



Moving Competency-based Education Forward

Lessons from five years of direct assessment implementation

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Foreword

By Charla Long

Talk to any group of college leaders, and they will tell you how intrigued they are by the potential of competency-based education (CBE). In a recent national survey¹ by the American Institutes for Research, the vast majority of institution respondents said they were interested in or in the process of adopting CBE. They noted that CBE has the potential to simultaneously improve the connection between education and career and expand degree attainment among Americans not well-served by traditional postsecondary models.

Yet, only 1 in 10 of the institutions surveyed met the threshold for actually offering a CBE program. That is consistent with other national estimates, which suggest only about 600 colleges and universities offer some form of CBE. And only a handful of institutions offer the most progressive form—direct assessment—which completely separates learning from the arbitrary time constraints of seat time. The reason for the disconnect, all too often, is uncertainty.

Institutional leaders see CBE, especially programs that are untethered from time, as risky. This perceived risk is not based on evidence—but because of a lack of evidence about best practices and student outcomes in today’s CBE programs. We need far more information about what works in CBE in order to inform both institutional practice and federal policy. That is why C-BEN, the nation’s only network for CBE programs, recently adopted quality standards that specify that excellent programs must not only be evidence driven, but also actively share their information with students, faculty, and the broader higher education field.

With this report, Capella University is among the first institutions to fully embrace that challenge, sharing both outcomes and critical lessons learned from the first five years of offering direct assessment through its FlexPath model. We learn that its direct assessment bachelor’s and master’s programs are delivering on many of the promises of CBE—speeding time to degree, reducing cost, and increasing flexibility for students, all without sacrificing quality. We learn that with the right structure, CBE programs can grow beyond a niche to expand access for a large number of students. Since launching FlexPath, Capella’s direct assessment programs have produced over 6,000 graduates, and 7,000 students are currently enrolled. Many of those learners would have never made their way to—and through—higher education if they did not have the flexibility that direct assessment provides.

Capella is sharing its outcomes and insights at an especially critical time, as Congress, through a potential reauthorization of the Higher Education Act, and the U.S. Department of Education are rethinking a host of policies and regulations that have a direct impact on the structure and growth of CBE. It is essential that those debates—and the ultimate policy changes—be informed by robust information on student outcomes.

The release of this report represents an important step in broadening policymakers’ and the higher education field’s understanding of CBE. My sincere hope is that Capella University is the first of many institutions to boldly share the results of its competency-based programs.

Charla Long is executive director of the Competency-Based Education Network

¹ <https://www.air.org/sites/default/files/National-Survey-of-Postsec-CBE-2018-AIR-Eduventures-Jan-2019.pdf>

Executive Summary

Competency-based education (CBE) has the potential to transform the way we deliver and quantify learning—and to open up a wider range of educational pathways for today’s diverse students. The focus on verified learning and achievement, which allows students to move at their own pace, is particularly promising for adult learners who are often working full time and raising families. The best competency-based programs are also designed to develop and measure high-demand skills, and they enable graduates to more clearly demonstrate their capabilities to employers.

Two years ago, Capella University and Whiteboard Advisors released a policy primer² that highlighted both the potential of CBE and the barriers to its expansion. What Deborah Bushway, former senior policy advisor to the Under Secretary of Education, wrote then remains true today: “Many educators are hopeful that this generation of CBE programs will prove to be sustainable while fulfilling the promises of increased focus on learning outcomes, strong alignment to the needs of both employers and society, and valid and authentic assessment of competencies.”

Despite such promise, CBE faced a number of impediments two years ago that persist today. In particular, we identified the twin challenges of an inconsistent understanding of various forms of CBE—including direct assessment, which divorces learning from the credit hour—and insufficient research on outcomes. Both remain significant barriers.

Given that, Capella felt it was critical to share early outcomes as the first institution in the country approved by the U.S. Department of Education to offer federal financial aid funds for competency-based direct assessment programs at the bachelor’s and master’s degree level. This new whitepaper shows that, after five years, the direct assessment programs are demonstrating an approach does in fact create more flexible pathways for students while maintaining quality. It enables more students to demonstrate mastery of key concepts and professionally-aligned skills on their own terms. Capella has found that direct assessment students typically:³

- Have a higher two-year persistence rate than their like peers in Capella’s traditional programs.
- Progress more quickly through bachelor’s and master’s degree programs, compared to similar students in Capella’s equivalent credit-hour programs.
- Are charged less in tuition and borrow less than like students in Capella’s equivalent credit-hour programs.

² <https://www.whiteboardadvisors.com/sites/default/files/Competency-Based%20Education.pdf>

³ See page 12 for detailed data, and page 19 for how this information was calculated.

