

EXPANDING COMPETENCY-BASED EDUCATION FOR ALL LEARNERS



JOBS FOR THE FUTURE

In partnership with the ECMC Foundation, Jobs for the Future is leading an effort to explore how postsecondary competency-based education models can be adapted to better serve underprepared adult learners. JFF kicked off this initiative with a convening of educators, policymakers, and researchers, the results of which are captured in this paper. We invite you to join this critical effort to harness the potential of CBE to propel more people to complete a high-value college credential, leading to job placement and career success, in less time, for less money.

THE OPPORTUNITY

Interest in competency-based education is surging among educators, employers, and students, and college-level CBE programs are emerging across the country. Proponents see its potential to be part of an improved educational system that leads to quicker attainment of quality credentials, job placement, and career success for all.

Yet these programs typically serve students who are already well prepared for higher education, leaving out a significant number of academically underprepared, low-income adults who may benefit tremendously

from a faster route to college completion. This is partially a reflection of the general belief among program developers that CBE students need college-ready skills in reading, writing, math, and computer literacy in order to be successful.¹ It is also a reflection of the early stage of development of modern CBE. Higher education faculty already face complex design challenges in creating high-quality CBE programs for college-ready students, so assisting academically underprepared learners may not be a priority.

However, at its core, what is exceptional about CBE—and holds particular promise for underprepared adults—is that it is designed to meet students wherever

they are on their individual path to a postsecondary credential and move them forward. For direct assessment models of CBE in particular, students advance at their own pace, based on their ability to master priority skills or competencies, rather than on time spent in class.

JFF knows from our 30 years of work developing postsecondary career pathways for underprepared learners that there are key features—e.g., flexibility, personalization, acceleration, and clear connection to careers—that are essential to ensuring student success. CBE has the potential to offer all of these at a greater level than traditional higher education due to its conceptual foundation rooted in individualized or student-centered learning.

There is evidence about what works to improve outcomes for underprepared learners in traditional higher education.² But the modern form of CBE is so new that no one knows enough yet to make strong claims about how these strategies will work in CBE programs, or what additional strategies may be needed. It is a time of experimentation and learning in the CBE field at large. This presents an ideal opportunity to explore what the components of a new, inclusive model should be so that CBE pathways can be a viable option for all learners.

To that end, we convened national experts in CBE and in strategies for underprepared adults to explore how competency-based education might be designed to best serve students who are not yet college ready.³ As a result, JFF identified seven key elements of CBE models that may need to be adapted, redesigned, or augmented in order to meet the needs of underprepared adult learners.

This brief describes each element, highlights specific educational practices that advance learners with diverse needs, and outlines important questions still to be answered.

ELEMENTS OF CBE FOR UNDERPREPARED ADULT LEARNERS

A CBE model for underprepared adult learners should be designed to meet their unique needs from the moment of initial contact through credential completion and, potentially, job placement. The following sections explore specific design features and program elements that meeting attendees highlighted as most likely to contribute to the

CBE DEFINITION AND FEATURES

- **Definition**—The field has not agreed on a definition, but this general description explains key differences between CBE and traditional postsecondary education: “Broadly defined as a form of higher education in which credit is provided on the basis of student learning rather than the number of credit or clock hours spent in class”⁴
- **Key Features**—Competencies are clear and connected to careers; learning and advancement are often self-paced and always based on mastery, not necessarily on seat time (i.e., direct assessment); programs are personalized to meet individual needs.⁵

COMMON CBE STUDENT CHARACTERISTICS

- Adults age 25 or older⁶
- Working, with some prior college experience
- Test as college ready⁷
- Drawn to programs that allow them to balance work and family responsibilities

THE CURRENT CBE LANDSCAPE

- Nearly 50 postsecondary institutions or systems in 23 states offer CBE programs.⁸
- Nearly 600 postsecondary institutions are now seriously exploring CBE models, actively creating one, or have one in place.⁹
- Most programs are online.

SOME CBE LEADERS

- Western Governors University (WGU) is the largest CBE program, with 62,000 students. It was started in 1998 by governors of 11 western states.¹⁰
- Sinclair Community College in Dayton, Ohio, is the lead of a three-state consortium that received a \$12 million U.S. Department of Labor TAACCCT grant to adapt the WGU model to accelerate information technology instruction. It is focused on working adults.¹¹
- College for America at Southern New Hampshire University specifically targets underprepared and low-income working adults, so that they can earn credentials in less time on their own schedule. It is developing “Just-in-Time Contextualizing and Empowering” academic assistance with a four-year grant from the U.S. Department of Education to take a radically different approach to developmental education, and is using an experimental design to build a body of evidence.¹²

WHO ARE UNDERPREPARED ADULT LEARNERS?

