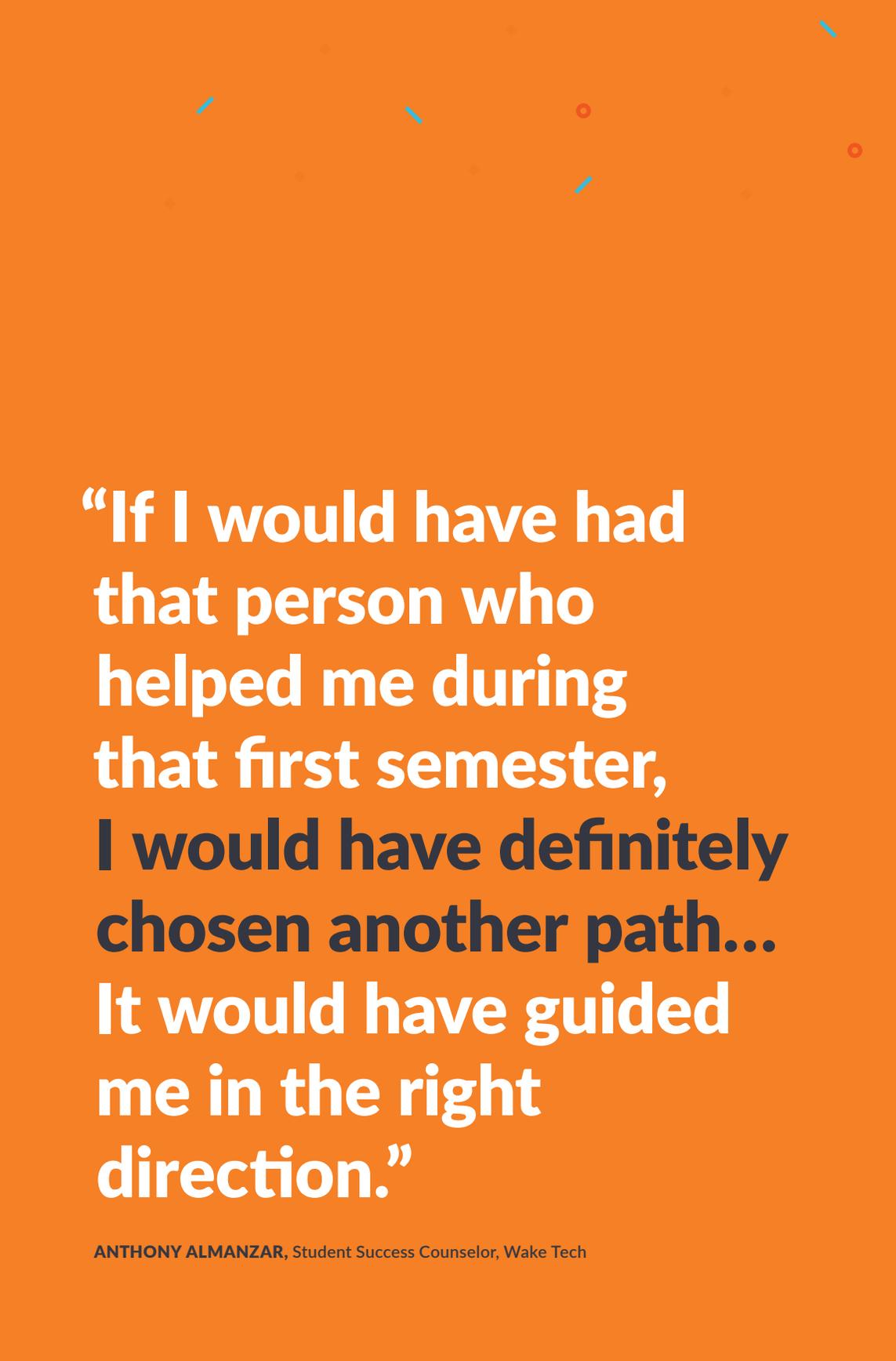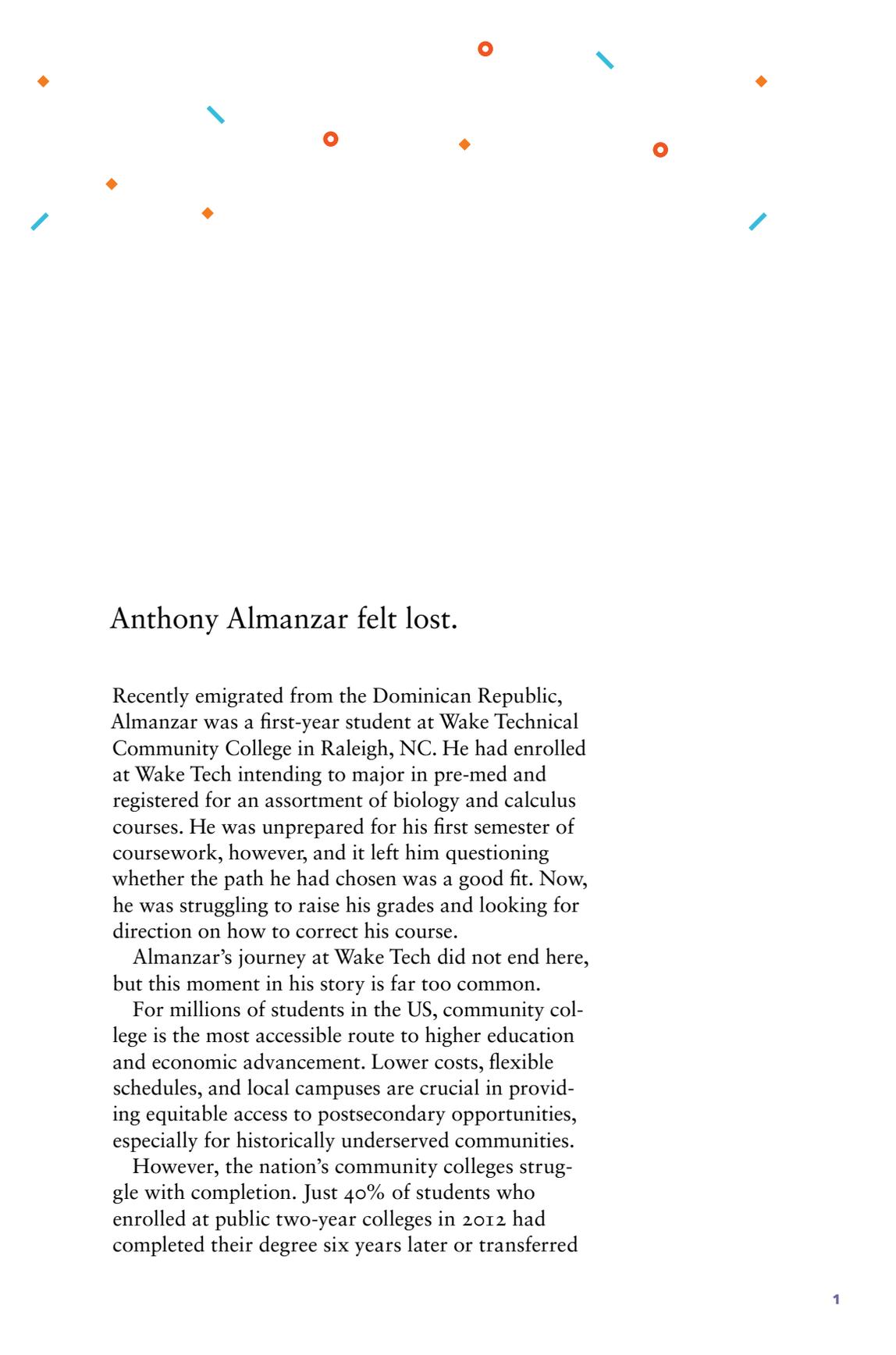# The Path to Completion

