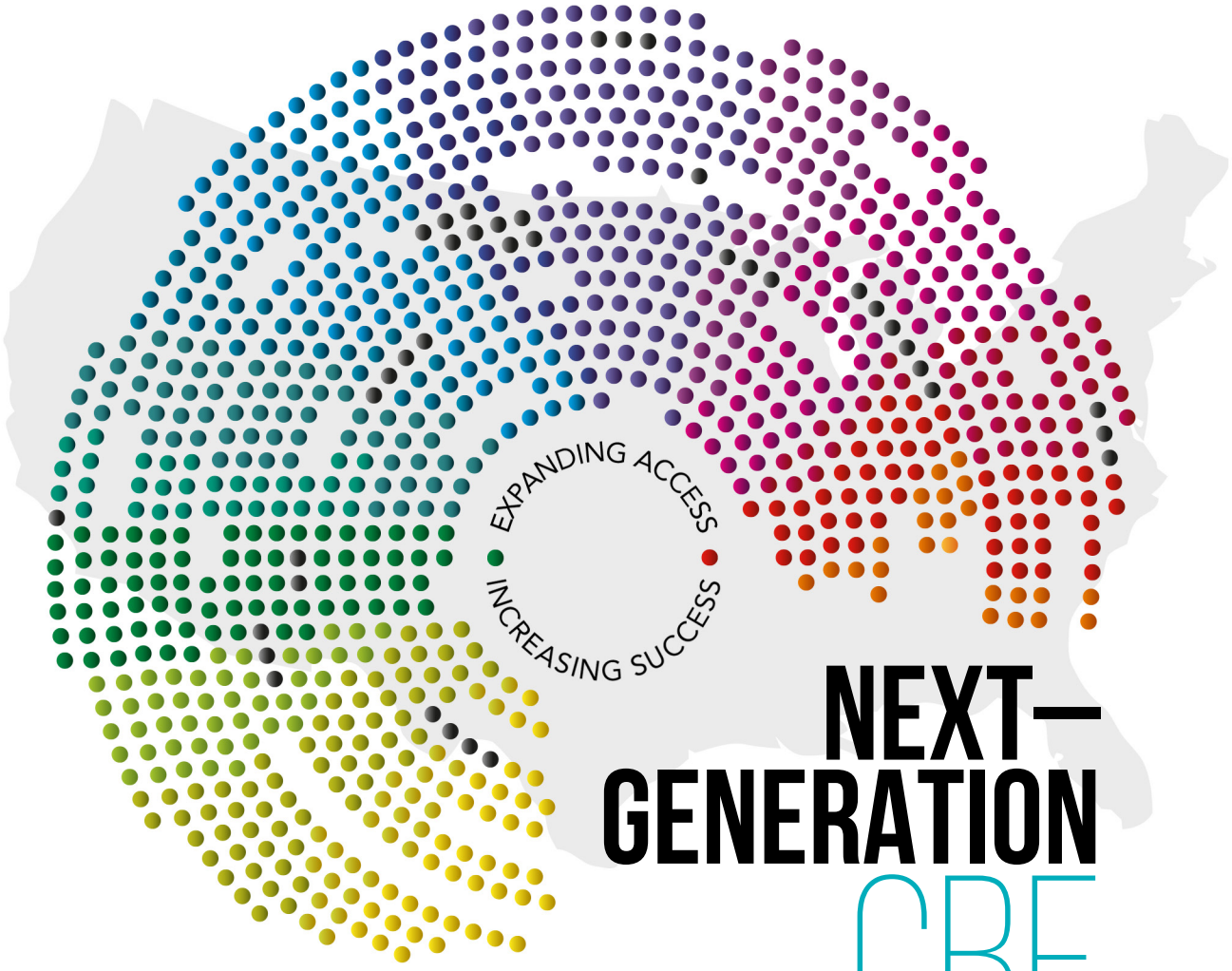

NEXT–GENERATION CBE

DESIGNING COMPETENCY-BASED EDUCATION FOR UNDERPREPARED COLLEGE LEARNERS

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BY AMY GIRARDI AND RACHEL CREW

JOBS FOR THE FUTURE

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JFF is a national nonprofit that builds educational and economic opportunity for underserved populations in the United States. We develop innovative career and educational programs and public policies that increase college readiness and career success, and build a more highly skilled workforce. With over 30 years of experience, JFF is the national leader in bridging education and work to increase economic mobility and strengthen our economy.