Nevertheless, the potential of direct assessment, and CBE more broadly, remains largely unrealized. Practitioners and policymakers have been working seriously to expand CBE for more than a decade, with heightened focus in the past five years. But advancements have been uneven—although there are hundreds of institutions experimenting with some form of CBE, only a handful of institutions in the country are authorized by the U.S. Department of Education to offer federal financial aid for direct assessment programs. While the early results are positive, the field remains hamstrung by a lack of understanding both within higher education and the public, anachronistic policies around the disbursement of financial aid, and insufficient capacity for change management at colleges and universities. All have held back the development and growth of CBE. In Capella’s experience, to help broaden the understanding of CBE and move the field forward, we must focus on:

- **Identifying CBE models that work.** Such models should support high standards for student learning outcomes while also reducing the cost of completion and increasing value for students.
- **Redefining the academic calendar.** Policymakers should allow for new academic programs that are not limited by the traditional constraints of credit-hour education financing.
- **Increasing options for attaining an affordable degree.** Education financing should create more opportunities for students, no matter their personal challenges, to access affordable, high-quality postsecondary education.
- **Engaging employers.** Institutions should continually identify ways to facilitate meaningful connections between higher education and employers.
- **Creative deployment of faculty.** Faculty are critical to the success of any educational model, and CBE has the potential to redesign how faculty engage students and ensure their success.

In sharing insights and outcomes from Capella’s experience with direct assessment, we hope to advance the understanding of CBE and specifically direct assessment, and to inform both institutional practice and policy solutions that expand the available education pathways for today’s students.

Finally, a disclosure: Whiteboard Advisors wrote this paper with Capella University with the goal of sharing the university’s experience, outcomes, and perspective to inform the field and public policymaking.

ABOUT WHITEBOARD ADVISORS AND CAPELLA UNIVERSITY



Whiteboard Advisors is a social impact agency for education. For more than 15 years, our team of educators, policy wonks, and storytellers has brought an unmatched understanding of the policy landscape to our collaboration with the most transformative organizations and entrepreneurs in education. We're passionate about taking breakthrough ideas to scale to reimagine how we learn, work—and live.



Capella University is accredited by the Higher Learning Commission. Founded in 1993, the university is dedicated to providing flexible, professionally aligned online degree programs designed to help working adults advance in their careers. As of March 31, 2019, more than 39,000 students were enrolled in Capella's bachelor's, master's, doctoral, and certificate programs. Known for its commitment to learner success, academic quality, and innovations in online education, Capella pioneered competency-based direct assessment programs allowing students to learn at their own pace.

About the Authors

Jillian Klein is Vice President of Government and Regulatory Affairs for Strategic Education, Inc. where she works with internal and external partners on higher education policy, postsecondary innovation and federal financial aid compliance on behalf of Capella University and Strayer University. She was part of the team that created Capella University's competency-based direct assessment program offerings (FlexPath), including the first bachelor's and master's level direct assessment programs approved to offer federal financial aid by the Department of Education. Jillian received a B.A. in business administration from Augustana College in Sioux Falls, South Dakota, and a M.A. in systematic theology from Luther Seminary. She is an alumna of the Policy Fellows program at the Humphrey School of Public Affairs at the University of Minnesota, and in 2019 participated as a non-federal negotiator in the Department of Education's negotiated rulemaking on both the Accreditation & Innovation Committee and Distance Learning Subcommittee. Jillian lives in Minnesota with her husband and two young girls.

David DeSchryver focuses on complex market research and analysis on emerging markets in the education and corporate training sector. Recent writing includes "Beyond Bootcamps: Policy Considerations for Accelerated Learning," "Accelerating Change: How education technology developers can jump-start a new adult education market" and "The Actual Dollars That Will Shape the New K-12 Investment Ecosystem."

David has been part of a wide range of cutting-edge education issues over his 20-year career. He helped state policymakers understand and craft their own charter school laws in the 1990s. He was an early employee of SchoolNet during the pioneering days of "data-driven-decision making," helping to build the K-12 learning management systems market in the early 2000s. As an attorney at the national education law firm of Brustein & Manasevit, he represented state educational agencies and local educational agencies on federal fiscal, procurement, and policy strategy and compliance matters during the heydays of No Child Left Behind and the American Recovery and Reinvestment Act.

David frequently presents on his work and experiences at national conferences, including the National Association of Federal Education Program Administrators (NAFEPA) and its state affiliates.

David received a B.A. in history and political science from Kenyon College and a J.D. from the George Washington Law School. He is a member of the District of Columbia Bar Association and the Maryland Bar Association. David lives in Washington D.C. with his wife, son, and daughter.

