



Pearson



CBE Playbook



CBE Playbook



Competency-Based Education (CBE) has captured the imagination of many higher education institutions across North America for good reason. CBE places students where they belong—at the center of the learning process. This structure allows them to master skills at their own pace and at the time and location of their choosing, leading to better engagement and outcomes. CBE systems also personalize the learning process by using technologies familiar to students and taking advantage of learning opportunities outside of the normal confines of school. Well-constructed CBE programs provide greater flexibility for adult learners, reduce costs for institutions, and provide students with validated skills that are highly valued by employers.

Although CBE remains a relatively small part of the current higher education landscape, Eduventures reports that CBE programs have grown fourfold since 1990. By the end of 2014, there were at least 52 colleges and universities in the U.S. offering CBE programs, and Eduventures projects that there will be 100 programs by the end of 2015. Moreover, they estimate that by 2020, CBE may grow to as many as 750 programs and more than 500,000 students in the U.S.

In response to growing CBE demand, there's a new body of research that addresses the pros and cons of CBE models, addresses tactical challenges, and focuses on specific program areas, such as technology. What has been missing to date, however, is an organizing framework to help institutional leads plan, design, and implement CBE programs. To help fill this critical gap, Pearson has created the **CBE Playbook**—a framework to help institutions think about, organize, and manage the many phases and decisions involved in developing a CBE program.

We have reviewed and analyzed CBE programs and initiatives underway, as well as the key policies and regulations, market dynamics, and student and employer preferences that are shaping the CBE landscape. The CBE Playbook incorporates this fact base and provides a high-level overview of the components and key decisions associated with launching a new CBE program.



The Playbook: Meeting the Challenge of CBE

Perhaps more than other academic innovations, CBE programs have tremendous disruptive potential and can require radically different approaches to virtually every aspect of the instructional and support process. Curriculum design and delivery, transcripting, scheduling, registration, assessment, financial aid, and faculty and staff roles are all affected by the CBE approach.

However, in designing these initiatives, institutions have great latitude in the degree to which they might adopt a full-bodied CBE approach. There are many examples of different program designs that blend traditional and CBE approaches. And new models and examples are being developed that will further diversify these approaches.

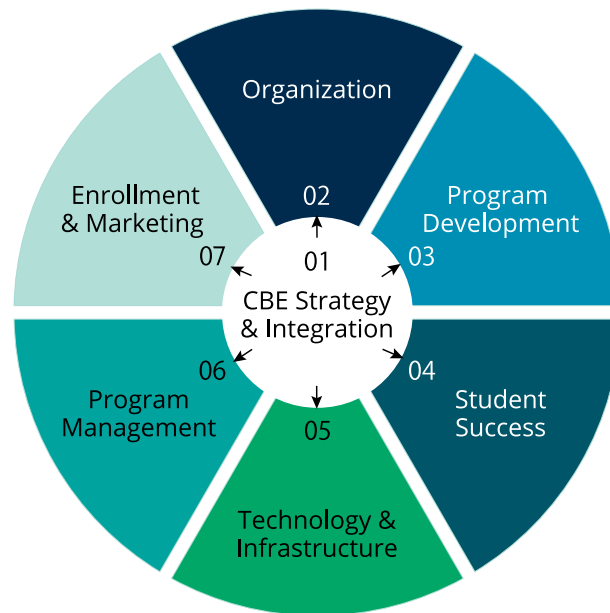
We designed the CBE Playbook to help institutional leaders see the chessboard more clearly, so to speak, so they can be more proactive than reactive. Our goal is to help you manage the complexity of developing such innovative programs and to craft strategies for how it will unfold tied to the unique needs, mission, and context of your institution and the students you serve.

The Playbook is intended to help:

- Provide a comprehensive approach to strategy planning and execution
- Activate institutional engagement and cross-functional collaboration
- Promote planning for effective scaling
- Foster change leadership that helps inspire faculty and staff

The Seven Workstreams

The core of the CBE Playbook consists of seven workstreams that organize the areas of functional decision-making and effort required to launch a CBE program.



