Developing a CBE Program:
Four Key Decisions

Although Competency-based Education (CBE) is not new, there has been a recent resurgence in interest in CBE programs for a variety of reasons. For some institutions, CBE is an innovative and disruptive way to provide access to populations of learners that have not been well-served by traditional modes of education or have perhaps opted out entirely. For others, CBE offers opportunities to better align outcomes of academic programs to the needs of employers and various career disciplines, especially in technical, industrial, and healthcare fields. Still others look to CBE as a way to increase personalization of learning while controlling or lowering costs for attaining a degree or certification.

Regardless of the particular reasons for considering CBE, there are some fundamental decisions every institution will need to make at the outset of planning a CBE program in order to achieve quality, sustainability, and scalability.
Pearson has identified four strategic decisions in planning a CBE program that are critical to articulate. They will inform choices made during implementation and will shape the success—or failure—of the program.

Taken together, these four decisions form the core of the CBE program strategy:

• **Program Management**
  What is the most appropriate organizational model for our CBE program’s roles and responsibilities?

• **Program Design Approach**
  What approach will we take for how students complete the program?

• **Accreditation and Financial Aid**
  What is our strategy for seeking accreditation and financial aid approval?

• **Program Strategy**
  How do we select or validate program choices for CBE development?

There is no single, defining CBE model. Instead, your institution will build its own distinctive approach tuned to the needs of your targeted student population, the scale and scope of your program, the level of available institutional resources, and the degree of campus engagement.

It is important to carefully consider these strategic decisions and use them to model how different choices might work. Adopting a CBE approach will invariably force you to think differently about nearly every aspect of the educational process, including the roles of faculty and staff; how student achievement is assessed, tracked, and reported; and how students can move through a self-paced program but still engage with faculty, staff, and each other.

Although your institution may initially focus on getting a program started, it is no less important to consider how to simultaneously sustain and grow the program in the future.
The Four Strategic Decisions: A Closer Look

Your response to these four strategic decisions at the outset can either limit possibilities and create future challenges or provide a solid foundation of opportunity, innovation, and quality.

Program Management

What is the most appropriate organizational model for our CBE program’s roles and responsibilities?

Program Management defines roles and responsibilities for those involved in the program. It is important to designate responsibility early on for operating the program and coordinating activities among the units who will serve students and provide other support.

It is important to carefully consider Program Management at the outset, especially if you expect the model may change over time as you grow. Even if your initial implementation can be accomplished within a departmental model, it may be wise to consider a different model if you envision any kind of expansion in the future.

As CBE programs grow in size, scope, and complexity, the gulf between these and traditional approaches tends to widen, necessitating a different organizational approach to support the level of innovation and disruption.

There are four general approaches that roughly correspond to the overall level of scalability of the CBE effort:

• Departmental Management (Austin Community College/Westminster College)
• Coordinating Management Unit (Lipscomb University)
• Separate Business & Academic Unit (SNHU College for America)
• Cross-Institutional (Western Governors University, Excelsior University)
Program Management models align to different institutional goals and missions

There are four major program management models. Key factors in program management model adoption are institutional size, mission, scope of adult/CBE program(s), scale of CBE program(s), and executive vision and leadership.

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<th>Departmental Management</th>
<th>Coordinating Management Unit</th>
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<td>Academic units drive program management and coordinate with traditional campus offices.</td>
<td>A central unit manages program delivery and acts as coordinating agency with academic, service, and business units.</td>
<td>A separate business manages program development, marketing, delivery, and other key functions with academic oversight from faculty.</td>
<td>The entire institution is organized around adult learning and/or CBE.</td>
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Examples:
- Westminster College
- NAU Personalized Learning
- Lipscomb University
- UT Texas ITL
- University of Wisconsin FlexOption
- SNHU College for America
- Western Governors University
- Excelsior
- Brandman University
- Rio Salado Community College

Program Design Approach

*What approach will we take for how students complete the program?*

Defining competencies, crafting and validating assessments to measure them, and creating compelling content to scaffold learning lies at the heart of Program Design. However, even before this crucial level of program development, you will need to determine how you expect students to progress from orientation through completion. Like the other strategic decisions, this choice will depend on how fully you wish to embrace the CBE model and the reliance on time as a factor in the program delivery process.

