

UNDERSTANDING COMPETENCY-BASED EDUCATION

TOOLKIT

The tools in this packet will help states describe and discuss competency-based education. These tools can be used to educate legislators, members of higher education commissions or boards, staff at institutions or systems, students and the general public.

- **Frequently Asked Questions About Competency-Based Education.** Since many stakeholders have only their own educational experience to draw on, and most progressed through a traditional environment, they might be unfamiliar with competency-based education. This document provides answers to some of the most frequently asked questions about competency-based education.
- **How to Communicate About Competency-Based Education.** This is a two-sided document that includes strategies for talking about competency-based education generally and with specific audiences.
- **Comparing Traditional Education and Competency-Based Education.** This table highlights some of the main differences (and similarities) between traditional education delivery models and competency-based education. It can serve as a starting point for discussion and clarification about competency-based education design and philosophy.
- **Understanding Competency-Based Education and Prior Learning Assessment.** There is a tendency for people to conflate competency-based education and prior learning assessment, which is problematic for a variety of reasons. In terms of state policy, many states have implemented legislation around including prior learning assessment as part of their strategy for meeting state attainment goals. If policymakers in those states are being asked to also consider the importance of competency-based education, it is important that they clearly understand the difference. This brief description of both helps to clarify those differences.
- **Costs, State Policies and Competency-Based Education—Considerations for States.** As state-level stakeholders seek to encourage the development and growth of competency-based education programs, they will need to understand the costs institutions face and how funding, financial aid and tuition policies might affect program development. This table offers a brief summary of these issues, questions policymakers and others might face and considerations for state policymakers to encourage the growth of competency-based education.

FREQUENTLY ASKED QUESTIONS ABOUT COMPETENCY-BASED EDUCATION

Since many stakeholders have only their own educational experience to draw on, and most progressed through a traditional environment, they might be unfamiliar with competency-based education. This document provides answers to some of the most frequently asked questions about competency-based education.

What is competency-based education?

Competency-based education is an approach to designing academic programs with a focus on competencies (knowledge, skills and abilities) rather than time spent in a classroom. According to the Competency-Based Education Network (C-BEN):

Competency-based education combines an intentional and transparent approach to curricular design with an academic model in which the time it takes to demonstrate competencies varies and the expectations about learning are held constant. Students acquire and demonstrate their knowledge and skills by engaging in learning exercises, activities and experiences that align with clearly defined programmatic outcomes. Students receive proactive guidance and support from faculty and staff. Learners earn credentials by demonstrating mastery through multiple forms of assessment, often at a personalized pace.

Is this just another name for prior learning assessment?

They are two different things. Competency-based education is an approach to teaching and learning that clearly identifies the competencies that students must master. Prior learning assessment is a tool used to assess learning outside of a student's academic program.

Is this a fad?

Competency-based education has existed for over 40 years. It is enjoying a resurgence of interest and currently being employed in over 600 programs. With the promise of better serving students across the country, competency-based education is likely to be long-lasting and transformative for education.

How do we ensure quality?

Quality in competency-based education programs is ensured in multiple ways. Faculty and subject matter experts (including workforce partners) are engaged in defining rigorous competencies. Third-party partners are used to validate competencies and assessments. Independent verification of assessments can be used to ensure their rigor. Programs are designed using national quality assurance frameworks, such as the Degree Qualifications Profile. The Competency-Based Education Network is also developing a set of Quality Standards for CBE to support institutions in developing high quality programs.

FREQUENTLY ASKED QUESTIONS ABOUT COMPETENCY-BASED EDUCATION

Is competency-based education just cheaper and faster?

Students are at the center of competency-based education programs. These programs offer personalized pathways so that students can take the time they need to fully demonstrate mastery of competencies. In some cases, students might be able to progress more quickly through their programs. In other cases, they might need to spend more time with the material to demonstrate mastery of all competencies. Increasingly, institutions are designing their competency-based education programs with affordability in mind so that even students who need more time might pay less than they would in traditional education.