Many underserved populations may benefit from competency-based education programs. This brief focuses on a specific subset of learners:

- Adults age 25 or older
- Unemployed or working (part- or full-time)
- Low-income
- Low-skilled (with or without a high school diploma/GED), need further education and postsecondary credentials in order to find (or advance in) work at a living wage
- Test into remedial education in at least one area (reading, writing, or math)
- Disproportionately includes racial/ethnic minorities, English language learners

COMMON BARRIERS TO SUCCESS

Academic underpreparation¹³

- Nearly 60% of students (roughly 2 million) enrolled in community colleges receive remediation in at least one subject before starting college-level work.
- Only 28% of students who took at least one remedial course completed a credential within 8 years.

Life challenges that interfere with persistence and completion¹⁴

- 36% are the first in their family to attend college, and many lack the community support to persist.
- Roughly 80% of community college students work while attending school, often in low-wage jobs with unstable schedules.
- One-third of student household incomes are at or below the poverty level.

Lack of college knowledge and student supports¹⁵

- Many students lack an understanding of how college works and how to access services and supports that promote completion.
- Students often lack a full understanding of the career landscape and need assistance in planning for careers and training programs.
- Many have had negative experiences in school and may need to strengthen study skills, self-advocacy, and self-direction.

success of underprepared adults in a CBE program. This list is by no means comprehensive, but rather a starting point. We focus on three distinguishing characteristics of this population: their need for academic preparation in order to access college-level work, acquisition of college knowledge for navigating bureaucracies and systems, and supports for life challenges. Each section also includes a series of guiding questions for college practitioners, leaders, and policymakers to consider as they continue to innovate with CBE models.

Some of these practices are already in place in a small number of programs. But there has been no formal attempt in the field to take a comprehensive or cross-institutional approach. Further exploration and vetting of these and other ideas is

essential to gaining a complete and accurate understanding of how to construct a CBE model that will expand economic opportunity for all. The elements here represent our initial thinking on areas for revision, but JFF is committed to surfacing more details of these elements and exploring others as we advance our work with CBE for underprepared learners.

“CBE, if done right, offers tremendous opportunity for underserved students. We need to explore this more systematically and systemically.”

*—Nate Anderson,
Jobs for the Future*

1. Intake, Placement, and Orientation

A CBE model for underprepared adult learners may require redesign of college intake, placement, and orientation processes. The explicit goal from this crucial first point of contact should be to set up each student for success and to determine how best to onboard students in an effective manner. Most CBE programs today screen out students who don't have a threshold level of academic and digital literacy. A redesigned intake, placement, and orientation process for underprepared learners would need to include the use of a variety of tools to identify academic and non-academic needs and establish plans that allow students to meet them, rather than blocking them from entry. Determining academic and professional goals is an essential part of this process. Research shows that underprepared students who enter postsecondary education with goals in mind are far more likely to succeed.¹⁶

Intake

Intake is an indispensable exchange of information between a new student and program staff. The level of detail required from—and for—underprepared students is likely to be greater than college-ready students and is best gathered in multiple ways. An obvious but necessary first step is providing an overview of CBE, which is unfamiliar to most students, and key features of the CBE program at the specific institution. For underprepared students, explaining the differences between competencies and traditional courses is particularly important, emphasizing the self-pacing required and the available supports for academics, college knowledge, and life challenges. Program staff will also need to learn as much as they can about the individual students, their interests, academic and career goals, past experiences with education, and life circumstances that could pose barriers to their progress. Some of this communication can happen online. But in-person conversations are vital to ensuring the student's comfort with the process of starting (or restarting) postsecondary education and the program itself, including information exchange from any referral agencies, which ultimately could affect their success.