The CBE model potentially changes educational delivery in two significant ways: time and place. At one end of the scale are programs that are entirely self-paced, where learning occurs apart from any classroom setting. Other program models are still bound to both classroom and seat-time measures of learning progress. Hybrid models combine aspects of both approaches.
There are three main choices you will need to make when designing a program:

- Classroom-based or self-paced
- Semester/term-based or non-term based
- Credit hour-mapped or direct assessment

Even in self-paced programs, there is a distinction between those that measure achievement in credit hours and those that use direct assessment of competency. In a direct assessment program, students earn a competency as soon as they can complete the required assessment, without respect to their engagement with learning activities. In a credit-hour-mapped program, completion of a certain number of competencies equates to completion of a corresponding number of credit hours, much like a traditional class.

Direct assessment programs could conceivably be offered without regard to a traditional term or semester structure, with students enrolling at any time rather than waiting for the start of a particular term. Credit-hour-mapped programs tend to adhere to traditional semester and enrollment schedules, and require students to complete a set of competencies within the semester.

The other factor that drives adoption of a particular program design model stems from the particular needs of the learners your proposed CBE program is targeting. If your goal is to target the large number of adult learners with some college but no degree, for example, then the approach might move toward self-paced and direct assessment models. But if your primary goal is to increase student achievement and better demonstrate learning outcomes for programs with heavy lab or practical components that might limit enrollment, then a classroom-based approach may be a more appropriate option.

It may seem easier to adopt a path that remains within the conventional boundaries of seat-time, credit hours, and classrooms. But remaining within the limits of traditional delivery modes comes at the expense of broader appeal to learners who require greater flexibility and/or desire more control over the pace and progress toward a degree.
### Complexity of Planning: Key Dependencies Example

<table>
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<tr>
<th>Seat-time only model</th>
<th>Hybrid model</th>
<th>Completely self-paced models</th>
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<td>Students demonstrate mastery of competencies through assessments, but learning is group-paced in a traditional classroom or lab.</td>
<td>Students can complete program requirements through a mix and match of traditional and online courses and exams with credits earned through CBE assessments.</td>
<td>Programs are offered in a CBE format but linked to traditional credit hours and semesters. Relies solely on direct assessment of competencies and not credit hours earned or classes completed.</td>
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Examples:
- George Mason University
- Excelsior
- Western Governors University
- Capella
- SNHU College for America

### Accreditation and Financial Aid

**What is our strategy for seeking accreditation and financial aid approval?**

The overall strategy for Accreditation and Financial Aid is closely related to the program’s design. The U.S. Department of Education is concerned with preventing financial aid fraud, and most of the regulations governing financial awards and disbursements have been developed around traditional program delivery practices, term structures, and definitions of student progress.

There is a process to apply for approval for direct assessment, which requires relaxation of certain financial aid regulations. To prevent financial aid abuse, the Department of Education requires details about how your institution will monitor to ensure that students are moving toward completion of a degree in a reasonably timely fashion. The key issue here is how the disbursements of financial aid for students in your CBE program will be made. This can directly impact your program’s financial model.
Because accreditors are primarily concerned with program integrity and student learning outcomes, they will want to know that the achievement of competencies equates to or exceeds expectations for learners in a comparable traditional program. They will also want to ensure that students have sufficient levels of support and opportunities for engagement, interaction, and access to credentialed faculty as part of the program. If there are prior learning credit options in your program, the accrediting agency will require assurances that the level of credit given is approved by faculty and meets standards for evaluating and assessing prior learning.