Is this for all students?

Students from many different backgrounds can thrive in a competency-based education environment. Competency-based education should be considered an additional option for students, and may not be ideal for everyone. Programs should be intentionally designed to meet the needs of their target students.

Is this for all educational programs?

Although some programs might lend themselves more easily to a competency-based design, all programs could be delivered in a competency-based education environment. Currently programs are being developed at hundreds of institutions and in majors ranging from general education to organizational leadership to advanced manufacturing.

Is this actual instruction?

One of the hallmarks of competency-based education is student support and regular interaction with teaching faculty. Although the delivery of content might look different from traditional education settings, students are still learning from subject matter experts and being holistically supported by institutions. Some CBE programs offer a learning experience based on responsible innovations integrating emerging technology, predictive analytics, cognitive science, and instructional design to offer learning support (instruction) that is responsive and personalized.

Are these programs expensive to develop and maintain?

It depends on the existing infrastructure and the design plan for the competency-based education programs. Startup costs can be high, but there can be a relatively short break-even timeline. Ultimately, the focus should be on what is best for students.

COMMUNICATING ABOUT COMPETENCY-BASED EDUCATION

As institutions work to develop and scale competency-based education programs, and states look for ways to support them, the following framework might be helpful in developing an effective communication plan and strategy.

General Communication Strategies

As states and institutions communicate about competency-based education, they should:

- Use multiple pathways and messages;
- Know the audience and meet them where they are;
- Anticipate questions and prepare responses ahead of time;
- Rely on lessons learned and publicly available sources to help craft messages;
- Provide specific examples;
- Keep communication simple and avoid jargon, but look for ways to make it fun;
- Repeat, repeat, repeat; and
- Practice.

Describing Competency-Based Education

Given the multitude of options for designing competency-based education programs, it is often difficult to describe it in a broadly applicable way. In communication plans and strategies developed by states, it is important to have a clear, consistent way of describing competency-based education. This description should allow stakeholders to have an idea of what competency-based education is, but not describe programs so specifically that institutions feel constrained.

The Competency-Based Education Network (CBEN) is a group of institutions that, together, are leaders in defining, describing and supporting competency-based education. This is the C-BEN definition:

- Competency-based education combines an intentional and transparent approach to curricular design with an academic model in which the time it takes to demonstrate competencies varies and the expectations about learning are held constant. Students acquire and demonstrate their knowledge and skills by engaging in learning exercises, activities and experiences that align with clearly defined programmatic outcomes. Students receive proactive guidance and support from faculty and staff. Learners earn credentials by demonstrating mastery through multiple forms of assessment, often at a personalized pace.

Other ways of talking about competency-based education include¹:

- A way to grow talent and build skills to meet the challenges of the future;
- A conversation with colleges and universities, and with K-12, licensing boards, other forms of education and the workforce;
- Personalized and individualized; and
- An approach with a focus on identifying and recording knowledge, skills and abilities across a broad spectrum.

Communicating About Competency-Based Education to Different Audiences

The table on the following page provides some advice for how to talk about competency-based education with various stakeholder groups.

¹ These points are adapted from a presentation by Joellen Shendy, Registrar at University of Maryland University College, on November 18, 2015.

COMMUNICATION POINTS AND EXAMPLES BY AUDIENCE

STAKEHOLDER

MAIN POINTS TO COMMUNICATE

EXAMPLE STATEMENTS



FACULTY

- Faculty are subject matter experts and are central in ensuring quality of programs.
- There is a more versatile style of teaching and flexible staffing roles and structures.
- Faculty are free to focus on certain subject areas or design tasks.

Competency-based education relies on faculty for the development, articulation and assessment of specific knowledge, skills and abilities of which students must demonstrate mastery.