Placement

The placement process is a deeper dive into each student's strengths, interests, and challenges that results in the development of a detailed personalized learning plan. Such a plan maps out a student's goals, the competencies needed to achieve them, and a detailed approach to mastering the competencies. This plan may include a jointly created work and study schedule, or a plan for supplemental tutoring or augmented academic supports should the student need them. In creating this plan, placement counselors should use a variety of assessments to measure individual skills and learning needs in reading, writing, math, computer skills, general college knowledge, and CBE-ready skills. Traditional placement exams can be replaced by diagnostic or readiness assessments tied to course competencies and should also include assessments of readiness for online learning.

Each program will need to determine a level of readiness required; some programs may choose to serve all students, regardless of their skills. Students who are judged not yet ready may need to access college “on-ramp” or intensive “boot camp” programs designed to increase their skills before they start. Ideally, CBE programs will develop these as part of their models.

The provision of opportunities for students to demonstrate mastery of competencies learned from past life and work experiences is an attractive feature of many CBE programs and is likely to benefit underprepared learners. These assessments, known as prior learning assessments (PLA), grant college credit for content that has been learned previously outside the classroom, often from work, military service, volunteering, or employer training. The use of PLAs can potentially accelerate time to completion and can offer varied ways to establish the most accurate understanding of each student.

“The greatest risk in this area is that CBE can inadvertently perpetuate or even grow equity gaps it has the same chance of closing.”

—Stephanie Krauss, The Forum for Youth Investment

Orientation

Orientation activities are often already present in CBE programs today, but they are even more crucial for serving underprepared learners. These orientation activities should delve into greater detail about how a particular program works and how students will progress through it based on their learning plans. Students should leave orientation with an understanding of the specific course expectations, program requirements, timelines, as well as greater knowledge of other institutional systems.

For underprepared learners in particular, a crucial component of this process is connecting each student with a “success coach,” or advisor who will work closely with the student, following the individualized learning plan to reach goals. Potential forms of orientation could include creating an initial course that ends with formal acknowledgement that a student is ready for the CBE program, or a staged approach that gradually introduces programmatic elements as students ease into a CBE model.

Orientation activities should also encourage a student's sense of “belonging” and identity as a college student, and should be designed as a way to foster a sense of community among CBE student cohorts. Research shows these add to persistence and success for underprepared learners, and can contribute to deeper social learning outcomes.¹⁷

Guiding Questions for Intake, Placement, and Orientation:

- What measures of readiness matter the most for hybrid (a mix of online and in-person instruction) CBE models? How are these identified and benchmarked?
- How can diagnostic assessments and PLA processes be used to guide individualized learning plans?
- Does each college need to custom build its own readiness assessments, or are there more widely available CBE-ready assessments with demonstrated effectiveness?
- How can a program incorporate academic and other readiness skills to students who don't have them?
- What else about college intake, assessment, and placement processes and policies needs to change to accommodate underprepared students who hope to access CBE programs?
- How can students who aren't ready for a CBE program be best prepared to transition into that program as quickly as possible?

2. Curricula and Competency Development

Curricula are the backbone of any CBE program. In CBE designs, curricula are comprised of competencies—statements of what students will know and be able to do at prescribed levels—rather than courses that meet for a certain number of hours per semester. Students advance according to the pace by which they demonstrate these competencies (see Assessment). CBE curricula, at their best, have a clarity and transparency that help students see what they will learn and how they will progress toward their goals. This can be highly motivational for underprepared learners, and increase student commitment and participation. It is important to note, however, that the need for clear, articulated paths must be balanced with concerns regarding “tracking” and locking students into pathways with little mobility or choice.

Curricula

Curricula should be robust, rigorous, and well planned. Learning artifacts should be chosen from a wide array of sources, using multiple media to engage learners.¹⁸ Curricula should also reflect multiple ways to learn, develop, and demonstrate each competency, so learners in the same program can progress at the pace that works for them,¹⁹ as laid out in their individual learning plan. The curriculum also should include both academic and occupational learning, with academics taught within

the context of the real world and job responsibilities whenever possible. This “contextualized” instruction increases student success for underprepared learners. Additionally, employment and critical thinking skills like problem-solving, professional communication, and collaboration (often lacking in underprepared learners) should be taught explicitly to ensure comprehensive student development and deeper learning.

Curricula should also be personalized and customizable in both scope and sequence. Research shows that personalized, learner-centered instruction can make a difference, especially for underprepared learners, because it increases relevance and agency, which increases motivation and confidence.²⁰

Academic readiness competencies must be embedded in all course content so that they connect to and are reinforced by non-remedial competencies. Students can learn basic academic skills while learning advanced content as well. Deeper research is needed to show the best specific ways to deliver remedial education in a CBE setting, whether co-requisite, compressed, modularized, or something else.