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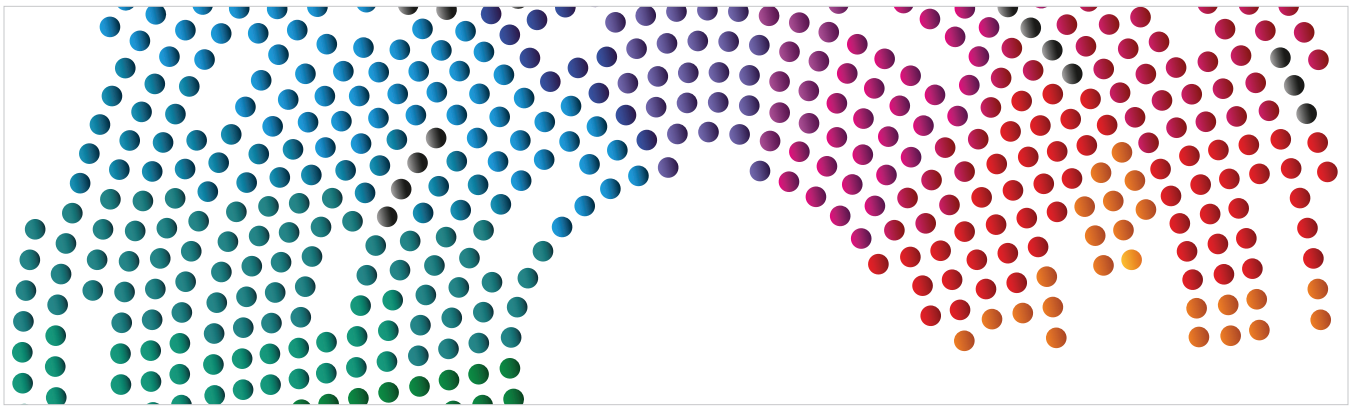

INTRODUCTION

In just a few years, competency-based education has gained considerable attention as an innovative alternative to traditional higher education. At a time of record student debt and stubborn college completion gaps, the appeal is clear: flexible and personalized, CBE paths have the potential to help adults who have struggled to complete college earn quality postsecondary credentials that lead to good jobs with good pay. Some proponents say these programs are more accessible and affordable than traditional programs and they can better enable students to meet their academic and career goals.

Yet despite rapid growth, competency-based programs currently serve a narrow slice of the college-going population. The majority are designed for students who are already well prepared for college coursework; few are intended for students who lack college-level math and literacy skills. This means that the millions of individuals who attend college every year with a need to improve basic academic skills are rarely able to access competency-based approaches. They are disproportionately from low-income backgrounds and often the first in their family to seek postsecondary education. Assessed when they arrive on campus, most end up in developmental education classes of questionable quality and few ever see success in credit-bearing courses, let alone graduate.

"CBE could be an important piece of the national movement to increase educational access, equity, and credential attainment."

If designed with the needs of a broader range of learners in mind, CBE could be an important piece of the national movement to increase educational access, equity, and credential attainment. To this end, JFF is leading an effort to explore how CBE can be adapted to meet the needs of underprepared adult learners, to help this large and economically vulnerable group earn college credentials and advance in the U.S. workforce. With support from the ECMC Foundation, JFF has reached out to national experts, policymakers, and practitioners to help identify key issues that can frame a national conversation about expanding and strengthening CBE for students who have been historically underrepresented in higher education.[1]

Despite the field's current focus on college-ready learners, experts we interviewed agree that it's time for CBE programs to expand their reach and serve a broader population. "This is where CBE has to go," as Amy Laitinen, a leading authority on CBE and director of higher education at the public policy think tank New America, said. "The potential [for CBE] to help students who need remediation is great."

But Laitinen and others caution that there is also potential for pitfalls: program designers must avoid lowering standards and offering a "college-lite" curriculum for students who enter with lower skills.

This brief is the first in a year-long series that will zero in on the practical, but complex, question: what specific design elements and policy changes are needed to realize the potential of CBE for the nation's underprepared students?

We begin this paper with an overview of the evolving CBE landscape and a summary of the major debates in national efforts to improve developmental education. Next, we examine the academic and personal barriers facing underprepared adult learners and how adapted CBE models can help students overcome them. We summarize key issues to consider in designing effective CBE programs for underprepared learners. We conclude with a look ahead to JFF's research plans and the design elements we will flesh out to build a comprehensive approach for underprepared learners to succeed in CBE.