Nine colleges redesign for student success

> **"If I would have had that person who helped me during that first semester, I would have definitely chosen another path... It would have guided me in the right direction."**
>
> **ANTHONY ALMANZAR,** Student Success Counselor, Wake Tech

Anthony Almanzar felt lost.

Recently emigrated from the Dominican Republic, Almanzar was a first-year student at Wake Technical Community College in Raleigh, NC. He had enrolled at Wake Tech intending to major in pre-med and registered for an assortment of biology and calculus courses. He was unprepared for his first semester of coursework, however, and it left him questioning whether the path he had chosen was a good fit. Now, he was struggling to raise his grades and looking for direction on how to correct his course.

Almanzar's journey at Wake Tech did not end here, but this moment in his story is far too common.

For millions of students in the US, community college is the most accessible route to higher education and economic advancement. Lower costs, flexible schedules, and local campuses are crucial in providing equitable access to postsecondary opportunities, especially for historically underserved communities.
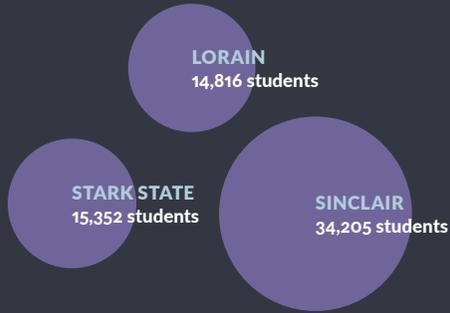
However, the nation's community colleges struggle with completion. Just 40% of students who enrolled at public two-year colleges in 2012 had completed their degree six years later or transferred
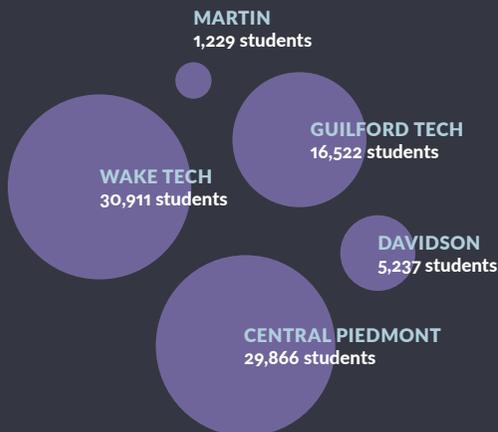
College Profiles[1]

