.ncher.us/resource/collection/9243F7D2-0FA5-4FE4-AF49-68FBF3013D3F/GEN-11-06.pdf

[18] American Institutes for Research (n.d.). State of the Field: Findings From the 2019 National Survey of Postsecondary Competency-Based Education. Retrieved from https://www.air.org/sites/default/files/National-Survey-of-Postsecondary-CBE-Lumina-October-2019-rev.pdf

[19] Office of the Inspector General. (2015, September 30). The Higher Learning Commission Could Improve Its Evaluation of Competency-Based Education Programs to Help the Department Ensure the Programs Are Properly Classified for Title IV Purposes. Washington, DC: Department of Education. Retrieved from http://www2.ed.gov/about/offices/list/oig/auditreports/fy2015/a05o0010.pdf.

[20] Lacey, A. and Murray, C. (2015, May). Rethinking the regulatory environment of competency-based education. Washington, DC: AEI. Available at http://www.aei.org/wp-content/uploads/2015/05/Rethinking-the-CBE-regulatory-environment.pdf and Council of Regional Accrediting Commissions. (2015, June 2). Available at https://www.insidehighered.com/sites/default/server_files/files/C-RAC%20CBE%20Statement%20Press%20Release%206_2.pdf.

[21] See Lacey & Murray.

[22] Kelchen, R. (2015, January). The landscape of competency-based education. Washington, DC: AEI. Retrieved from https://www.aei.org/wp-content/uploads/2015/04/Competency-based-education-landscape-Kelchen-2015.pdf.

[23] Competency-Based Education Network. Retrieved from: http://www.cbenetwork.org/about/.