What is Competency-Based Education?

CBE models are flexibly paced programs of learning in which progress toward a degree is determined by what students demonstrate they know and are able to do, regardless of time spent in a classroom.[2]

THE CBE LANDSCAPE

Postsecondary CBE programs are multiplying rapidly, aiming to fill the desire of individuals to earn college credentials that decent jobs require in this knowledge-based economy. More than 500 postsecondary institutions are now operating CBE models.[3] ***The programs cover a range of fields, including information technology, criminal justice, business administration, elementary and secondary education, and even specific occupations such as wind turbine technician.***

Despite its recent surge in popularity, CBE is not a new approach to learning. CBE has been around since the 1970s, when colleges and universities tried new ways to help returning Vietnam War veterans and other adults quickly gain the skills they needed to find good jobs.[4]

Today's CBE models typically are structured around online learning or a combination of online and in-person instruction, both approaches that didn't exist 40 years ago. Yet there are no universal rules about what makes a program "competency based" and there is wide variety in design.

However, there are several common threads. Generally, students progress through the curriculum at their own pace, based on the time they have available and their ability to demonstrate specific competencies. Students who fall short receive targeted assistance and can try again (more than once, if necessary) to show they have mastered a competency. The approach stands in contrast to traditional college programs, where students typically advance to the next course at the end of the semester, regardless of how well they understand the content or perform certain skills, so long as they earn a "passing" grade.

Postsecondary institutions and systems in at least 23 states[5] currently offer CBE, ranging from pioneers of the 1970s to programs that just opened their doors. Excelsior College in Albany, New York, and DePaul University's School for New Learning in Chicago, Illinois, for example, have offered competency-based degrees to adult learners for nearly four decades. More recent arrivals include Southern New Hampshire University, which in 2013 launched an online CBE program for working adults. Called College for America, it became the first program eligible for federal financial aid that does not take into account the amount of time graduates spend in school.[6]

The federal government has since shown growing interest in CBE and has taken several steps to encourage its development. The U.S. Department of Education now offers waivers from some of the time-based restrictions found in federal financial aid guidelines. The Experimental Sites Initiative allows selected institutions to test program designs outside the financial aid constraints of the Higher Education Act, while allowing the department to research how such programs can be implemented at greater scale.[7] The U.S. Department of Labor has also shown interest in CBE, promoting expansion efforts through grants to postsecondary institutions under the $2 billion Trade Adjustment Assistance Community College and Career Training (TAACCCT) program.

Supporting the growing movement are a number of leading think tanks and education intermediary organizations, such as New America, Public Agenda, and the Council for Adult and Experiential Learning. Several were instrumental in championing CBE early on. Now they have turned their attention to questions of quality, investing in research, tools, design institutes, and communities of practice. The largest community of practice, the Competency-Based Education Network, includes 30 individual colleges and universities and four public systems comprising 82 campuses.[8] Philanthropic organizations also are investing in research, as well as in peer learning for a core group of CBE institutions.

Who are Underprepared College Learners?

Underprepared learners are individuals who enter college without college-level skills in at least one foundational area: reading, writing, or math. Roughly 2.4 million community college students each year—about 60 percent of the incoming population—are required to take at least one remedial course in English or math before starting credit-bearing classes. Only 28 percent earn a credential within eight years.[9] Many juggle school with work and family responsibilities.

THE DEVELOPMENTAL EDUCATION LANDSCAPE

At the same time that CBE programs are spreading throughout the country to serve college-ready learners, colleges are seeking better ways to serve underprepared students by overhauling developmental education. A number of states, including Tennessee, California, Florida, Virginia, and Connecticut, have imposed major reforms on publicly funded two-year and four-year institutions through legislative mandate or system policy, fueling debate about what works best. Some of these efforts have begun to bear fruit, but many questions remain.

Successfully navigating this landscape will be essential to efforts to adapt CBE for students who need to build college-ready skills. At the heart of designing CBE for underprepared learners is the need to balance remedial instruction with college-level work, within a system of effective student support services.

Developmental coursework is meant to address significant skill gaps to prepare students for college but, unfortunately, it is often a deterrent. Too frequently, developmental education is implemented in such a way that it diverts students from credential attainment. Many students are inadequately or ineffectively assessed and placed in programs that do not fully address their needs.[10] Additionally, many developmental education programs lack the infrastructure or culture to foster student success, including strong guidance and advising practices, and connections to college-level work or career interests.