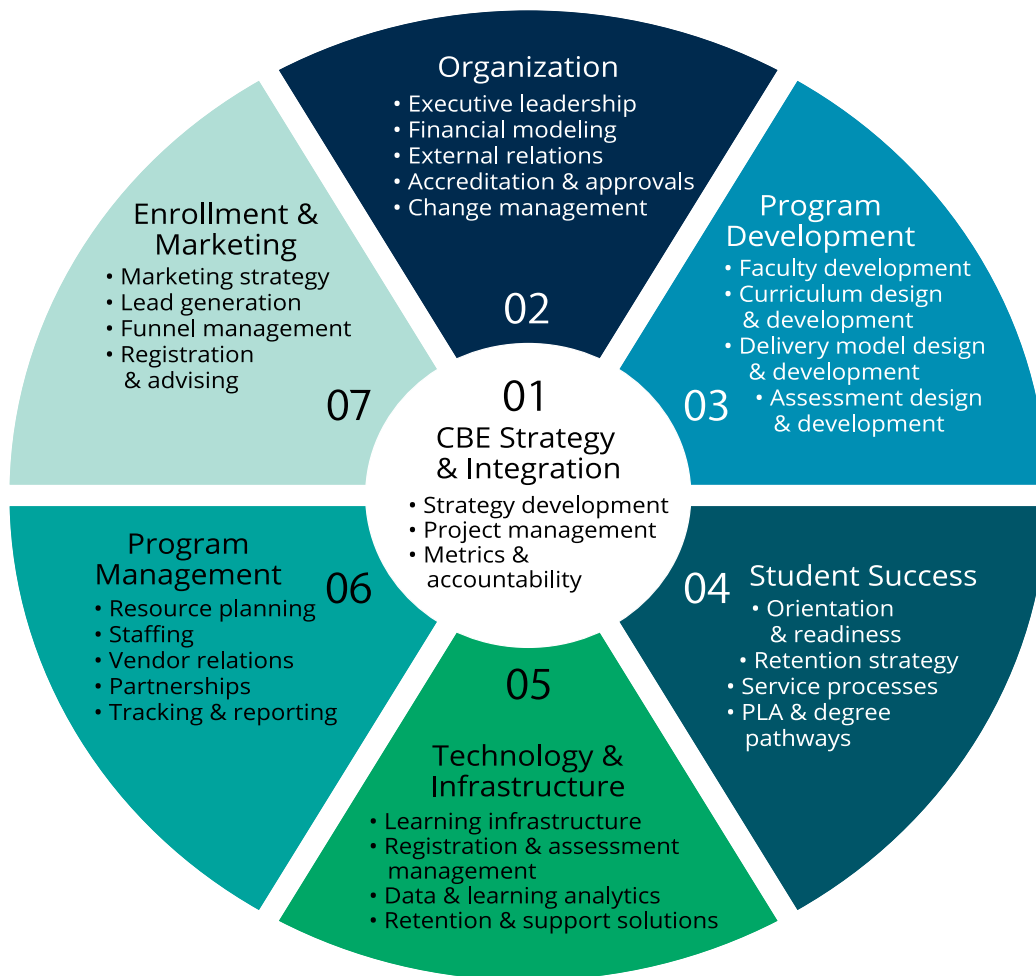
Each workstream represents a set of functions, key decisions, and strategy areas that form the building blocks of a comprehensive CBE program initiative, and each poses an overarching question.

- **Strategy and Integration:** What is our overall strategy for CBE and how does it fit into our mission?
- **Organization:** What organizational challenges does CBE present and how do we address them?
- **Program Development:** How does a CBE program differ from traditional models and to what extent should we fit CBE into the present model or redesign a new model?
- **Student Success:** How do we ensure student success within a CBE framework?
- **Technology:** What technology and data strategy do we need to support CBE?
- **Management:** How can we most effectively coordinate efforts among cross-functional teams and responsibilities?
- **Enrollment and Marketing:** What approach to marketing and recruiting will best help us achieve our enrollment and branding goals?