The Destination: The Potential of Competency-Based Education

Competency-based education (CBE) has the potential to expand the pathways to a degree—making higher education possible for today’s students. Direct assessment, in particular, can provide a path to a degree for individuals who are not able to pursue education within the normal framework. A specialized form of CBE, direct assessment programs are free from credit hour requirements and use authentic assessments, rather than seat time, to measure learning. Direct assessment allows students far more flexibility in when they learn and at what pace and intensity than do traditional or even other competency-based programs. This allows students to move more quickly through concepts that are more familiar—and, just as important, it allows students who need more time, for various reasons, to slow down and spend more time on the content areas that are more challenging for them.

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When we look back on higher-ed reform early in the early 21st century, we may see the dawn of competency-based learning as a watershed moment that, like the GI Bill, forever alters our perception of the typical college student.⁴



Dr. Richard Senese
President of Capella University

David Bergeron, senior fellow for postsecondary education at the Center for American Progress, sees particular promise for the significant number of adults who work unpredictable or highly-seasonal schedules, as well as individuals with learning styles or disabilities that make self-pacing highly beneficial. “Direct assessment opens up education to a whole range of students who didn’t have access before,” he says.⁵

The appeal of CBE is also deeply rooted in its potential to create a common language between colleges, students, and employers. Indeed, creating a tighter connection to work is perhaps the holy grail of education today. Adult learners are almost singular in their focus on using education to advance in their careers. And even among traditional-aged students, 85 percent say they were motivated to go to college in order to get a better job—the most cited reason.⁶ At the same time, however, there is growing concern that higher education is not actually preparing students well for today’s high-growth jobs. Just over 40 percent of recent college graduates are underemployed, working in jobs that do not demand their level of training.⁷ And only about half of employers in a recent nationally-representative survey agreed that degrees are “fairly reliable representations of a candidate’s skills and knowledge.”⁸

4 <https://www.edsurge.com/news/2016-03-24-the-shift-toward-competency-starts-with-faculty>

5 Interview on March 18, 2019

6 <https://www.heri.ucla.edu/monographs/TheAmericanFreshman2016.pdf>

7 https://www.newyorkfed.org/research/college-labor-market/college-labor-market_underemployment_rates.html

8 https://www.northeastern.edu/cfhets/wp-content/uploads/2018/12/Educational_Credentials_Come_of_Age_2018.pdf

In an era when employers are increasingly skeptical of the value of a degree, CBE can bring greater clarity to both the skills we should be teaching and how we should be measuring them. It eschews old proxies for talent in favor of real evidence of skills and competencies and allows institutions to be confident that their graduates can do what they say they can do. In its best form, it creates transparency for students who deserve a better understanding of how their studies map onto their career aspirations.

Despite the promise of CBE, significant challenges persist. In the policy primer⁹ released in early 2017, we identified the challenges of inconsistent understanding of and insufficient research on CBE, and two years later, they remain major barriers to the growth of CBE. Two years, of course, is a short period of time in the historical evolution of higher education. But we no longer have the luxury of evolving over decades. Technological change is driving rapid shifts in the workforce and the skills employers demand. Already, 44 million working-class adults in the United States are not earning a living wage.¹⁰ They do not have time to spare. Neither do the growing number of new high school graduates from backgrounds not traditionally well-served by higher education.

To be sure, the number of institutions experimenting with CBE is growing. By some estimates, at least 600 colleges and universities are offering or designing some form of CBE, up from just a handful a decade ago. And a recent national survey by the American Institutes of Research (AIR) indicates that the growth may be far more widespread. It found that 86 percent of institution respondents were interested in or in the process of adopting CBE, and 75 percent expected the field to grow in the next five years.¹¹ “There’s a lot of optimism about the growth of CBE,” says Kelle Parsons, a senior researcher at AIR who led the survey. “Our survey found a lot of recognition around the potential benefits of CBE, especially around expanding access for ‘nontraditional’ learners and improving workforce readiness.”¹²

However, that same survey found that the vast majority of institutions are still in the early planning phases or have adopted components of CBE but not implemented full programs. Only 10 percent reported having a fully-operational CBE program. Institutions interested in CBE, and especially direct assessment, are often constrained by operational challenges associated with federal financial aid delivery and their own internal processes. The existing federal financial aid program, for example, is built around the credit hour and based on the assumption of a full-time learner who is a student first and foremost. A panel advising the U.S. Department of Education on changes to higher education regulations through the negotiated rulemaking process has called for creating a framework that allows federal financial aid to be disbursed based on subscription periods rather than a set course load during a term. The rules would base student eligibility on a form of academic progression that more accurately reflects the contemporary, part-time student and removes the quantitative satisfactory academic progress standard for direct assessment programs. These changes, if well-implemented, have the potential to remove a key barrier to the expansion of CBE while continuing to safeguard learners.