As the evidence mounts that basic skill deficits and involvement in developmental education negatively impact wide swaths of the college-going or college-bound population, efforts have increased to investigate how best to tackle the problem. Experts have identified a number of factors that appear to impact student success, including: placement in multi-course sequences, lack of connection to a program of study, lack of engaging or motivating pedagogical approaches, and weak support services to address life challenges.[11, 12]

To address the complex issues that derail many students from completing college courses and credentials, reformers aim to redesign developmental education to ensure that it accomplishes several key goals: it serves as an on-ramp to students' programs of study, it provides a stronger mix of intensive advising, it clearly delineates education and career pathways, and it restructures course designs and sequences. The interventions have manifested in myriad models, but most prominent efforts could be broadly categorized as strategies that aim for the following:

Bridging to College

These strategies are often aimed at students entering postsecondary education directly from basic skills, GED, or Adult Basic Education programs. The goal is to bridge the full range of skill deficits in compressed, though disconnected, "boot camp"-like models that prepare students for typical entry into college.[13]

Accelerating Developmental Education

Acceleration is an umbrella term that comprises numerous strategies, such as co-requisite, contextualized, compressed, modular, and other efforts to reduce the time spent on remediation in order to speed entry into college-level work. Included within these models are often, but not always, elements that promote integration with college programs of study, and strong academic and other student support services.[14]

Bypassing Developmental Education

These models typically move students directly into "mainstream" credit-bearing courses upon college entry. They have emerged in states like Florida that no longer require developmental education for a large percentage of students. The strategy is often associated with early assessment and early remediation efforts in the K-12 system to catch students well before they enroll in college and help them avoid the need for developmental coursework. A related strategy is the use of multiple, varied measures of assessing student skill levels. Rather than making placement decisions based on a single placement test score, this approach uses several different academic indicators to determine whether students who score poorly have sufficient academic strengths to be placed in entry-level college courses with extensive academic and other support services.[15]

WHAT CBE CAN OFFER UNDERPREPARED LEARNERS

Underprepared learners are individuals who enroll in college, but whose tested skills are below college level in at least one area: reading, writing, or math. These learners may or may not have a high school diploma, and are typically in need of further education and postsecondary credentials in order to find or advance in careers with a living wage. The size of this population is significant. Nearly 2 million high school graduates enroll in community colleges and receive remediation in at least one subject—and, for many, remediation in multiple areas—each year. Success rates are low: only 28 percent of these students complete a postsecondary credential within eight years.[16]

But academic underpreparation is not the only barrier to success for this population. They are disproportionately low income, racial/ethnic minorities, and English language learners. More than one-third are the first in their family to attend college. Many underprepared learners and, in fact, many college students in general, also lack "college knowledge," an understanding of how to navigate the complexities of college systems, such as knowing which courses to take in sequence to make progress toward a credential or how to access services and supports that promote completion. Many also lack a full understanding of the career landscape and need assistance in planning for careers. Further, many underprepared learners have had negative experiences in school or may have underdeveloped study skills, self-advocacy, and self-direction.[17]

Roughly 80 percent of this population is working, often in low-wage jobs with unstable schedules, and need to juggle work, school, and family obligations. Further still, one-third of student household incomes are at or below the poverty level, and many have difficulty meeting basic needs, such as food, housing, or health care.[18]

Our research unearthed three core ways in which CBE has the potential to better serve the needs of underprepared learners than traditional higher education. Many of these elements are present in parts of more traditional approaches, but CBE's potential lies largely in its ability to combine all of these features into a unified approach.

As Holly Morris, director of postsecondary model development adoption for EDUCAUSE, said: "CBE opens the door to a quality education for many people who've been shut out by the structure of traditional programs."

Flexibility

Experts interviewed for this brief returned repeatedly to one particularly powerful feature of CBE—its flexibility. Flexibility is a hallmark of successful programs for underprepared learners who often are older than traditional students and must earn a living and care for children while attending school. CBE programs can be more flexible than traditional college programs in two key ways: 1) variable methods of access, and 2) adjustable pacing. Working in tandem, they enable students to progress at a rate that suits them, at convenient locations and times. By contrast, most postsecondary courses require the same pace of learning for all students, based on class assignments and test dates, and are built around a standard method of delivery, usually in a classroom on a college campus.