Competency Development

Competency development should be a robust process that includes input from academic instructors, developmental education faculty, psychometricians, instructional designers, and representatives from industry. Many CBE programs employ external frameworks or are aligned with authoritative sources on standards, such as Association of American Colleges and Universities’ “Essential Learning Outcomes,” or, more commonly, Lumina Foundation’s “Degree Qualifications Profile.” These frameworks can provide helpful benchmarks for rigor, thoroughness, and depth, while still allowing for the heightened customization characteristic of CBE models. To serve underprepared learners, there may also need to be an additional layer of development that takes into account research into “what works” for remediation and basic skill development, among other population-specific factors.

Developed competencies must be clear, transparent statements about what a student needs to know and be able to demonstrate at a prescribed level in order to advance to the next skill, the next level, and the next course. Competencies must also include evidence of readiness and the habits of mind (including measures of metacognition) necessary to advance successfully along the career pathway.

Guiding Questions for Curricula:

- How can CBE evolve in order to deliver remediation? Are there particular best practices in remediation redesign that have stronger potential than others to work in CBE and/or online courses?
- Are there situations where remedial competencies cannot or should not be blended with college-level competencies?
- How are employability skills (also known as 21st-century skills, or “soft” skills) best incorporated into competencies?

3. Instructional Delivery and Pacing

The majority of CBE programs today, including the largest, are delivered in part or completely online. In adapting programs for underprepared learners, technology can bring many benefits, including flexibility, the potential for acceleration, and personalization. However, CBE models for underprepared learners likely should not be exclusively online, as research suggests that few underprepared students succeed in purely online environments, and many lack access to the full array of technology tools and infrastructure necessary for fully remote programs.²¹

Therefore, a regular face-to-face component for both instructor-student interaction and peer interaction is important in order to provide the individualized assistance, collaboration opportunities, and increased motivation that comes from learning in a group. Also, computer ownership is lower among low-income households, and cost may be prohibitive to many students. Programs may want to consider loaner arrangements, computer-sharing, mobile applications, or other alternatives that allow for maximum benefits for scarce technology resources. Further, programs will also need to address the challenge of lower rates of home Internet access in low-income households.²²

Instructional Delivery

Every effort should be made to design instructional delivery in a flexible, varied approach that blends online instruction with real-time, face-to-face learning events. In order to encourage digital literacy skills and increased comfort with technology-enabled learning, online instruction could include recorded lectures, real-time or recorded webinars, simulations, videos, games, and the use of other web 2.0 tools that encourage content creation by underprepared learners. Additionally, in-person instruction should be designed flexibly to

provide space for hands-on learning, labs, collaboration activities, or other problem- or project-based activities that reinforce individual learning competencies and complement online work.²³

Access to instructional content must be flexible to accommodate the schedules of adult learners, who need to fit in learning between work, child care, and other responsibilities. Underprepared students will benefit from flexible deadlines to complete work, and flexible dates to enter and exit a program without penalty. This is especially important for low-income learners, whose work responsibilities may require multiple jobs and little time for anything else.

Pacing

Pacing is determined by the individual student in a CBE model. For many students, this flexibility is one of the most attractive and important features. Varied or individualized pacing can be designed to not only encourage deeper engagement with new content without the constraints or external pressures of learning based on seat time, but also because it can accelerate the pace at which students can move through content that is more familiar to them. This varied and adaptable pacing element will need to be designed thoughtfully for underprepared learners, but it can potentially assist students in developing their own schedules for learning, studying, and validation. Self-pacing is extremely important to CBE programs, but students must be closely monitored so that it doesn't backfire and leave students behind.

“If you do it right, you could do away with the stigma of failure.”

—Gina Burkhardt, Jobs for the Future

Guiding Questions for Instructional Delivery and Pacing:

- What is the most effective way to deliver college knowledge, including study skills, time management, and navigating college bureaucracies?
- Is a combination of online and face-to-face instruction the optimal approach?
- What aspects of a CBE program might be delivered online? How might online delivery change over time?
- Will different students require different forms of delivery? More face-to-face or more online?
- Are there technologies/tools that help underprepared learners succeed in CBE programs?