Beyond operational challenges, the field continues to have an inconsistent understanding of CBE. “There is a lot of conversation about what assessment looks like,” Parsons says, “but there is still a lot of confusion outside the core circles of CBE about what assessment can and should capture, especially as it relates to

⁹ <https://www.whiteboardadvisors.com/sites/default/files/Competency-Based%20Education.pdf>

¹⁰ <https://go.stradaeducation.org/on-ramps>

¹¹ <https://www.air.org/sites/default/files/National-Survey-of-Postsec-CBE-2018-AIR-Eduventures-Jan-2019.pdf>

¹² Interview on March 12, 2019

fundamental competencies like critical thinking and ethical reasoning.” The lack of a common language around competencies and assessment makes information-sharing, iteration, and potential policy change especially challenging. So too does the sheer number of different forms of CBE. The CBE Network (C-BEN) describes the wide umbrella as follows:

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

Thus, CBE encompasses a wide range of programs—from traditional programs that incorporate competencies but are still measuring progress by clock time and credit hours to those that are building entirely new instructional models. At the non-traditional end of the spectrum are institutions that employ direct assessment, as with Capella’s programs offered through FlexPath. This type of program, authorized in a narrow way under the 2008 reauthorization of the Higher Education Act, represents a significant departure from how the U.S. Department of Education traditionally requires institutions that receive federal student aid to operate. Only a handful of institutions—including Southern New Hampshire University (SNHU), Capella University, University of Wisconsin-Extension, Brandman University, Walden University, and Texas State College System—are currently authorized to operate such programs.

The implications of these direct assessment programs for students and institutions are significant. Direct assessment programs provide far more flexibility for students, allowing them to move through material at their pace. This allows them to take the time they need—even if it’s a year or more—to truly master a competency. Alternatively, students who master material more readily can move much more quickly through a direct assessment program than a traditional one.

But the higher education field still has a relatively limited understanding of the student outcomes that direct assessment, and CBE more broadly, can deliver. We need to grow the research base about the relative strengths of various approaches to CBE. Greater sharing of outcomes, promising practices, and persistent challenges would help us to develop a common vocabulary and to speed iteration for existing programs and implementation for new entrants.

Policymakers and educators should not be hasty in changing the fundamentals that underpin the higher education system, but we also need to get serious about creating more flexibility for students not well-served by traditional higher education. With this paper, we hope to encourage practitioners and policymakers to move from talking about refining and further developing CBE to actually doing it. We hope to contribute to the shared understanding of the field by highlighting student outcomes in our FlexPath programs and discussing the central lessons we have learned from five years of providing education through direct assessment.

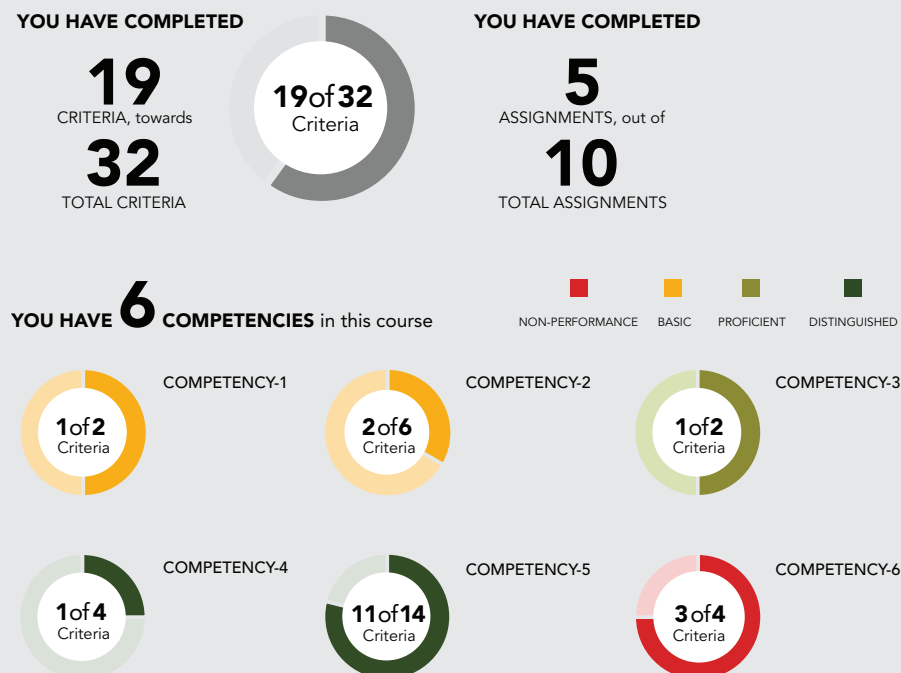
Learning from one another, we can move CBE from a promising innovation to a broad-based model that expands opportunity for today’s students.