We then break each workstream down into sub-components that provide a rigorous outline of the key functions and activities in the overall program implementation.

This component view of a CBE program initiative represents a large-scale implementation, but the framework can also apply to smaller, incremental initiatives. In such cases, some of the functional areas within each workstream may require more or less attention, but the overall framework provides a useful tool to ensure a thoughtful and comprehensive plan.

CBE: Key functions and activities across work streams

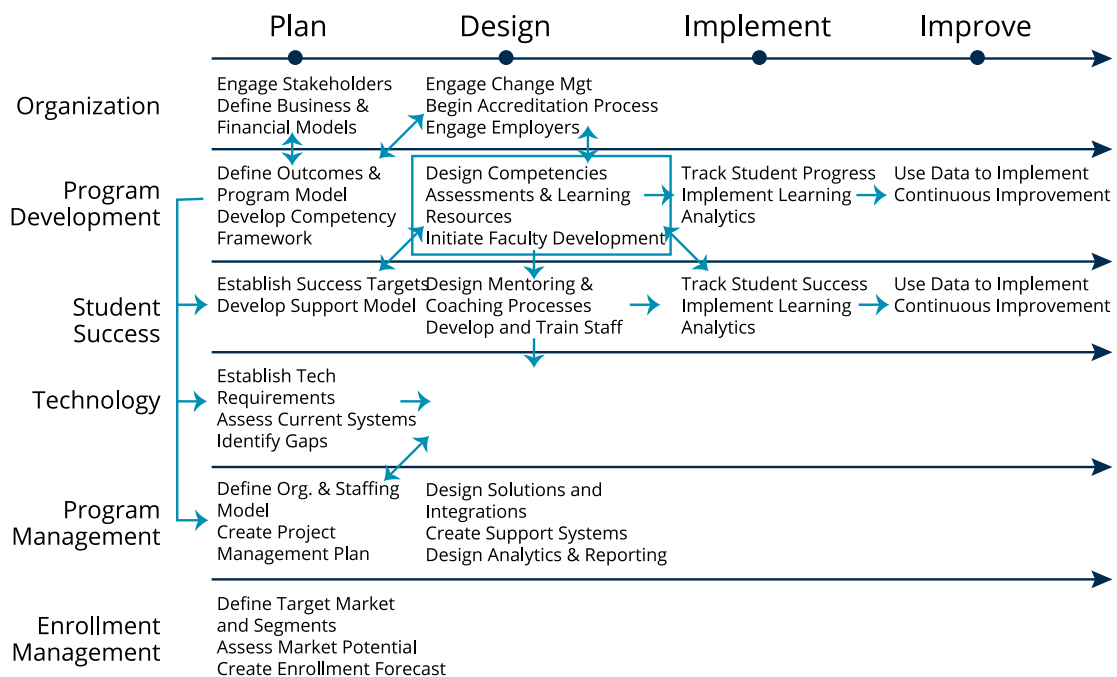


However, developing a CBE program is not as simple as laying out the key functional areas and understanding the components and decision points within them. It is an iterative effort that unfolds over time. Effective planning requires a view of how these workstreams will unfold and how activities in one will form dependencies with activities in another. So, it is important to put these workstreams into motion and pay attention to how activities and focus shift over the course of different phases in the project.

The CBE Playbook framework can be used to organize and coordinate key activities over several phases of program development, so that the timing of key decisions, activities, and benchmarks can be synchronized. The framework can be further used to visualize dependencies between activities in each workstream. Creating an effective CBE program can entail re-engineering of traditional processes, procedures, and practices that are highly interdependent across functional areas. Not only is the timing of key decisions and activities important, but interaction across workstreams is essential.

The following example illustrates how the work of designing competencies, assessments, and learning resources is interdependent with other activities across workstreams.