ANNUAL ENROLLMENT

The year-round undergraduate enrollment of full- and part-time credential-seeking students.
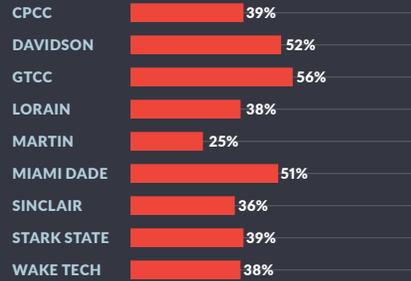
Ohio

LORAIN
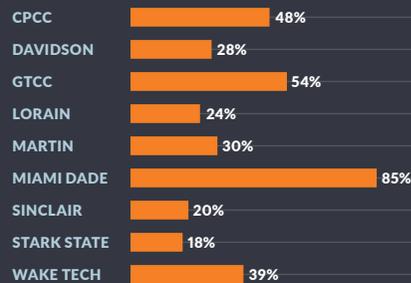14,816 students

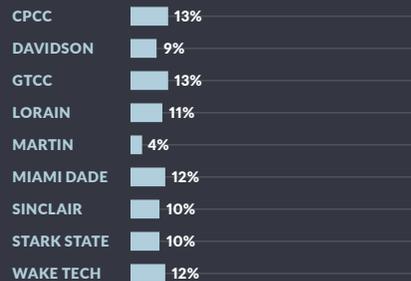**STARK STATE**
15,352 students

SINCLAIR
34,205 students

North Carolina

MARTIN
1,229 students

GUILFORD TECH
16,522 students

WAKE TECH
30,911 students

DAVIDSON
5,237 students

CENTRAL PIEDMONT
29,866 students

Florida

MIAMI DADE
91,749 students

LOW-INCOME STUDENTS (% OF ENROLLMENT)

College	%
CPCC	39%
DAVIDSON	52%
GTCC	56%
LORAIN	38%
MARTIN	25%
MIAMI DADE	51%
SINCLAIR	36%
STARK STATE	39%
WAKE TECH	38%

STUDENTS OF COLOR (% OF ENROLLMENT)

College	%
CPCC	48%
DAVIDSON	28%
GTCC	54%
LORAIN	24%
MARTIN	30%
MIAMI DADE	85%
SINCLAIR	20%
STARK STATE	18%
WAKE TECH	39%

FTEIC* (% OF ENROLLMENT)

College	%
CPCC	13%
DAVIDSON	9%
GTCC	13%
LORAIN	11%
MARTIN	4%
MIAMI DADE	12%
SINCLAIR	10%
STARK STATE	10%
WAKE TECH	12%

% OF FTEIC REQUIRING DEVELOPMENTAL ED

College	%
CPCC	48%
DAVIDSON	22%
GTCC	48%
LORAIN	62%
MARTIN	15%
MIAMI DADE	41%
SINCLAIR	84%
STARK STATE	81%
WAKE TECH	40%
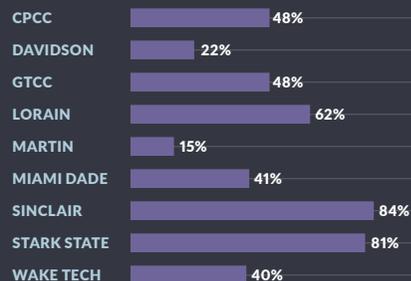
FTEIC = first time ever in college

to a different four-year institution.[1] Not only does this problem of completion matter to individual students like Almanzar, it matters to the national economy as well. In 2020, an estimated 65% of jobs in the US will require a postsecondary education. At that time, the country will face a shortage of five million educated workers.[2]

In 2011, nine colleges joined the Bill & Melinda Gates Foundation on a student success initiative called Completion by Design (CBD). They all shared the premise that addressing the problem of completion requires a long-term, large-scale approach. These colleges recognized they could have a significant positive impact on student success rates if they were willing to redesign their entire institutions around degree completion. Six years later, the student experience at these colleges looks markedly different.

Pre-college advising has been vastly expanded to help students decide on a program, register for classes, and apply for financial aid. Once enrolled, students receive proactive support to help them choose their courses, improve their grades, and navigate life events. Classroom instruction is more student-centered and faculty use new data systems to monitor student progress and conduct interventions. This effort has involved unprecedented levels of collaboration among college administration, faculty, and advising staff. Together, they are having rigorous conversations grounded in data in order to develop new approaches. The transformation in culture that the initiative has inspired can be seen across all nine institutions.