FlexPath: The First Five Years

In 2013, Capella became the first institution in the country approved by its accreditor and the U.S. Department of Education to award federal financial aid for direct assessment programs at the bachelor's and master's level. Capella's direct assessment programs, called FlexPath, built on the university's strong assessment infrastructure and long history of offering professionally-aligned, competency-based programs. Since launching, Capella's direct assessment programs have over 6,000 graduates.






FlexPath uses a mastery model, which requires learners to demonstrate proficiency in all competencies before they are able to complete their degree. Students work closely with faculty and tutors throughout their courses, and their programs test critical competencies using assessments that mirror activities required in a given profession. Programs operate on a 12-week subscription period basis, which gives students an all-you-can-learn format for pursuing their degrees. The university's competency map (see figure 1 for example) allows students to track their progress and see how their studies align with skills in high demand from employers. This is a valuable tool for learners, both during their educational programs and upon completion of their credentials, as students have a visual representation of their competency attainment and mastery level that they can share with employers.

Figure 1



Capella's direct assessment programs are mapped to the same learning outcomes as the university's credit hour programs, which enables the university to directly compare data on the two and see how direct assessment is working and the ways in which it can be improved. Key outcomes from the first five years demonstrate that direct assessment is speeding time to degree and driving down costs for students while maintaining quality.¹³

Outcomes from FlexPath's first five years

	The median time to complete for direct assessment bachelor's programs was 59% FASTER than similar learners in equivalent credit-hour bachelor's programs.
	The median time to complete for direct assessment master's programs was 42% FASTER than similar learners in equivalent credit-hour master's programs.
	The median federal financial aid borrowed by a FlexPath student was \$11,739. This is 45% LESS than a student in equivalent Capella credit-hour programs.
	The median tuition billed to a FlexPath student was \$10,548. This is 59% LESS than a similar learner in an equivalent credit-hour program.
	In the last quarter of 2018, the two-year persistence for FlexPath learners was 23% HIGHER than in equivalent credit-hour programs.

These early outcomes and our experience over the past five years have taught us a great deal about the strengths and challenges of direct assessment programs. These insights are helping the university refine FlexPath for over 7,000 current learners, and it is sharing them in the interest of helping other institutions as they develop and fine-tune their own competency-based programs.

¹³ Capella used a propensity score matching methodology in comparing FlexPath and GuidedPath students, adhering to prevailing standards for reliability. See page 19 for details on how this information was calculated. Although this information reflects the typical experience of a FlexPath student, competency-based, direct-assessment programs are inherently flexible, allowing for a wide range of student experiences. Capella is careful to educate prospective students that their own experience in the program will depend on a variety of factors, including how many transfer credits they bring and how quickly they move through their coursework. The first four metrics are measured for students who started their program after October 1, 2013 and graduated on or before December 31, 2018.

Direct assessment delivers savings in both time and money.

The direct assessment programs have proved a powerful tool for saving students both time and money. Students both were charged less and borrowed less than their counterparts in equivalent programs tied to the credit hour. These cost savings demonstrate the power of the mastery model of education to create more affordable pathways for students, particularly working adults.

Freed from the credit hour, direct assessment programs allow students to move more quickly through the competencies with which they are more familiar and slow down and take more time with concepts that are less familiar. This model allows students to fit education into their lives, at the intensity level and at times that work for them.

Students also are realizing cost savings in the direct assessment programs because the model is largely agnostic about the source of learning. Students are provided with robust resources in the courseroom, but are able to use any resource they would like to develop mastery of the material. Students always receive substantive feedback from faculty, but they can also work with tutors, online resources, the university library, textbooks, or a multitude of other resources. Students determine the size of their investment into course materials, which can lower the total cost of education.

Students value flexibility.

When the university began designing direct assessment programs, institutional leaders quickly agreed to a subscription pricing model. They thought that, with a low price point and a billing model that created an incentive for students to move faster, almost all students would move more quickly through program requirements. However, the university soon saw that the challenges facing contemporary students at any institution—mainly, time constraints—affected students in the direct assessment pathway, too. While many FlexPath students are moving more quickly through their programs, saving both time and money on their education, some students move at about the same pace as their counterparts in the traditional online programs.

We found that these learners generally were drawn to direct assessment because of the flexibility it provides. For many, juggling part-time or full-time jobs and family commitments precluded traditional education, even online, from being a viable path to degree completion. They placed a premium on a learning model that was divorced of credit hour requirements, allowing them to move more quickly when they had available time or were more familiar with a concept and to slow down when they needed to. This model allows the student to fit education around their lives, not the other way around.