Flexible access: Through the use of online learning management systems, CBE programs can provide learners with remote access to course content from any location with a computer and Internet service—including homes, workplaces, and public libraries—even if most instruction is delivered in a classroom setting or through a blended (classroom and online) approach. This ability to access learning resources virtually anytime, anywhere, allows students to engage when they have time—often outside of the traditional course schedule, early in the morning, late at night, or on weekends and holidays. While flexible access is also a key feature of online courses that are not competency based and is becoming more common in traditional classroom models, it is even more effective when combined with flexible pacing. Traditional online courses offer broad access, but still follow an instructor-determined schedule, at a one-size-fits-all pace.

Flexible pacing: CBE programs often provide flexible pacing so that students can adjust their progression to their individual learning needs. (Offering flexible enrollment and start dates, rather than a strict semester-based schedule, is also helpful.) As underprepared learners have a mix of strengths and challenges, individuals can slow down or speed up their pace depending on their grasp of specific content. Students who believe they are ready to progress quickly can demonstrate their knowledge through some form of assessment and move on as soon as they show mastery. CBE programs can strike an effective balance by monitoring the amount of time it takes each student to reach each benchmark: a student languishing too long in any area would trigger additional academic supports.

An example of a CBE program that uses a "flex with benchmarks" approach is the Accelerate IT program, found at Ohio's Sinclair Community College. Assessments take place at specified points in the course and students are required to demonstrate certain competencies in order to proceed. This allows faculty and students to keep track of individual progress, even though everyone is moving at a different rate, and enables coaching for students whose self-pacing may not be effective. As Nancy Thibeault, the designer of Accelerate IT at Sinclair, said: "Coaching students on how to adequately assess their own progress and set a pace for themselves that works is crucial."

Customization

Inherent in CBE is the concept of customization, or the ability to tailor learning experiences to the needs of each student. Using individualized

BENEFITS OF CBE

BARRIERS FOR UNDERPREPARED LEARNERS

	FLEXIBILITY	CUSTOMIZATION	MASTERY
POOR PLACEMENT	* The process for determining remediation needs and course placement can offer students a variety of paths to the goal of becoming college ready and earning a postsecondary credential.	* The process for determining remediation needs and course placement can be based on multiple kinds of assessments that highlight individual abilities and needs, rather than on a single test. * Students can concentrate only on the specific competencies they need to master, instead of being required to take semester-long courses that include material they already know.	* Students can concentrate only on the specific competencies they need to master, instead of being required to take semester-long courses that include material they already know and may discourage them from persisting in school.
WEAK ENGAGEMENT	* Curriculum content and instruction can be designed to meet individual learning needs and interests.	* Assessment instruments can be customized to career interests and life contexts; this can increase relevancy and motivation. * Curriculum content and instruction can be designed to meet individual learning needs and interests.	* Students are required to show a firm grasp of content and skills before they move on to new topics; this level of understanding can increase engagement.
LIFE CHALLENGES	* Students can learn at a variable pace, depending on their individual work, family, and other needs during a particular period of time. * Students can access online coursework and support at times and locations most convenient to them, whether 12 noon or 12 midnight.	* Students can learn at the pace that works best for each individual. * Student supports, both academic and psycho-social, can be tailored to individual needs and circumstances.	* Students can advance at any time they are able to demonstrate a competency, rather than only at the end of a term.

assessments, placement activities, and content from a learner's career or academic focus is particularly helpful for underprepared learners. Many of these students faced challenges in traditional education environments that led to severe frustration. CBE can be designed to make placement more appropriate, content more relevant, and educational approaches more adaptive to individual needs.

In CBE, placement activities can be customized to ensure a well-rounded, thorough review of a student's needs and abilities. While some traditional developmental education programs are starting to employ a "multiple measures" approach[19] for placement—specifically seeking out information about entering students to augment or replace standardized test scores, such as high school GPA or prior course experience—CBE programs can take this approach further by using behavioral or performance assessments more tailored to the adult experience.

> ***"CBE opens the door to a quality education for many people who've been shut out by the structure of traditional programs."***

For example, Nashville-based Lipscomb University has created a day-long, intensive placement exercise that employs a committee (typically composed of faculty and professional staff) that evaluates entering students as they engage in collaborative and individual projects.[20] This approach, called the Customized, Outcome-based, Relevant Evaluation (CORE), evaluates skills and competencies ranging from problem-solving and presentation skills to industry-specific technical skills, and awards up to 30 credits. Students who do not earn the full 30 use customized online course content to build the missing competencies before continuing their education.