Colleges agreed to track key measures of student success, such as the percentage of first-time-ever-in-college (FTEIC) students completing gateway math and English courses and earning 12 credits in their first term. They set 2019 targets for each metric and the data already validates their efforts. For each of these near-term indicators, CBD colleges on average met or exceeded their targets by 2016. Additionally, the most recent data from the Department of Education shows that from 2009 to 2015, the increase in students earning degrees or certificates was on average over 30 percentage points greater at CBD

STRUGGLING WITH COMPLETION

Just 40% of students who enrolled at two-year colleges in 2010 had completed their degree or transferred six years later.[1]

40%
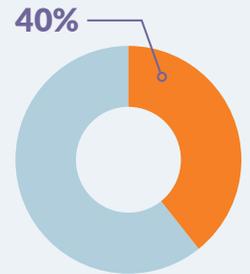
colleges than at other public two-year colleges.[1] There is still more to do, but Completion by Design colleges are seeing progress towards the long-term impact they set out to achieve.
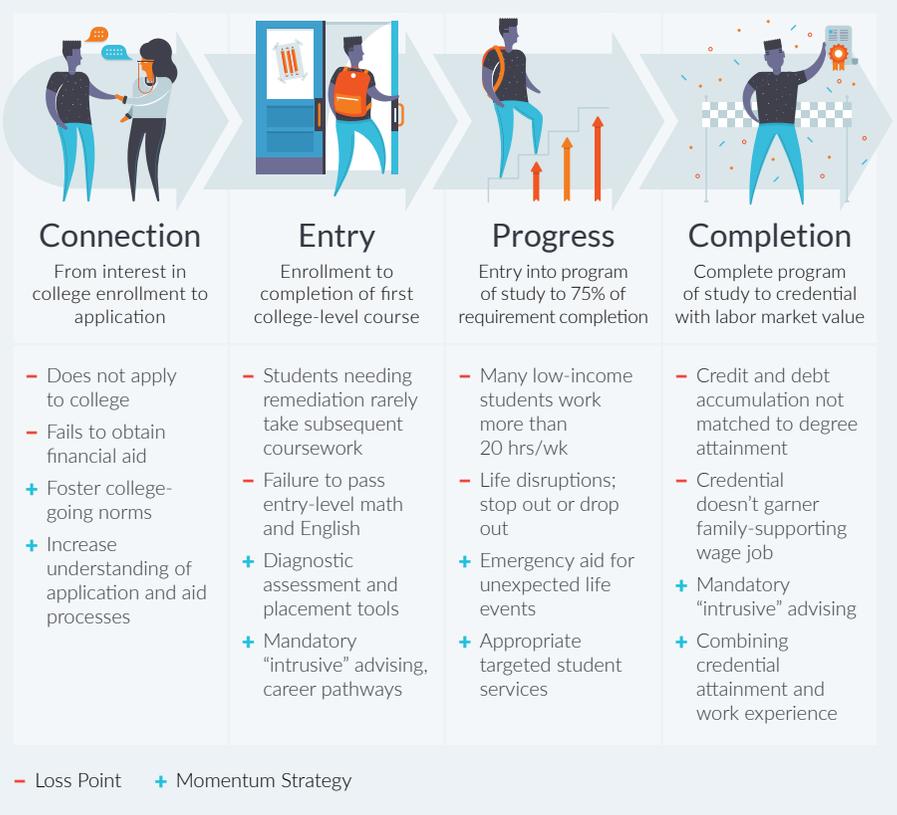
UNDERSTANDING THE CHALLENGE

The colleges involved in the Completion by Design effort varied widely in terms of size and student demographics. In 2015-16, Martin Community College had a year-round undergraduate enrollment of 1,229 credential-seeking students, while Miami Dade College, which is the largest undergraduate institution in the country, had more than 91,000. More than half of the annual enrollment at three different colleges were students from low-income families. The percentage who were students of color

at each college ranged from 18% to 85%.[1] Given the level of their diversity, no college joined the CBD initiative expecting simple answers or one-size-fits-all solutions. They knew that such a complicated problem would require a holistic approach and believed that by tackling the problem together, they would glean valuable insights from one another.

At the start of the initiative, the colleges formed teams composed of faculty, staff, administrators, and students to identify systemic barriers to academic progress and devise means to help students overcome those challenges. They structured their inquiry around a framework that divided the student experience into four distinct stages—connection, entry, progress, and completion. The teams spent six to nine months collecting and analyzing student data, examining research, and conducting surveys in order to better understand the status quo and uncover opportunities for change. Shared insights soon emerged across the institutions:

- CONNECTION: Many prospective students did not understand the application process and had little idea of how to apply for financial aid. In addition, these students often lacked the confidence and resilience needed to persist when problems arose.
- ENTRY: A large number of students lacked adequate preparation for college and many students arrived at college without a long-term plan.
- PROGRESS: Once students decided on a focus for their degree, many had little idea what coursework they needed to take. Students were also unclear on which of their credits would transfer to other local institutions.
- COMPLETION: Even students on the cusp of completion still faced barriers, like graduation fees, that prevented them from attaining their degree.
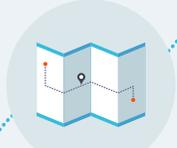
The investigations by the CBD teams revealed a clearer picture of how and when students lost momentum during their community college experience. With this information in hand, the colleges set out to determine the programs, policies, and practices that needed to change.