There are three potential strategic approaches to Accreditation and Financial Aid:

- Credit hour- or semester/term-based
- Direct assessment
- Blended

There are three general models for Accreditation and Financial Aid:

**Western Governors University**
- 100% credit hour equivalency
- 1 competency = 1 credit hour
- Semester terms
- Completion = “B” grade for financial aid purposes
- All financial aid follows federal guidelines
- Regionally accredited for CBE

**SNHU College for America**
- 100% direct assessment
- Competencies roughly map to credit hours—2:1
- 6-month rolling terms
- Regionally accredited and approved for CBE
- Federal DOE approval for direct assessment exemption

**Lipscomb University**
- 50% CBE direct assessment
- 50% traditional credit hour
- Competencies map to credit hours
- Semester terms
- Regionally accredited and approved for CBE
- Seeking federal direct assessment approval
Program Strategy

*How do we select or validate program choices for CBE development?*

Program Strategy takes into account the fact that CBE initiatives don’t emerge in a vacuum; they usually arise from a particular need for a program area or degree. It is important to think about the Program Strategy by evaluating the appropriateness of providing a CBE program, and also considering which programs or degrees you might offer in the future.

It is also essential to consider what your development strategy will be and carefully evaluate market research. Higher education institutions still tend to overlook the importance of solid market research that evaluates both program supply and demand, along with basic research about the nature of the potential student population.

Most CBE programs tend to focus on broad areas in disciplines that seemingly lend themselves to the approach, mostly at the associate and bachelor’s degree levels. But there is growing interest in CBE certifications in healthcare, IT, and manufacturing. Recent data suggests that there is a potential explosion of these new programs on the horizon, so it may be difficult to gauge now what the supply side for CBE delivery will look like in the future. Nevertheless, it is essential to consider your potential program development strategy and carefully evaluate market research.

*What is your program development strategy?*

Degree level and subject matter focus

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<th>SUBJECT MATTER</th>
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<td>Doctoral degree</td>
<td>Technical, Licensure, Career-focused, Transferrable skills, Liberal arts</td>
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<td>Masters degree</td>
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<td>Graduate degree</td>
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<td>Degree completion</td>
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<td>Associates degree</td>
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One of CBE’s key goals is to lower costs for both students and institutions, but this only occurs at certain levels of scale. Program Strategy is first and foremost a conversation about the degree of scale your institution hopes to achieve. Laying out the progression of possible program offerings provides an agenda that can shape some of the other key decisions in formulating your overall strategy.

Because CBE programs are potentially disruptive, requiring significant rethinking and redesign of existing processes, systems, curriculum, and faculty/staff roles, it pays to consider a long-term strategy early on in the process so that everyone involved with the initiative is looking toward the same level of scalability and sustainability. The risk of not carefully considering an overall program strategy is that your initial efforts will not be sustainable in the long term and your program may expend valuable human and material capital without realizing its full potential.

Concluding Thoughts

There are several key strategic issues to keep in mind as you formulate an overall CBE strategy. Consider the following:

• Technology and data analytics are important elements in CBE operations, and they will be informed by your four strategic decisions. It is one of the key workstreams in the overall CBE planning process and will require considerable attention as soon as the response to these four decisions have emerged.

• Everything must align with the overall goals and mission for the institution and the CBE program. Clearly articulated goals at both levels should form the guiding principles that help institutions arrive at these four decisions.

• CBE is, first and foremost, student centered. You must understand whom the CBE program will serve, their needs, and the context. Your goal is to move away from a one-size-fits-all approach.

• Successful innovations require thinking differently about design. Although these decisions are an important part of the strategy design process, they are guidelines only. Most successful CBE programs were built by trial and error. Use these decisions as working hypotheses and test and validate them with data and experience.

• No two CBE programs look exactly alike. The four key decisions are strategic building blocks, but how they get assembled will depend highly on institutional context, local innovation, and the needs of your particular learner populations.
References


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