CBE also can allow for more individualized, contextualized activities that make learning more relevant than traditional higher education. By outlining learning outcomes explicitly, and by focusing activities and assessments on the application of knowledge in multiple contexts, CBE can provide underprepared learners the opportunity to situate their own learning in the context of their chosen field and in a way that reflects their lives.

For example, for a learner to demonstrate a set of competencies, both remedial and college-level, he or she could complete a project that incorporates real-world experience, such as creating and delivering a presentation on the importance of preventative public health measures for the seasonal flu in a nursing context, in addition to sitting for traditional exams or assessments. The customized performance assessment can show how a learner is able to employ multiple skills in one setting, rather than a few in isolation, and mirror more closely the world outside of the classroom. This is crucial in maintaining the relevance of course content and individual motivation to persist.

Learning for Mastery

CBE programs can allow students to advance based on demonstration of competencies, as opposed to traditional higher education, which measures time spent in class and requires only passing grades on exams, leaving potentially large gaps in understanding. Thus, at its core, CBE represents a pedagogical approach that has the potential to promote deeper understanding of content and broader ability to apply content. Requiring students to pass not only traditional assessments but also to demonstrate knowledge in customized, contextualized projects, could mean the difference between just "getting by" with passing scores and developing real understanding of foundational content and new material.

Specifically, in measuring for mastery, learners are asked to perform their understanding, and in so doing demonstrate their ability to move on to higher-level knowledge and skills. Many CBE programs outline levels of understanding—emerging, evident, proficient, and master, for example—at specified intervals before additional content is available for students. This helps prevent underprepared learners from advancing before they are fully ready, and decreases the impact of high-stakes exams that have weak correlation with academic success.[21] This concept of mastery is more closely aligned with real-world experiences. This also helps ensure that students do not take on more advanced coursework until they are ready to succeed.

As Amy Laitinen of New America said, "The promise of CBE is about being able to verify quality of learning—through competencies and robust demonstrations and assessments. That ability does not exist currently in traditional higher education."

CBE programs can allow students to advance based on demonstration of competencies, as opposed to traditional higher education, which measures time spent in class and requires only passing grades on exams.

KEY CONSIDERATIONS IN DESIGNING CBE FOR UNDERPREPARED LEARNERS

In addition to emphasizing the potential benefits of CBE, interviewees had a number of suggestions about design elements that would need to be considered, explored, and tested in order to ensure a model was appropriate for underprepared learners. Many of these suggestions came from evidence-based research on redesigning developmental education or adult education programs outside of CBE, while other suggestions were more observational, derived from practitioners' hands-on experience. The most commonly raised design elements to consider were as follows:

Technology

Online instruction is not by definition part of CBE, but most existing CBE programs are delivered significantly or wholly online. In adapting CBE for underprepared learners, it is essential to balance the amount of online instruction and in-person instruction. Online delivery has significant benefits, but significant drawbacks, too. Several experts said the key issue would be adapting CBE designs to harness educational technology, but not rely on it.

On the one hand, many experts cautioned that online delivery would be potentially problematic for underprepared learners, citing the myriad research surrounding the challenges many learners face in these environments.[22] Online formats lack mechanisms to develop the types of in-person relationships that foster student success, and often fail to ensure that learners have the robust digital literacy skills to engage meaningfully with online content. On the other hand, technology-driven innovations in postsecondary education show tremendous potential to provide strong support systems, customized learning experiences, and acceleration for underprepared learners.

For a CBE design to work for underprepared learners, experts suggested a blended approach where students complete much of their coursework remotely but have a strong in-person classroom experience to develop relationships and collaborative learning habits. Similarly, the need to develop strong digital literacy and proficiency could be scaffolded, where students could be coached slowly into the use of remote technologies, in essence building confidence and ability while forming supportive relationships with other students. New technologies should be explored, but not assumed to be appropriate for underprepared learners until they have been piloted and evaluated.