LOSS/MOMENTUM FRAMEWORK

The Loss/Momentum Framework identifies key loss points and momentum strategies like the ones below across four distinct phases of the college experience.[5]

Connection	Entry	Progress	Completion
From interest in college enrollment to application	Enrollment to completion of first college-level course	Entry into program of study to 75% of requirement completion	Complete program of study to credential with labor market value
− Does not apply to college	− Students needing remediation rarely take subsequent coursework	− Many low-income students work more than 20 hrs/wk	− Credit and debt accumulation not matched to degree attainment
− Fails to obtain financial aid	− Failure to pass entry-level math and English	− Life disruptions; stop out or drop out	− Credential doesn't garner family-supporting wage job
+ Foster college-going norms	+ Diagnostic assessment and placement tools	+ Emergency aid for unexpected life events	+ Mandatory "intrusive" advising
+ Increase understanding of application and aid processes	+ Mandatory "intrusive" advising, career pathways	+ Appropriate targeted student services	+ Combining credential attainment and work experience

− Loss Point   + Momentum Strategy

A PATHWAY FORWARD

The Completion by Design colleges identified five focus areas for their work:

1. ONBOARDING needed to reach students early and in compelling ways.
2. ADVISING had to become more proactive and holistic.
3. Students needed an ACADEMIC MAP that explained the connection between any given course and their degree.
4. Students also needed more robust INSTRUCTIONAL AND CO-CURRICULAR SUPPORT, including academic intervention, extracurricular activities, and financial guidance.
5. To support it all, colleges had to develop COMPREHENSIVE DATA SYSTEMS for monitoring student progress and creating alerts at crucial moments.

The redesign of these component parts evolved into the Guided Pathways approach, where each component works in concert with the others to support students from the connection stage all the way through to completion. While these five focus areas were common across the initiative, the strategies and programs implemented varied from one college to the next depending on the needs of its students and the realities facing its faculty, staff, and surrounding community.

For example, Lorain County Community College reduced 130 programs of study to nine Program and Career Pathways and allowed students a full semester to decide on their concentration. Sinclair Community College, on the other hand, required students to choose a program of study before their first semester and assigned them to "career communities" that offered activities related to their choice. At Guilford Technical Community College, students were assigned to faculty coaches in their field of study, while Miami Dade adopted a three-tiered advisory system that connected with students before they registered, transitioned into first-year advising, and finally, provided mentors through to completion. While the individual strategies varied by college, the inherent scope of developing these Guided Pathways meant that for every institution, the starting point was a foundational shift in organizational culture.

A CULTURE OF COMPLETION

The CBD colleges were no strangers to reform efforts. Many had been leading innovative efforts in faculty engagement, industry collaboration, and other critical challenges. In fact, it was their frustration with the slow pace of change that brought them together to explore a different approach.

Completion by Design was unlike previous initiatives in that it proposed a redesign of the entire community college experience with an eye towards student completion. Effecting this type of transformation required a cultural shift that extended to all corners of the institution.

Reflecting on the CBD initiative, Ron McDonald, a student success counselor at Stark State Community College, asserted that this wholesale change effort required "assistance and cooperation and engagement from lots of different parts of our campus…You have to do a lot of communication to break down some of those silos so that everyone understands what you're trying to accomplish—what they're trying to accomplish." The nine colleges estimated that the design and implementation of new strategies have involved more than 75% of full-time faculty and staff, many of whom had never previously worked together. Participants had to relinquish their usual perspectives in order to adopt a mindset that put student interests above all else. Lada Gibson-Shreve, Stark State's provost and chief academic officer, made clear the centrality of this new perspective. "Completion is the purpose… It's not to have a student walk in the door the first day, it's to have them walk across the stage. So we need to be focused on what it is that we need to be doing in order to help students succeed."

For a number of those involved in the CBD initiative, this shift in thinking was uncomfortable at first. "When we started this transition, I was terrified," reported math professor Jeff Humphrey at Wake Tech. "I had always taught a particular style. I had a routine I was very comfortable with. CBD forced me to come out of my comfort zone. It was very hard for me and it was very hard for the department." Humphrey and his colleagues have since become avid participants of the redesign, but

> **"Completion is the purpose… It's not to have a student walk in the door the first day, it's to have them walk across the stage."**
>
> **LADA GIBSON-SHREVE**, Provost and Chief Academic Officer, Stark State

the key to managing the stress of the transition was an emphasis on shared responsibility for designing and implementing change. "The problem with faculty buy-in is always the suspicion that things happening on campus are top-down," said Jonathan Dryden, provost at Lorain. "So my role was to assure them the focus on student success began with sharing the data with them and then having conversations with them about the specific challenges we face."