Complexity of Planning: Key Dependencies Example





Workstreams: A Closer Look

Ultimately, each CBE implementation has to proceed in the unique context of the sponsoring institution, so no two implementations will look exactly alike. In the rest of this whitepaper, we will take a closer look at each workstream and highlight some of the key questions, decisions, and challenges in each. Taken together, this closer examination should provide a template for the kind of comprehensive planning needed to develop a successful CBE program.

1. Strategy and Integration

The *Strategy and Integration* workstream represents the highest level of strategic decision-making for the CBE program initiative. A successful program needs to arrive at some key decisions very early in development, because these decisions will govern and affect all of the other workstreams and dependent activities.

For example, decisions about key roles and responsibilities for managing the program and operational functions, approaches to credit-hour mapping or direct assessment, and a clear articulation of key goals and measures of success need to be laid out at the outset.

Although there are many ways to organize your efforts, this framework suggests that the *Strategy and Integration* workstream be guided by a group of representatives across functional areas to provide overall coordination, guidance, and leadership for the initiative. There are, as the framework illustrates, many moving parts, and the value of a coordinating group cannot be underestimated in keeping all of these elements carefully orchestrated.

2. Organization

The *Organization* workstream answers key questions of institutional importance, for example determining the best financial model and financial aid framework, providing leadership for change, developing external relations, and managing the process for accreditation and approvals.

These issues are complex and intertwined and require a significant amount of executive-level engagement. Organizational work addresses how a CBE program can radically change the model for higher education delivery and achieve your institution's goals for expanded access, increased completion, and lower costs.

3. Program Development

The *Program Development* workstream lies at the heart of Competency-based Education. The challenge in this workstream is to develop coherent, aligned models for competencies, content, delivery, and assessment.

There are three essential tasks related to curriculum design: establish a competency framework, write specific competencies, and develop robust and validated assessments of competency.

This workstream also addresses the delivery model and modalities, as CBE programs depend on high levels of flexibility to allow students to move at their own pace and based on their own performance and prior learning.

Additionally, CBE programs can change the traditional role of faculty. Faculty development from the outset will be essential to help your faculty understand and become comfortable with new and unfamiliar roles in the design, creation, and delivery of CBE curriculum. For example, assessment is emphasized in CBE, and many programs rely on a separation between curriculum design, delivery, and assessment, so faculty who teach in the program may not necessarily be the ones to design, conduct, and evaluate assessments.

Finally, students require academic content to help them prepare for competency assessments, and they may access or use this content in ways that differ from traditional models. You may need to think about multiple pathways through materials depending on individual students' interests, abilities, and prior knowledge. You may also need to prepare and present a great deal more content than in a traditional class in order to provide more personalized learning experiences.

4. Student Success

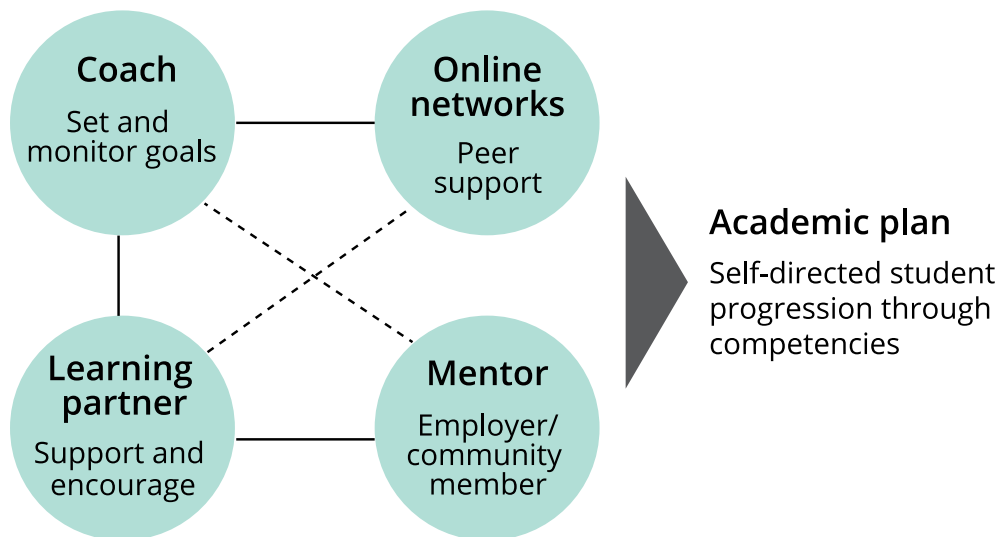
Student Success is another workstream where roles and responsibilities can depart from traditional models. Students in CBE programs may work in a self-paced, online model rather than a group-paced, classroom setting. The requirements for support and encouraging student retention and persistence rely heavily on personalized coaching and tutoring models. Progress and tracking data help team members pinpoint which students need help and when.