ADMINISTRATORS

- Assessments are authentic, measurable and meaningful.
- Students will engage in learning outside the classroom and utilize valid and reliable assessments that include both objective and performance-based tools, not just standard lecturing or tests.

Competency-based education serves student markets not currently well served, and can potentially result in an increase in enrollment, completion and revenue.



STUDENTS

- There are transparent expectations for what students need to prove they know and what skills and abilities they can demonstrate.
- Programs allow for personalization and flexibility and are often self-paced.
- Learning might be project-based or experiential.

Competency-based education provides more personalized learning that allows you to progress as you demonstrate mastery of the subject matter.



LEGISLATORS

- Institutions can serve students better by providing transparent yet flexible pathways to degree completion.
- This approach holds potential for lower cost to students and states.
- There is no single “right” way to design programs, but there are some common features.

Competency-based education is an approach to learning that can serve your [jurisdiction] better through both alignment to employer needs and transparent expectations for what knowledge, skills and abilities graduates possess; assurance of quality through valid and reliable assessments of learning; and the potential to lower costs for students and taxpayers.



WORKFORCE/ BUSINESS COMMUNITY

- Education and workforce development needs might be better connected to address talent shortages.
- This is an innovative approach to build a stronger workforce.
- Employers will know what knowledge, skills and abilities that graduates possess.

Competency-based education gives the business community greater assurance that universities are equipping their graduates and future employees with the knowledge, skills and abilities needed for a productive workforce. The approach also allows for greater alignment to local workforce needs.



K-12

- K-12 and higher education stakeholders might have different vocabulary, but same underlying principles.
- Learning organized around knowledge, skills and abilities that students must master rather than credit hours.
- Allows for flexible pacing of progress.
- Competency-based diplomas are becoming more widely recognized.

Competency-based education focuses on the knowledge, skills and abilities of students, which allows for self-paced progress and provides students with the supports they need to succeed.

COMPARING COMPETENCY-BASED EDUCATION AND TRADITIONAL EDUCATION

TRADITIONAL EDUCATION		COMPETENCY-BASED EDUCATION
Course.	BUILDING BLOCK OF ACADEMIC PROGRAM	Competency (knowledge, skill, ability).
Course-based—lecture, discussion, lab. Can be online or in-person. Fixed timing.	 CONTENT DELIVERY	Varied and includes lectures, projects, use of publicly available resources developed by experts (open educational resources). Online or face-to-face. May be self-paced. Flexible and personalized.
Course-based exams and projects.	 ASSESSMENT OF LEARNING	Students are evaluated through a system of authentic assessments designed to determine mastery of competencies over the entirety of a program. Multiple methods of assessment may be used.
Based on semester or credit hours.	 TUITION	Subscription models charge tuition based on a set amount of time (e.g., \$2,500 for 6 months); modular tuition models charge per competency unit or module.
Students go to class or virtually attend online sessions for a set number of hours per day and participate in faculty-led lectures or activities.	 CULTURE OF LEARNING	Varies by institution and student population served. Flexible, personalized learning environment with regular interaction with faculty and may include classes, projects or learning outside of the classroom or learning wherever it occurs.
Students earn credits for completing courses, typically with acquisition of at least 60 percent of the material.	 MEASURING PROGRESS	Students advance by demonstrating mastery of competencies.
Students take a series of courses or classes in a prescribed time period.	 EXPECTATIONS	Students progress depends upon mastery of competencies.
A single faculty member may perform multiple roles and serve as subject matter expert, instructor, advisor, curriculum designer, etc.	 FACULTY ROLE	Roles may be unbundled and have specific curriculum designers, assessors, coaches, subject matter experts, etc.

UNDERSTANDING COMPETENCY-BASED EDUCATION AND PRIOR LEARNING ASSESSMENT

“Competency-based education” (CBE) and “prior learning assessment” (PLA) often are used interchangeably. However, in reality they are two different things.