The role of senior leadership proved crucial to implementing these institution-wide efforts. Leaders had to be fully committed to the Completion by Design vision while also distributing leadership roles to their faculty and staff. Dave Collins, provost and chief academic officer at Sinclair Community College, also knew that top-down prescriptions would not work. Instead, he and other college leaders reached out to faculty and staff directly. Like Dryden, he recalled approaching them and saying, "Here's what we're faced with. If we want to continue to serve the needs of the community, we are going to have to adapt in a meaningful way." This dynamic was the same at every other CBD institution. "It doesn't happen without the cooperation of the community, the faculty, the staff, and the students," McDonald agreed. "It is truly a group effort."

Which is not to say that this collaborative approach was easy. Interdepartmental teams brought together individuals with different skill sets, expertise, and perspectives on the student experience. Leaders from all levels of the organization had to establish trust among parties that had long had competing agendas. Rodney Veal, adjunct faculty and completion coordinator at Sinclair, facilitated steering committees where faculty and advising staff revealed honest opinions about where they felt the system was breaking down. Veal described it as a "clash of titans" and recalled those meetings as some of the most difficult conversations their teams had.

The CBD colleges embraced this kind of open dialogue as a way to build consensus that change was necessary. Faculty and staff alike came to understand that mere modification of programs and procedures would prove insufficient. Over the course of these interactions, they realized that the only way forward was through institution-wide change. Many employees were given extensive retraining, while in some cases, new staff were hired and other positions eliminated. For every institution, defining what change needed to look like was a contentious and humbling experience. Krista O'Neill, an advisor from Lorain, described the CBD effort as, "definitely hard work. It's not for the faint of heart." But by cultivating an institution-wide culture focused on long-term student success and degree completion, each college established a foundation for transformative change. "It's tremendously challenging and it's extremely worthwhile," O'Neill continued. "It's probably the most significant work I've done in my 30-year career."

"If we want to continue to serve the needs of the community, we are going to have to adapt in a meaningful way."

DAVE COLLINS, Provost and Chief Academic Officer, Sinclair

"It's tremendously challenging and it's extremely worthwhile. It's probably **the most significant work** I've done in my 30-year career."

KRISTA O'NEILL, Advisor, Lorain

ADVISING: FROM REACTIVE TO PROACTIVE

With a collective focus on student completion, most CBD colleges set their sights on changing the advising process first. Initial research by the CBD teams revealed many disheartening stories of students who were unable to see advisors in a timely fashion, who saw three or four different advisors and received conflicting information from each, and who had issues that no advisor seemed able to address. The colleges' various advising functions "were definitely operating in silos," according to Tonya Greene, an associate professor at Wake Tech. Adam Porro, director of student services at Miami Dade, described student interactions with advisors as a "factory approach—I register you and you're on your way." Other staff used the term "cafeteria-style" to describe a self-service model that offered a vast array of courses and program options and required students to find their own path with limited assistance from advisors.

At the start of the CBD initiative, none of these colleges had proactive advising programs in place for the majority of their students. Krista O'Neill described the old model at Lorain as reactive, with students seeking out advisors only when they felt they had a need. She saw many first-generation college students and students from lower socioeconomic backgrounds failing to get the support they needed because they did not know how and when to access supports within the system.

To combat the problems associated with the advising status quo, O'Neill said that Lorain made the decision to "front-load services to new students, with the idea that if we start them off in the right courses on a map—on a path, with the right placement and the right support—then they'll be successful." The college made orientation and pre-enrollment advisor meetings mandatory. They began using non-cognitive testing to learn about students' mindsets towards college and any life challenges they might be facing. This type of assessment allowed advisors to intervene early, explained O'Neill. "If you have a student whose academic motivation in math is low and their assessment scores in math are also low, then you can link that information together and get that student into tutoring right away, not three weeks into the semester."

Kelly Hernandez, director of recruitment at Miami Dade, affirmed the importance of pre-college advising, especially given the large number of first-generation students attending Miami Dade. "When we first started, the term 'pre-college advisor' was not anything that I had ever heard," she said. Since embarking on the CBD initiative, Miami Dade has begun assigning pre-college advisors to every public high school in Dade County. "The students love it, because they have a concierge to guide them through this mysterious project called college-going." Miami Dade came to see its academic departments and student services as two parts of the same advising paradigm. "For me, the biggest 'aha' in all this is realizing we're not just recruiting to the college," Hernandez said. "We're recruiting to a program much earlier on, and helping the students have the mindset of 'I'm going to be part of a community of students with the same interests.'"