Most successful CBE programs depend on a proactive, multi-level approach to provide timely and appropriate intervention and to build a support community

and social environment for learners. For example, Southern New Hampshire's College for America uses success coaches, mentors, learning partners, and social networks combined with an academic plan to create a powerful learning network for its students.

Case Study: SNHU College for America Model

The key for this workstream is to develop the right structure and



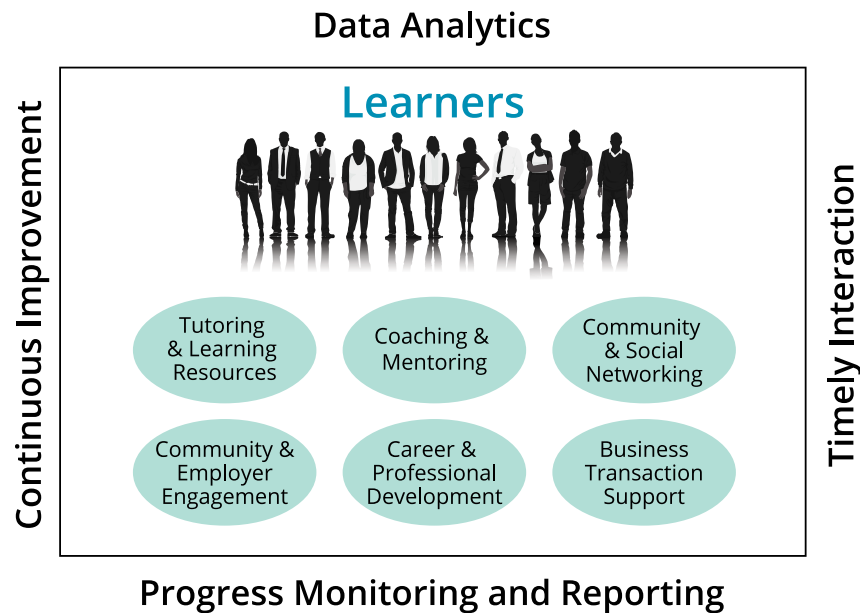
Source: Adapted from EDUCAUSE Next Gen Grant Reception Profile

processes and align them with the program competency curriculum and delivery models that provide optimal support for students.

CBE programs can embrace self-paced learning and still support student interaction, engagement, and collaboration. The chief goal is to design the right structure tuned to the specific needs of the program, students, and institution.

The most effective and scalable approaches will be supported by timely data analytics and reporting.

Developing a structural support system for students is crucial



5. Technology


The *Technology* workstream addresses the challenges presented by CBE programs, many of which stem from the fact that most legacy systems were not designed to provide the features needed to support CBE approaches. The degree of challenge depends on the particular learning models and strategic approaches to designing the CBE program.

Generally, the further an approach is from traditional practice, the greater the need for customizing functions or adopting new systems with CBE in mind.

This workstream focuses on four considerations:

Learning infrastructure: Does the learning management platform allow for non-semester-based enrollment cycles and presentation of material in a self-paced, modular format? If the learning management platform will be used for assessment delivery, to what extent are assessments linked with other systems?

Registration and assessment management: There will be requirements for student registration, assessment delivery, and reporting that do not necessarily correspond to traditional semester periods. In an ideal CBE environment, students would start and complete competencies at many points across an academic year. Technology systems must be able to handle this level of flexibility in order to support many CBE models.