The importance of investing in tools to support students cannot be overstated.

“Self-paced” shouldn’t ever mean that students are left to navigate on their own. Students need well-designed supports in order to be successful, and if anything, direct assessment programs should be especially thoughtful and personalized in their approach. Some of our early ideas about the best support model have shifted and evolved as we learned what resonates most with students. For example, we thought students attracted to a direct assessment program would be laser-focused on academic and career outcomes, and less interested in investing time in a college community. But we found that many FlexPath

learners wanted opportunities to build connections and community with other students, and we have since created mechanisms for them to do so in a form and frequency of their choosing.

We have invested in consistent communication, reaching out via text, email, courseroom messaging, and phone calls to effectively deliver the right message at the right time to each student. FlexPath's innovations in the student support model have benefited from a rich infrastructure of data analysis that provides insight into what student activities make a learner in the direct assessment programs more or less likely to succeed. In addition, offering both direct assessment and credit-hour programs that result in the same learning outcomes has allowed the university to compare apples to apples in order to understand what is working and what needs to be improved within specific program offerings.

Because direct assessment doesn't look exactly like a credit-hour program, orienting students before they start their program is especially critical. All incoming direct assessment students go through a required orientation that helps them understand what to expect in the courseroom, policies, how to stay on pace towards completing their degree, how billing works, and what the financial aid disbursement process looks like. At the end of orientation, students even submit a sample assessment upon which they receive feedback, which helps them to get a real feel for what to expect and how to be successful.

Finally, the institution made the decision to invest in coaches to support students in the direct assessment model, and this investment has been integral to the success of the model. This role is much more than an academic advisor to students. The coach is a dedicated support position that helps learners overcome obstacles they encounter in their educational journey—time management, resources, sometimes even personal matters. Interactions between the coach and the student are largely based on student preferences in terms of the type and frequency of communication. With some students, these interactions are almost daily, while with others they are less frequent. Coaches follow students through their courses and provide a consistent, personal point of contact who can help students remove obstacles to effective learning and, ultimately, complete their degree.

Faculty—no matter how the role changes—remain integral to student success.

In five years of gathering data and listening to students, the university has experimented with a variety of design elements when it comes to determining how to most effectively deliver the direct assessment model to students. One such change has been experimenting with a disaggregated faculty model versus a more traditional faculty model. Institutions often assume that disaggregated faculty models—where some portion of the workload of the faculty of record is shifted to secondary resources—are a necessary element of a CBE program. The rationale is that this model ensures that the highest-value work can be completed by the most skilled faculty and that there are benefits to the faculty and to the student when a single faculty member is not required to be all things to all students.

To this end, we say: the jury is still out. In FlexPath, we have seen pros and cons to both a more traditional faculty role and also of an unbundled faculty model. As one example, even with a very clear delineation of responsibilities in the courseroom—and overt communication about it—students accustomed to a more traditional faculty model can still get confused about which faculty member to consult on which issues. What is abundantly clear, however, is the importance in general of the role of the faculty—no matter what

that model looks like—within these innovative learning programs. As Richard Senese, president of Capella, recently wrote: “All too often...we consider the evolving demands of students to be at odds with faculty mores and preferences. Our experience flies in the face of that conventional wisdom.”¹⁴ From course and program design, to tutoring and one-on-one instruction, to evaluation and feedback, the role of the faculty is integral to the success of students.

And as the role of the faculty model continues to evolve across the higher education landscape, it is critical that we ensure faculty are at the table in conversations about how their role is evolving to meet the needs and expectations of the contemporary student. The faculty model within direct assessment, even when it follows a more traditional pattern, looks markedly different than how the faculty role has historically looked. Without support from faculty, as well as from academic leadership, the CBE movement will experience significant challenges in maintaining momentum.

The existing federal financial aid construct needs to evolve to meet the needs of students in direct assessment programs.

Five years in, we can say one thing above all else regarding offering direct assessment programs: the existing federal financial aid system—based on credit hours and assuming traditional enrollment patterns—is not optimal for evolving learning models. From the start, it was clear that the university was going to have to retrofit the direct assessment programs into existing, largely antiquated funding rules in order to get federal financial aid dollars to students. This presented a significant challenge to the institution, and across the field of higher education, it has reduced the number and type of institutions that have the resources and capacity to offer direct assessment programs to students.

The direct assessment model, which allows students to begin their program in any month, complete courses at any time, and was developed to minimize any gaps between courses, requires an unnecessarily complicated financial aid delivery model. Despite its independence from time and its inherent flexibility, it continues to be tied to credit hour requirements for the purposes of federal financial aid, which creates confusion for students and unnecessary burdens for institutions.