4. Assessment

Dissatisfaction with traditional assessment—in particular, standardized tests that are high stakes but not an accurate measure of what students know and are able to do—and standardized pacing are driving forces behind the adoption of competency-based education. In a CBE model, assessment is central to all functions of program design, and in some models (like the direct assessment models largely explored here) instruction is driven by it.

Traditional exams in these direct assessment models can be replaced or augmented by varied assessment instruments and methods tied to course competencies. Multiple options, both formal and informal, are important to demonstrate mastery at every level.²⁴ These would include performance assessments, where students demonstrate academic skills or skills necessary for the workplace in either real-world or closely mimicked circumstances, and formative assessments designed to give students feedback on how close they are to mastering a specific competency. Significant research is still required to determine how best to design assessments for underprepared learners and it is likely that higher frequency skill validation and varied measures will contribute to a successful model.²⁵

Competency or Summative Assessment

Competency or summative assessment allows demonstration of competency in multiple ways, including performance assessment, project-based work, and simulations. It allows for demonstration of mastery in college-ready skills in reading, writing, and math, as well as college-level content. Development of competencies and assessment of competencies should include academic instructors, developmental education faculty, and industry representatives in order to be most effective. These assessments will measure what has been learned at the culmination of a learning event, course, or module segment.

Formative Assessment

Formative assessment includes regular progress monitoring and benchmarking instruments. Formative assessments are typically defined as “assessments for learning” and are used to mark progress and surface current learning and ability. They are also an essential part of determining the most effective content and assignments for each student, and can be used to guide additional assignments and augmented lessons. Programs can use results to customize supports to reach mastery, and to move students ahead. The specific type should

be determined by experts in the subject taught—either faculty or industry representatives.

Guiding Questions for Assessment:

- Should more than one type of assessment be available for a single competency? Should the choice be up to the student, or made in conjunction with an advisor?
- Are certain types of assessments more effective measures of certain types of competencies, particularly remedial competencies?
- When is an underprepared learner ready to take an assessment to demonstrate mastery?
- If a person does not demonstrate mastery on the first try, how many times can someone retake the assessment to demonstrate mastery?

5. Student Experience and Student Supports

CBE programs for underprepared adults must pay special attention to meeting the individual needs of each student in academic supports, career guidance, college knowledge, and daily life challenges. This is absolutely critical to the success of underprepared adult learners who face barriers to persistence and success in all of these areas—a major reason they may drop out. Acceleration is possible in CBE programs, but the opposite is also true—that the self-pacing could backfire and the person could take much longer to complete competencies. The CBE programs that are experiencing some success with some underprepared learners point to the success of their coaching, advising, and navigation services. Advising needs to be not only intensive but highly personalized.

Academic and Career Supports

Academic and career supports must be provided in concert so students can always see the relationship between them. One promising approach, called “intrusive advising,” makes aspects of advising mandatory for the student, and includes close tracking of student progress and highly structured meetings with advisors.²⁶ An advisor might be called an academic coach, a success coach, a learning coach, or a student success advocate, but they are all closely monitoring the progress of students in achieving their goals and offering interventions when things go awry or students progress too slowly. An early warning system should be standard. Online advising may be helpful if the technological access and logistical issues can be resolved. Maximizing availability would be ideal since many students may do their learning entirely at night or early morning

hours because they are at work the rest of the day. However, some may fare better with in-person advising. Underprepared students are likely to need guidance and structure to work independently and stay on a reasonable pace. They are likely to need help throughout the course, where college-ready CBE students typically need help at the beginning and then need much less as the course continues.

Comprehensive Non-Academic Support Services

Comprehensive non-academic support services are essential to meeting daily life challenges such as child care, health care, transportation, housing, and food. These are immensely important to low-income learners and can be bigger barriers to progress than academic issues. These services need to be available at nontraditional times and places as well as at some traditional times and places on campus during business hours. Case management that includes this component is a good place to start, and the use of external state agencies and community organizations for referrals could be explored.

College Knowledge

College knowledge, the building of self-advocacy, a willingness to seek help when needed, and sufficient understanding of the supports available, is a critical skill set. Other crucial skills include how to self-direct, stay motivated, be organized, and manage resources in a complex environment. Explicit instruction in these skills is necessary to avoid inadvertently setting up the perpetuation of significant inequities.