The CBE program at Sinclair Community College illustrates several ways to capitalize on technology. Sinclair created a comprehensive online tool called "My Academic Plan" to assist students in creating a career roadmap that automatically links to MAP MAKER, an online tool that tracks student progress and performance and alerts staff to problems. As a result, Sinclair's CBE completion rate is 13 percent higher than that of other programs; the students earn three times as many credentials as students in traditional programs, and 90 percent of students obtain internships that lead to full-time employment.[18]

Comprehensive Supports

All of the experts interviewed emphasized the need for comprehensive student support systems specifically designed for underprepared learners. Experts noted repeatedly how even college-ready students required more support in CBE designs. Traditional students often have an ingrained understanding of what going to school looks and feels like. This usually entails a semester-based schedule, a didactic delivery method, and three to four interim exams along with a final. CBE models attempt to turn this format on its head—allowing students to work through material at their own pace and demonstrate mastery and competency of a subject through a myriad of projects and assessments.

Hudson Baird, executive director of PelotonU, a company that provides coaching and a campus to students enrolled in CBE programs, said that all students are introduced to CBE during a comprehensive two-month-long orientation process. It includes remediation, as needed; career mapping; and a crash course on how CBE works and how it is markedly different than a traditional degree or training program.

Many interviewees were quick to point out the benefit of using mandatory intake, placement, and orientation activities—such as assigning academic coaches, faculty, and peer mentors, and co-developing academic and career pathway maps—as a foundation from which to form the student support systems and plans.

Many also referred to all student experience and supports under the umbrella of "case management," and noted that the roles of advisor, coach, mentor, peer, and instructor can and will vary depending on the program pace, degree path, and delivery method. However, they added that practitioners should assume that without significant investment in ongoing, active support services, underprepared learners are unlikely to be successful in CBE pathways.

Several interviewees also suggested that the use of student data to analyze and measure progress has been an effective way to keep coaches abreast of student activity in order to keep them on track.

Along with academic student support systems, there was emphasis from the field that individual empowerment and confidence building are crucial to success for an underprepared student population. So often, underprepared students feel left behind by traditional higher education. People who may not excel in a traditional environment can benefit from personalized and self-paced learning approaches that CBE programs offer. However, in order to put students on the path to self-discovery, building basic skills and confidence is essential.

Charla Long, the former dean of Lipscomb's CORE program and current executive director of the Comptency-Based Education Network, said: "People are doers; give them the opportunity to do and they will catch up with the theory behind what they are doing. If you don't give someone a place to start, where they are comfortable, you will never be able to teach them." Lipscomb is just one example of many programs that have reinvented the role of coaching within the academic environment to include personalized connections with students as a mechanism for success.

Emphasizing Both Academic and Career Competencies

One of the critiques of modern CBE is that it can be too rigidly focused on job-specific technical knowledge, leading to graduates who lack critical skills that lead to longer-term academic success and career outcomes. Many experts we consulted cited this concern as stemming specifically from some faculty members' belief that CBE is "just for workforce," or "college lite," largely because it often focuses on adults who return to school in search of skills and credentials to help them succeed in the workforce. This concern is also in some ways a reaction to the more learner-centered, self-directed

nature of CBE, with some faculty suggesting that the learners' desire for more immediate workforce training could compete with the need to develop the more nuanced critical thinking and metacognitive skills faculty members typically feel is their role to cultivate in college students.

However, experts noted that these distinctions, and these concerns, are largely artificial. Many said that the need to balance both career and general educational development is by no means exclusive to CBE, and that quality design matters and is challenging in all forms of higher education.

In fact, many experts suggested that CBE has the potential to be a powerful lever in promoting technical skills tightly aligned with students' chosen careers, while *also* enriching academic and life skills more broadly. "[CBE's] greatest promise may in fact reside in its ability to push traditional higher education to think more deeply and creatively than ever before about what rigorous and high-quality learning outcomes ought to look like," said Alison Kadlec, senior vice president at Public Agenda.

By leveraging faculty expertise and knowledge around learning and human development—particularly their understanding of how to develop critical thinking, metacognition, and humanistic competencies through coursework—and combining it with student career context, CBE could provide the right balance for underprepared learners. A CBE model for underprepared learners must therefore be designed to encompass broader academic content and life-long learning skills by leveraging faculty knowledge of student development. CBE curricula should incorporate opportunities for learners to develop depth of knowledge not only in their fields of study and chosen careers, but also in cross-cutting disciplines and liberal studies, and assessments should reflect each area.

Experts suggested a blended approach where students complete much of their coursework remotely but have a strong in-person classroom experience to develop relationships and collaborative learning.