While both are used to support degree completion, competency-based education is an **approach** to organizing and delivering education around students’ knowledge, skills and abilities (rather than time spent in courses). Prior learning assessment is a **tool** for assessing what knowledge students have acquired outside their academic programs.

Competency-based education, as an approach, is an intentionally designed program through which students acquire knowledge, build skills and demonstrate mastery of competencies. Student learning is at the core of this approach. CBE programs are designed in all kinds of ways. On the whole, CBE might be agnostic to the details of how knowledge is acquired (for example, CBE programs could be course-based or project-based, they could rely heavily on open educational resources, or they could encourage independent learning through experiences), but a specific CBE program is designed a certain way for a reason. CBE programs might employ PLA to determine the knowledge, skills and abilities with which students enter a program—in similar fashion to a traditional educational approach.

Prior learning assessment, as a tool, is used to assess what students have already learned before enrolling in an academic program. Students are given credit for what they already know and do not have to participate in relearning that material. The exams and portfolio assessments that fall under the PLA umbrella are not concerned with where and how a student has built knowledge, but rather are focused on whether the student has mastery over the academic content. Furthermore, these exams and assessments are taken at one point in time and are not built to scaffold learning or support students through an entire educational program. Students would not enter a program and earn a degree wholly through PLA.

It is not enough to say simply that both PLA and CBE assess learning outside of the classroom. In fact, CBE is much more than assessment—it is focused on the educational journey and mastery of learning.

COMPETENCY-BASED EDUCATION

- Pedagogical approach in which the knowledge, skills and abilities students must master are clearly defined.
- Scaffolding of competency areas that students must master in order to progress and earn degrees.
- Might be course- and credit-based, but might not.

PRIOR LEARNING ASSESSMENT

- Tool to support credential completion using assessments that are designed to measure what knowledge students have before engaging in their education.
- Includes Advanced Placement, CLEP, DANTES and other exams as well as portfolio assessments.
- Can be used by all kinds of higher education programs (traditional, CBE, etc.).

COSTS, STATE POLICIES AND COMPETENCY-BASED EDUCATION CONSIDERATIONS FOR STATE

	CONSIDERATIONS FOR STATES AND SYSTEMS	QUESTIONS FOR POLICYMAKERS	OPTIONS FOR CREATING A SUPPORTIVE CONTEXT FOR COMPETENCY-BASED EDUCATION
 <p>COST TO INSTITUTIONS</p>	<p>These costs consist of:</p> <ul style="list-style-type: none"> • Curriculum and assessment development; • Data and information systems; • Staffing; and • Marketing. 	<ul style="list-style-type: none"> • Where could efficiencies be found for institutions across the state? • How might budgeting priorities differ in a competency-based environment? 	<ul style="list-style-type: none"> • Explore and encourage sharing of resources. • Invest strategically at the state level to not have duplicate costs.
 <p>STATE FUNDING STRATEGIES</p>	<ul style="list-style-type: none"> • Metrics and language around credit hour, enrollment intensity and academic calendars might be difficult for competency-based education programs. 	<ul style="list-style-type: none"> • Are there metrics other than the credit hour that can help? • What should the state be responsible for supporting? 	<ul style="list-style-type: none"> • Outcomes-based funding, or other strategies that do not rely on the credit hour.
 <p>TUITION POLICIES</p>		<ul style="list-style-type: none"> • What should students be paying for? • Should competency-based education programs be designed to intentionally be cheaper? • What is the investment responsibility of the student? 	<ul style="list-style-type: none"> • Subscription models that might encourage accelerated completion and be more affordable for some students. • Modularized tuition models that can help students better fit their education into their lives.
 <p>FINANCIAL AID POLICIES</p>		<ul style="list-style-type: none"> • Are state financial aid policies aligned with federal policies? If so, why? • Are there alternative sources of student assistance the state could promote? 	<ul style="list-style-type: none"> • Decouple aid policies from the credit hour—perhaps basing on percentage or number of competencies mastered.