A panel, through a negotiated rulemaking process, recently recommended that the U.S. Department of Education create a framework for delivering federal financial aid to direct assessment programs using subscription periods. That framework would base student eligibility on a form of academic progression that more accurately reflects the educational course of part-time students. In our experience, this change would greatly reduce students’ confusion around financial aid and enhance their access to necessary funds.

The panel also recommended that the aid system remain tied to the credit hour, which will still require complicated translation for direct assessment programs. The credit hour has a long history, and it should only be replaced by a viable alternative that can truly measure learning. Policymakers, researchers, and CBE leaders must work to develop a currency outside the credit hour to measure learning, whether that is a “competency unit” or another measure. Until that time, the credit hour remains the best protection for students and will continue to exist as the backbone of most financial aid funding in the United States. Ultimately though, maintaining the credit hour standard means flexible programs cannot be as flexible as they need to be to meet the needs of the contemporary student.

¹⁴ <https://www.edsurge.com/news/2016-03-24-the-shift-toward-competency-starts-with-faculty>

The Way Forward

Although the direct assessment movement is still in its infancy, direct assessment programs across the country are making incremental, important gains in understanding how to better meet the needs of the changing postsecondary population. But we are a long way from fully realizing the potential of learning models that offer true flexibility and permit students to marry the experiences they have with higher education opportunities. Direct assessment is just one piece of a very complex postsecondary landscape that can include prior learning assessments, workplace credentials, job training, and more. The higher education policy community's next task will be to weave together these opportunities into a cohesive, accessible model that helps move students forward—and that is no small endeavor.

The first step to understanding the potential and existing impact of CBE is to invest in the data infrastructure to help develop postsecondary policies that are based on measured outcomes and program results. These results can and should stand alone, but they should also be compared to results that are observed within credit-hour programs. More analysis is also needed to understand how we can truly flip the model in education and begin to measure and incentivize outputs in learning instead of inputs. This work stands to benefit not just institutions—and their students—but also employers and other stakeholders who benefit when graduates possess professionally-aligned skills.

To advance the conversation around CBE, we published a policy primer in 2017 detailing how direct assessment fit into the broader narrative on CBE and where, in the opinion of the authors, policymakers and practitioners should focus their efforts in order to make the practice an accepted (and maybe even the preferable) pathway within the higher education landscape.

Two years later, the experiences and the data from FlexPath are beginning to clarify how CBE can address the pressing issues identified in the 2017 primer. The table below provides a quick inventory of the key issues and lessons.

Pressing Issue	Lessons ¹⁵
<p>Identifying CBE models that work. CBE models should support high standards for student learning outcomes while also utilizing new technologies and innovative program design that reduce the cost of completion and increase the value of experience for students.</p>	<p>Capella's competency-based direct assessment program, created with an all-you-can-learn, 12-week subscription model, produced over 6,000 graduates since its launch. Another 7,000 students are currently enrolled. Students who may have struggled in traditional conditions (or not attended at all) are demonstrating laudable persistence. Over 85 percent of learners demonstrate a higher level of competency on assessments upon the next attempt resubmission. Students are receiving and integrating formative faculty feedback into their assessment creation to demonstrate mastery over professionally-aligned skills and competencies.</p>
<p>Redefining the academic calendar. Policymakers should envision and allow for the design of new academic programs that are not limited by the traditional constraints of credit-hour education financing.</p>	<p>Students do benefit from a flexible calendar. Direct assessment is lowering student costs. The median tuition billed to a FlexPath student was \$10,548. This is 59 percent less than a similar learner in an equivalent credit-hour program.¹⁶ Notwithstanding, current credit-hour financial aid rules are tethered to the traditional academic-year programs and credit-hour course schedules. This causes confusion for students who have to wade through aid package options and imposes unnecessary costs on institutions.</p> <p>This challenge will be substantially, though not completely, addressed by the U.S. Department of Education's plans to create a framework for delivering financial aid to direct assessment programs using subscription periods. That framework would base student eligibility on a form of academic progression that more accurately reflects the educational course of part-time students.</p>
<p>Increasing options for attaining an affordable degree. Program and related education financing should create more opportunities for students, no matter their personal challenges, to access affordable higher education.</p>	<p>Costs and time are key drivers of opportunity and completion. Today, the average student is older and already wading through a career, so delivery on the promise of faster and cheaper (with quality) needs to be actualized. CBE can deliver on that promise. The median time to complete for direct assessment bachelor's programs was 59 percent faster than for similar students in equivalent credit-hour bachelor's programs and 42 percent faster for direct assessment master's programs.¹⁷</p> <p>We need more CBE models, including those that blend direct assessment and traditional delivery, to expand student options. The U.S. Department of Education plans to change federal rules to permit programs that blend both direct assessment and traditional delivery models to operate.</p>
<p>Engaging employers. Institutions should continually identify ways to facilitate meaningful connections between higher education and employers.</p>	<p>Actual workplace performance is the preferred way to ensure program and assessment authenticity. Industry experts work with the FlexPath programs to ensure that the courses and assessments are simulations of activities that the industry values. In some instances, students are able to demonstrate skills and competencies on the job. Yet the interaction between industry demand data and the development of CBE programs and courses is still sluggish. Employers and institutions need to explore ways to better use data solutions like the Chamber of Commerce's Job Data Exchange™ (JDX). Employers should also adopt tools—such as pre-hire assessments—and processes that allow them to hire based on competencies and demonstrated skills, rather than just credentials.</p>
<p>Creative deployment of faculty. CBE has the potential to redesign how staff and faculty regularly and substantively engage students and ensure their success.</p>	<p>The needs of the student should dictate the design, not the other way around. The role of faculty is integral to the success of students. Some students may benefit from a traditional model while others may benefit from an unbundled system of support from many staff and faculty. FlexPath has tested a variety of models and each—when working from a clear map of learning objectives, skills, and competencies that a student will acquire during the course—offers value to the student.</p>