> ## "The students love it, because they have a concierge to guide them through this mysterious project called college-going."
>
> **KELLY HERNANDEZ,** Director of Recruitment, Miami Dade

ACADEMIC MAPS: CHARTING PATHS TO COMPLETION
CBD colleges also invested in developing academic maps to give students a clear picture of what courses their credential required and the order in which they should be taken. Academic maps gave advisors the means to create individualized academic plans for each student that took into account students' developmental math and English needs, personal scheduling constraints, and goals for the future. CBD colleges built this approach on research from the Community College Research Center, as well as their own internal data, that showed that students who follow a well-defined course sequence graduate at higher rates more quickly.[3]

The importance of academic maps was especially apparent when aligning courses and sequences with transfer-institution degree requirements. Guilford Tech discovered that a surprising number of their courses were not considered eligible for transfer by local universities. One team member remarked, "We began to better understand the frustrations of our students. And in the end, we couldn't in good conscience recommend students take courses that didn't transfer to most UNC schools." The academic mapping process led the institution to recognize the need for specialization and certificates that would yield greater credential achievement. This resulted in the creation of seven certificate programs in computer science and the eventual restructuring of all its technical programs a few years later.

Initially, many faculty members across the CBD colleges expressed skepticism of academic maps, concerned that this new approach would cause departments to compete for student enrollment. Other faculty feared the mapping process would decrease enrollment in electives and narrow the student experience. At one college, these fears were heightened when they saw enrollment in fine arts courses decline. The faculty worried that the mapping process was causing certain electives to be recommended over art and music. But as the college dug deeper, they found that this shift in enrollment was largely due to increased enrollment in gateway mathematics and English courses, both of which are strong predictors of future degree completion. With this information in hand, the humanities faculty recalibrated their projections, knowing that they would see increased enrollment in fine arts once students fulfilled their academic prerequisites.

> # "We began to better understand the frustrations of our students."
>
> **TEAM MEMBER,** Guilford Tech

RETHINKING THE CLASSROOM

Redesign of the student-instructor relationship proved a crucial complement to the reimagining of advising and the creation of academic maps. Chandra Noel Lehner, an associate professor of mathematics at Guilford Tech, explained that her method of teaching developmental math has changed dramatically as a result of the CBD initiative. When Lehner was hired in 2007, her instruction looked very traditional, with students seated in rows of desks while she taught from the board. She assigned students pre-defined problem sets, controlled the in-class practice times, and set dates for each test. Over time, however, she noticed that some students would drop out and then reappear in her class the following semester, only to repeat the process a second or third time. Instructors at other CBD colleges reported similar occurrences, suggesting a need for comprehensive change in their instruction.

To address this problem, a number of math classes at Guilford Tech adopted a modular, student-directed approach. These courses flipped the traditional approach to teaching, with students setting their own pace, accessing content online outside of class, and receiving individualized support from faculty in the classroom. Lehner welcomed the opportunity to change tack but admitted that it was difficult to let go of control in the classroom.

In time, Lehner bought into the new approach and is glad she did. "You're answering the students' questions. You're finding out what their needs are, and where they're getting stuck," she said. "You're really focusing in on individual needs versus this is my 11 o'clock class and by Tuesday we have to test." Asked to sum up her experience, she stated simply, "You can't argue with progress. You know the student you had in your traditional math class three times in three semesters who never passed chapter one—all of a sudden, she's in the redesign classroom and she's done with module one and now she's going on to module two. You can't argue with progress there."

The focus on student success that triggered a shift in Lehner's practice has reached well beyond the classrooms at CBD colleges. It has affected everything from the implementation of data tracking and alert systems to the development of new academic interventions and co-curricular supports. For each part of the Guided Pathway, redesigning for completion has brought together a diverse group of stakeholders to wrestle with how they might reimagine existing policies and programs to improve student outcomes. In all of these conversations, the common ground has been a commitment to placing student success at the center of the design process. The approaches these teams developed are the products of risk, experimentation, and iteration and they have already begun to show results.

"You're really focusing in on individual needs versus this is my eleven o'clock class and by Tuesday we have to test."