Experts noted that this is possible if CBE programs promote collaboration among students and faculty, embed intentional and explicit opportunities for student reflection on learning, and expose students to a wide variety of learning opportunities outside of their narrower career scope and remedial needs. In a CBE design, this would mean designing competency statements and corresponding assessments that explicitly blend basic skills targets with technical content and higher-order thinking skills.

For example, a CBE program that is centered on students entering a science, technology, engineering, or math field like robotics could blend remedial competencies in math and writing in the context of blueprint design and reading. The competency statements from which the students would be assessed could include a mix of technical math use, written materials, and computer-aided drafting and graphic design combined with a presentation component in which the student must "defend" his or her design to an audience. The rubrics or scoring criteria for this would clearly detail the basic skills, technical application and knowledge, and metacognition apparent in both the ultimate product design and the degree to which the student is able to communicate ideas through the presentation. In completing this block of competencies, a student would need to demonstrate a host of capabilities that, while situated in the context of a career, reach beyond rote memorization of technical steps and encompass broader academic and critical thinking skills.

CONCLUSION AND NEXT STEPS

Ultimately, in order to design CBE for underprepared learners, we must build on the groundwork of the modern CBE field, leverage the existing evidence and promising practices of the developmental education reform landscape, and seek to broaden the conversation around educational equity and access.

In the coming year, JFF will explore in depth how postsecondary CBE models can be adapted to better serve underprepared adult learners through review of research; visits to promising programs; and interviews with CBE and developmental education practitioners, policymakers, and experts. In a series of papers, we will recommend specific features likely to help more students master college-ready skills, persist in their postsecondary studies, and complete credentials, with the goal of informing the creation of a pilot model for underprepared learners.

The series will cover six topics:

Developmental Education and CBE

Much of the remediation redesign work currently underway nationwide is complementary to efforts to create high-quality CBE pathways for all learners. Many of the core concepts—such as acceleration, support services, and personalized learning—are nearly identical. This paper will highlight the most promising strategies for incorporating developmental education into CBE programs, helping to ensure that practitioners in the field can efficiently combine efforts.

Intake

Intake, placement, and orientation are critical components of the foundation students need to be successful throughout their educational experience. A CBE model for underprepared adult learners will likely require redesign of college intake, placement, and orientation processes, and 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. This publication will delve deeply into the role of these onboarding and placement activities and explore strategies and practices that promote success.

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. This publication will outline ways to leverage technology, sequence instruction, and design delivery mechanisms that support student success.

Competencies and Curricula

Curricula represent the backbone of any education program, and outlining the ways in which competencies are identified, articulated, sequenced, and measured is critical to program success. For CBE for underprepared learners, curricular development must intentionally integrate both college-level and remedial content, and be designed in such a way as to reflect multiple ways to learn, develop, and demonstrate knowledge. This publication will explore how to effectively design curricula that address remediation and career and academic content, and provide strategies for building performance objectives.

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 CBE. In a CBE model, assessment is central to all functions of program design, and in some models instruction is driven by it. This publication will provide a broad overview of assessment practices, along with strategies and suggestions for using assessments as instructional tools in CBE programs.

Student Experiences and Supports

CBE programs for underprepared adults must pay special attention to meeting the individual needs of each student in the areas of 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. This publication will outline how to build supports into CBE programs and how to bolster student success and engagement.

JFF will continue working with partners to advance the goal of expanding postsecondary CBE for all learners, especially underprepared learners, and construct the core components of a new, inclusive approach. We invite you to join us in this important work and welcome feedback on the questions we raise and the ways practitioners are tackling these issues in the field.

APPENDIX

Experts interviewed for this paper

Christina Amato
Project Manager
Accelerate IT, TAACCCT Grant eLearning Division
Sinclair Community College

Hudson Baird
Executive Director and Board Member
PelotonU

Kris Clerkin
Executive Director
College for America at Southern
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Maria Scott Cormier
Senior Research Associate
Community College Research Center
at Columbia University

Lara Couturier
Director
HCM Strategists

Alison Kadlec
Senior Vice President and Director,
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American Association of Community Colleges

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Charla Long
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College of Professional Studies at Lipscomb University

Holly Morris
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American Association of Community Colleges

Jamie Scurry
Dean
Roger Williams University School
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Jessica Stumpff
Academic Coach
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ENDNOTES

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23. Phone interview March 24, 2016, with Project Manager Christi Amato and Academic Coach Jessica Stumpff, of Accelerate IT, TAACCCT Grant eLearning Division, Sinclair Community College.

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