¹⁵ Capella used a propensity score matching methodology in comparing FlexPath and GuidedPath students, adhering to prevailing standards for reliability. See page 19 for details on how this information was calculated. Although this information reflects the typical experience of a FlexPath student, competency-based, direct-assessment programs are inherently flexible, allowing for a wide range of student experiences. Capella is careful to educate prospective students that their own experience in the program will depend on a variety of factors, including how many transfer credits they bring and how quickly they move through their coursework. The first four metrics are measured for students who started their program after October 1, 2013 and graduated on or before December 31, 2018

^{16, 17} From October 2013 to December 2018

The lessons, of course, do not resolve the issues. Rather, they provide more color and context to the issues by offering data points that should advance the conversations and work ahead on improving higher education programming and financing.

Capella University invites an ongoing conversation about the pressing issues for CBE and how (or whether) the lessons and data from five years of direct assessment programs provide any clarity and direction. Likewise, the university hopes the Department of Education will share what it has learned under the Experimental Sites Initiative (ESI) authority. Over the past several years, the Department of Education has used the ESI to test changes to federal financial aid awarding and disbursing, but to date the broader community has yet to see the results and learnings from those experiments. Policymakers and the broader higher education community would benefit from information gathered from the Aid for Prior Learning, Limited Direct Assessment, and CBE experiments, in addition to the EQUIP experiment, as the broader community works to make data-driven decisions about how to construct the next generation of federal financial aid funding models.

Conclusion

Outcomes from five years of the country's first direct assessment programs approved to offer federal financial aid for bachelor's and master's degrees show both the potential of and the persistent limitations to that approach. We can create flexible education pathways that allow students to move at the pace that makes the most sense for them. Some students will choose to move more slowly — allowing them the time they need to demonstrate true mastery — while others will be able to move more quickly. Our experience shows that, on average, direct assessment both speeds time to degree and reduces cost. But current federal regulations, particularly around financial aid and the credit hour, have slowed the expansion of such pathways. Planned changes to financial aid rules, which would allow aid in direct assessment programs to be disbursed based on subscription models, will reduce barriers to expansion. Government leaders and the higher education field must continue to encourage policies that promote innovation, protect educational quality, and build evidence that can guide institutions to meet the needs of an ever-changing student demographic. Doing so is critical to enabling more Americans to learn on their own terms and to ensuring that they graduate with the skills employers truly value.

Methodology

Capella used the propensity score matching methodology in developing its comparisons of FlexPath and GuidedPath students. A random sample of 2,000 FlexPath students was used to identify a control pool of 2,000 GuidedPath students using propensity score matching. Simple random sampling was used, which means that the selection probability was the same for all students in the sample. The final sample size was determined based on literature-recommended guidelines, and was the largest sample pool for which it was possible to build an equivalent pool of high-quality matches. The quality of the propensity score match between the sampled pool and the control pool were well within the literature recommended thresholds for usability.

The sampled population included only FlexPath students who began their degree at Capella University in a FlexPath program, and finished or are still enrolled in a FlexPath program. The propensity score matches were sourced from a pool that included only GuidedPath students who began their degree at Capella in a GuidedPath program that has a FlexPath counterpart, and finished or are still enrolled in one of those GuidedPath programs (excluding certificates).

For graduation-related comparisons, the population includes students who started their program after October 1, 2013, and graduated on or before December 31, 2018. For persistence comparisons, the timeframe is also learners who started their program after October 1, 2013, and whose activity took place through December 31, 2018. The graduation and persistence outcomes of the two groups were then compared.