Data and learning analytics: Student support and program progress measures depend heavily on data analytics. The further away from the classroom model the CBE program gets, the more important data becomes. Without regular and frequent instructor contact, data analytics become the eyes and ears of the program, allowing for effective and efficient student intervention, contact, and engagement.

This is one area where a close working relationship with the program development workstream is crucial to determine to overall reporting and data requirements. One particular challenge is how to integrate different sources of data in a timely fashion so that student progress and achievement can be monitored on a weekly or daily basis.

6. Management

Managing CBE programs involves resource planning, staffing, partnership and external relations, vendor relations, and tracking and reporting for overall program management. Regardless of the scale of the program, two areas stand out: staffing and external partnerships. This is the focus of the *Management* workstream.

The model for staffing is perhaps one of the most significant areas that impacts both the quality of the program and the cost of education. It is also one of the most significant inputs into the overall financial model and cost-savings potential. It's important to evaluate and model various approaches to balance the need for quality and cost.

CBE programs are designed to meet workplace needs, whether for career-specific skills or for transferable soft-skills important in a variety of fields. Developing external partnerships lets you involve employers in defining and validating competencies, suggesting real-world assessments, and providing additional expertise to support the program and students. Employers also recognize the lower cost and time-to-degree potential for CBE and have, in some cases, been more willing to support students with tuition benefits.

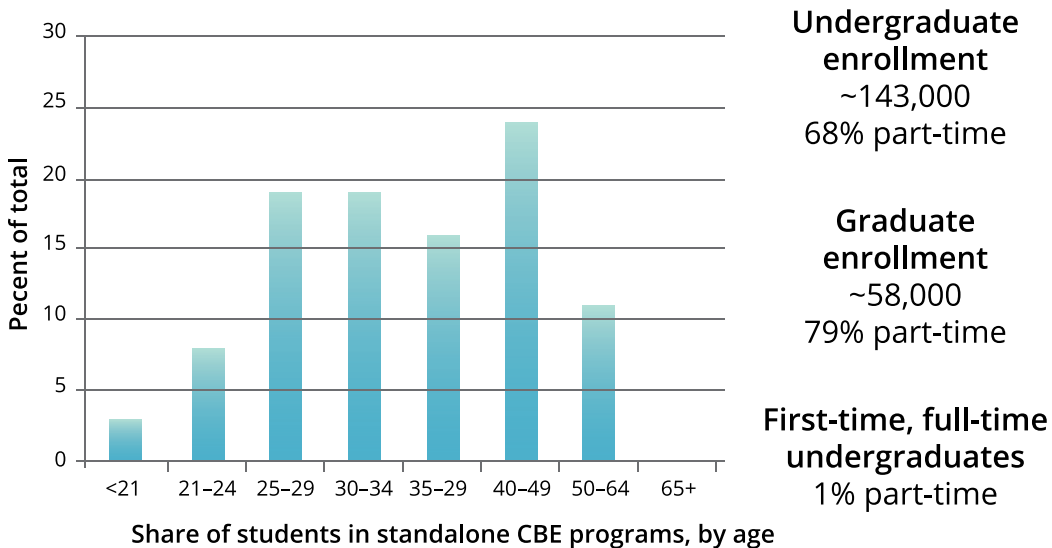
7. Marketing and Recruiting

Although CBE programs are growing and seem to offer attractive flexibility and cost opportunities for significant populations of prospective learners, it is not a “build it and they will come” proposition. The **Marketing and Recruiting** workstream concentrates on understanding who is most interested in CBE programs, what messages best articulate the unique value of a CBE approach, and what programs areas are most in demand by both students and employers.

CBE programs tend to appeal to a large but narrow segment of learners, and it is important to keep this in mind as you craft an enrollment and marketing strategy.