Peer/Faculty Interaction

Peer/faculty interaction is especially important for programs that include an online component. Some students may feel less motivated without the structure of a physical space for the class to meet at a regular time. The flexibility of being able to email an instructor or classmate rather than wait to see them in class can be liberating. But, special attention must be paid to students who prefer regular opportunities for “real-time” peer learning and faculty interaction online, as well as in person. Both perhaps must be provided in order to offer flexible scheduling, cohort learning, and faculty interaction.

Flexible Scheduling

Traditional college calendars offer two semesters per year starting in September and January and maybe a summer term; classes are held on specific days each week, at

specific times. This is impossible for many underprepared learners, with work and family responsibilities, unpredictable schedules, and transportation challenges. Flexible scheduling likely will vary by program and is hindered by financial aid restrictions. Offering multiple start times and courses of different lengths throughout the year is important, with some programs starting on the first of any month. If an unexpected issue comes up, a student can easily delay starting for just a few weeks or longer if necessary. However, there are issues to balance with the need for group learning, which is often important to underprepared learners.

Guiding Questions for Student Experience and Student Supports:

- ▶ What kinds of academic assistance work best? Some in person? Some in real time via text, mobile app, or email?
- ▶ What kinds of other college knowledge and non-academic supports work best?
- ▶ Do faculty/coaches need to be “on call” at off hours in order to respond?
- ▶ What are effective ways to minimize social isolation and maximize motivation in online or hybrid models?
- ▶ What aspects of CBE programs are uniquely or especially challenging for underprepared learners, and how can counselors be prepared to address these challenges?
- ▶ What should professional development look like for counselors working with underprepared adults in CBE programs?

6. Career Connections

Programs need to engage and emphasize employer involvement from the very beginning to ensure that students are prepared for their field of choice and specific job demands. The importance of preparing students, not just for a credential but for careers, is an explicit goal of both CBE programs and programs for underprepared learners. Many adults pursue CBE because they have a specific career goal in mind and the flexibility of CBE allows them to pursue this goal more effectively. The same is true whether they are prepared for college-level work when they begin the program or not. Career connections and employer/job linkages must be incorporated from the earliest point in the program—more than in other programs. Key activities include:

- ▶ Opportunities for career exploration, work-based learning, career counseling, and internships.

- › Support from a job placement specialist. Programs may want to dedicate a staff person to this outreach and partnership work.
- › Faculty and employer partnerships to bring employers into the classroom.
- › Career contextualization of academic skills to boost effectiveness of remedial instruction and increase motivation.
- › Competencies mapped to occupational demands. Develop partnerships with employers to identify students, competencies, and credentials. Some CBE programs align in-classroom competencies with national industry standards that have the potential to be more directly and quickly tied to employer needs than traditional models. These also need to be regularly updated because some industries change rapidly.

Guiding Questions for Career Connections:

- › How can we balance academic and career learning without tracking students into overly narrow occupational paths?
- › How can we build strong partnerships with employers on competencies, contextualized instruction, credentials, work-based learning, and career exploration?
- › How can opportunities for work-based learning, including job shadowing, internships, and apprenticeships, be incorporated into the design and delivery of CBE?
- › Are there effective ways to create personalized career content for students who are not yet committed to a career path or program of study (e.g., students interested in a transfer degree)?

7. Credentials

Credentials must signal the skills employers value—both specialized for a specific occupation or field and cross-cutting to encompass skills such as problem solving, critical thinking, and decision making. Ideally, credentials can lead to work or further education. Different levels of proficiency in certain cross-cutting skills may be appropriate for different credentials and this may appeal to students who come in at different levels. Key activities include:

- › Develop interim motivational credentials such as badging that signal readiness for college-level work in specific academic areas such as math, reading, and

writing, but which also serve to encourage persistence as students work toward more significant credentials.

- › Connect with local employers to develop credentials that address priority needs of the labor market but that can still be accessed by people who enter college less academically prepared.
- › Ensure that credentials are transferable to other educational institutions so individuals may pursue further education if they wish.

Guiding Questions for Credentials:

- › Are there ways in which credentialing can promote a greater success rate for underprepared learners?
- › How can micro-credentials demonstrate what students have learned if they only have a short time and encourage them to come back because they have evidence of what they have already earned?
- › Do programs need to develop two kinds of transcripts—one traditional and credit based; the other listing the specific competencies the individual has demonstrated? If so, how is this best communicated to students?

“You can start where you need to start. CBE meets you where you are.”

—Sarah Miller, Council for Adult and Experiential Learning

CHALLENGES

Designing a CBE model for underprepared learners will involve resolving numerous issues that do not fall neatly into one of the above categories, but rather cut across several of them. They are important issues that also require attention from researchers, policymakers, and practitioners alike. These include:

- › **Faculty**—Faculty are key to the development and ultimate success of any new program. In CBE programs, faculty often shift away from traditional teaching roles and focus more on success coaching. This evolving role requires different skill sets and many faculty will benefit from additional training and support. Issues to consider include: professional qualifications for CBE faculty; professional development to increase and continually improve skills; evolving job descriptions; the role of remedial educators in a CBE system; and ensuring that teaching and learning remain student centered.²⁷

- **Data**—The identification and collection of timely data on individual students and groups of students is essential to a well-functioning CBE program and potentially more so for underprepared learners because of the number of skills they’re working on during their time in the program. Issues to consider include: adequate capacity of existing data systems; appropriateness of using traditional student management software for CBE courses; data systems that can’t communicate with each other to come up with a comprehensive picture of an individual student; collecting data in time to intervene; and creating milestone/warning systems that illustrate each student’s progress against expected benchmarks.
- **Infrastructure**—The logistics involved in setting up the infrastructure, particularly the technological infrastructure, is daunting and the cost may be prohibitive. The equipment, installation, maintenance, and upgrading required is complex and costly. There is a confusing array of vendors and solutions available, without a clear mechanism for assessing quality.
- **Cost**—No one knows how much it will cost, in addition to the technological needs, to build brand new CBE programs that meet the needs of underprepared

learners. But providing the individualized support required by thousands of students is likely to be expensive and will require creative solutions.

- **Policy**—Financial aid issues are complex and need to be worked out. There are also issues related to the credit hour and transcripts, as well as financial aid, which need to be meaningful to multiple audiences, including the student and prospective employers.
- **Scale**—The scope of the population that potentially could benefit is large but no one knows how to scale these programs yet.

CONCLUSION

CBE is not the answer for everyone, whether prepared or not for college-level work. But JFF believes that adapting CBE has the potential to be an effective credential attainment strategy for many underprepared adult students.

We will continue research and action toward this goal. We invite you to join us in this important work and welcome feedback on the questions we raise and how practitioners are tackling these issues in the field.

APPENDIX: ORGANIZATIONS REPRESENTED AT JFF EVENT

- American Institutes for Research
- Blackboard
- Bray Strategies
- College for America at Southern New Hampshire University
- Community College Research Center at Teachers College, Columbia University
- Council for Adult and Experiential Learning
- The Forum for Youth Investment
- Guttman Community College at City University of New York
- National Governors Association
- National Immigration Forum
- Newsome Associates
- RTI International
- Sinclair Community College
- Thomas Edison State College
- U.S. Department of Education

ENDNOTES

¹ Person, Ann E., Lisbeth Goble, & Julie Bruch. April 2014. *Developing Competency-Based Program Models in Three Community Colleges*. Oakland, CA: Mathematica Policy Research. http://www.mathematica-mpr.com/~media/publications/PDFs/education/compentency-based_program_models.pdf

² See, for example: Zachry Rutschow, Elizabeth & Emily Schneider. 2011. *Unlocking the Gate: What We Know About Improving Developmental Education*. New York, NY: MDRC. www.mdrc.org/sites/default/files/full-595.pdf

³ See Appendix for a list of organizations represented at JFF's convening November 19 in Washington, DC.

⁴ There is still no consensus definition of CBE, "even among the institutions that provide it," according to *The Landscape of Competency-Based Education*.

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⁶ Of 9 CBE programs with available data, only 1 in 10 enrolled students were under age 25, according to *The Landscape of Competency-Based Education*. Kelchen. 2015.

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FEBRUARY 2016

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JOBS FOR THE FUTURE

TEL 617.728.4446 FAX 617.728.4857 info@jff.org

88 Broad Street, 8th Floor, Boston, MA 02110 (HQ)
122 C Street, NW, Suite 650, Washington, DC 20001
505 14th Street, Suite 900, Oakland, CA 94612

WWW.JFF.ORG