CBE students are generally older, part-time, and have some college experience

Over 85 percent of students (at standalone CBE institutions) are over 25)



Source: Adapted from AEI, 2015, IPEDS

The messaging for CBE programs must also emphasize the key values of cost, flexibility, and degree of self-pacing designed to meet the needs of working adults or other specific learner populations. This is often a sensitive area because the CBE “branding” may be quite distinct from that of the traditional program.



It is important to study a competitive analysis of other CBE programs, and not traditional competitors, to differentiate the messaging in market communications. Employer partnerships can also provide highly effective target communication channels to reach potential learners.

Finally, selection of CBE program areas should be supported by market research looking at both the supply side (competitive programs) and the demand side (labor statistics and employment projections). This market research will be essential to build realistic enrollment models that feed into the overall financial modeling for the program and determine the potential scale of the initiative. It will also suggest other marketing and communication channels that can help target recruiting and enrollment efforts.

Concluding Thoughts

The purpose of this whitepaper is to provide an overview of Pearson's CBE Playbook and provide an illustration of the comprehensive planning process essential for successful CBE program development. A more full-bodied treatment of all of the issues, nuances, and decision-points would require much more space.

As the Playbook demonstrates, there are many moving parts and dependencies between them. However, we believe outlining the relevant workstreams and providing examples of best practices helps clarify the process for implementing a successful CBE program. In the end, each program or initiative will be different, but with this Playbook, we hope institutions can more proactively manage their own planning process.



CBE Playbook

References

- Fleming, Brian. "Mapping the Competency-Based Education Universe - Eduventures." Eduventures Blog. EDUVENTURES, 16 Feb. 2015. Web. 06 Aug. 2015. <http://www.eduventures.com/2015/02/mapping-the-competency-based-education-universe/>
- Kelchen, Robert. Competency-Based Education: Enrollments, Demographics, and Affordability. Working paper. Washington, DC: American Enterprise Institute, 2015. AEI Ser. on Competency-Based Education. Jan. 2015. Web. 08 Aug. 2015. <http://www.luminafoundation.org/files/resources/competency-based-education-landscape.pdf>
- Kelchen, Robert. "The Landscape of Competency-Based Education: Enrollments, Demographics, and Affordability." Jan. 2015. Web. Aug. 2015. <https://www.aei.org/wp-content/uploads/2015/04/Competency-based-education-landscape-Kelchen-2015.pdf>
- Book, Patricia A., and May 2014. "All Hands On Deck: Ten Lessons From Early Adopters Of Competency-Based Education." May 2014. Web. Aug. 2015. <http://wcet.wiche.edu/wcet/docs/summit/AllHandsOnDeck-Final.pdf>
- Customized, Outcome-based, Relevant Evaluation (CORE) at Lipscomb University. Case Study. Council for Adult and Experiential Learning (CAEL), 2014. Web. Aug. 2015. http://www.cael.org/cael_lipscomb_case_study
- College for America: Bringing Higher Education to Where Students Live and Work. EDUCAUSE, Oct. 2013. Web. 12 Aug. 2015. <http://www.educause.edu/library/resources/college-america>
- Bushway, Deb, and Deborah Everhardt. "Investing in Quality Competency-Based Education (EDUCAUSE Review) | EDUCAUSE.edu." Investing in Quality Competency-Based Education (EDUCAUSE Review) | EDUCAUSE.edu. EDUCAUSE, 8 Dec. 2014. Web. 12 Aug. 2015. <http://www.educause.edu/ero/article/investing-quality-competency-based-education>
- Soares, Louis. "A 'Disruptive' Look at Competency-Based Education." Americanprogress.org. Center for American Progress, June 2012. Web. 12 Aug. 2015. <https://www.americanprogress.org/issues/higher-education/report/2012/06/07/11680/a-disruptive-look-at-competency-based-education/>

For more information on how Pearson works with schools to design, launch, and support successful CBE programs, visit pearsoned.com/cbe.

**Learning
makes
us**

Every lesson builds character, shapes dreams, guides futures, and strengthens communities. At Pearson, your learning gives us purpose. We are devoted to creating effective, accessible solutions that provide boundless opportunities for learners at every stage of the learning journey.