CHANDRA NOEL LEHNER, Associate Professor of Mathematics, Guilford Tech
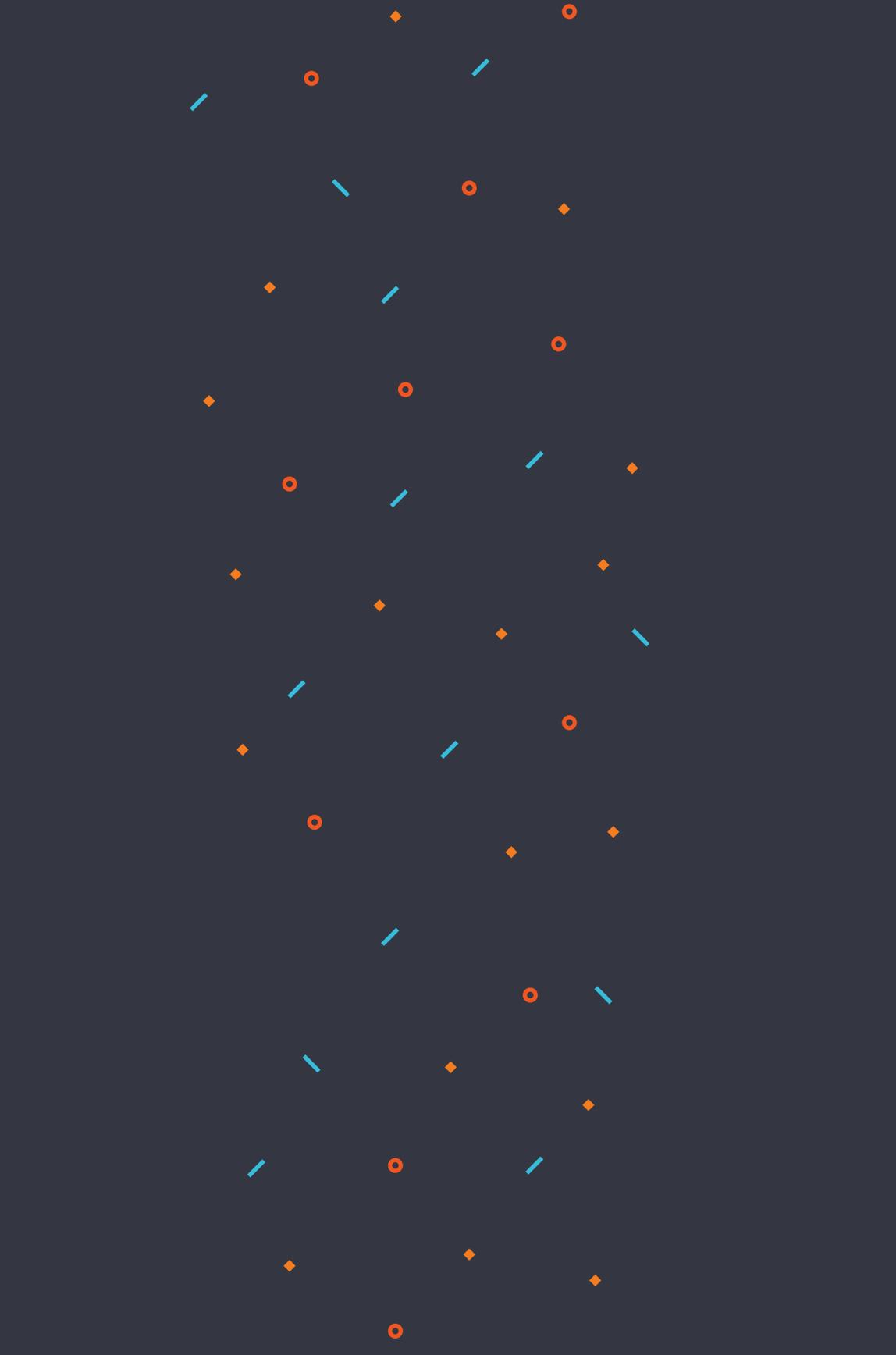
"Our success as an institution is based on completion... when you **focus on the success of a student,** the process changes."

RON MCDONALD, Counselor, Stark State

The focus on performance measurement is paying off.

THE CBD EFFECT

From the beginning of the CBD initiative, the colleges developed a strong commitment to data-driven problem solving. Faculty and staff agreed that the large-scale changes they hoped to effect could not be left to subjective assessments. Instead, the colleges had to be proactive in collecting and analyzing student data in order to best respond to near-term concerns and produce long-term results. "You need to be flexible in your mindset and put aside the fear of data and numbers," said Hernandez from Miami Dade. "It's going to ultimately educate you better to do your job more efficiently. You're not just working harder to get the students in, but you're working in a more targeted manner to get more yield out of your hard work."

CBD colleges measured several key performance indicators (KPIs) of student progress, such as the timely completion of gateway math and English coursework. Miami Dade found that students who fail to complete English in their first term, for example, are over four times more likely to drop out. Colleges also tracked student course load, another important factor in student success, as research shows that students enrolled full-time are more likely to earn their credential or transfer.[4] The CBD colleges paid close attention to these and other metrics, setting 2019 targets for each one.

This focus on performance measurement is paying off. The most recent data available (2015-16) shows that the number of first-time-ever-in-college students completing gateway courses in their first year was on average 10 (math) and 12 (English) percentage points higher than the pre-CBD baseline. The number of FTEIC students completing 12 credits in their first term was also 12 percentage points higher on average. As a group, the CBD colleges have already met or exceeded their 2019 targets for all five near-term KPIs, which also include the percentage of students concentrating in a program of study and completing 24 credits in their first year.

Comparing CBD growth against national trends reinforces the progress made to date. Nationwide, the 2014-15 graduation and transfer rate at public two-year institutions was only one percentage point higher than it was in 2009. At CBD colleges,

All near-term targets met 3 years early

Each of these five measures was shown to be a leading indicator of future degree completion or transfer.[4]

GATEWAY MATH
Percentage of students who complete entry-level math on their first attempt in their first year *(FTEIC*, fall term)*

2019 TARGET
13.1% — 23.4%
2013-14 2014-15 2015-16

10.3%
POINTS

GATEWAY ENGLISH
Percentage of students who complete entry-level English on their first attempt in their first year *(FTEIC, fall term)*

2019 TARGET
34.2% — 45.7%
2013-14 2014-15 2015-16

11.5%
POINTS
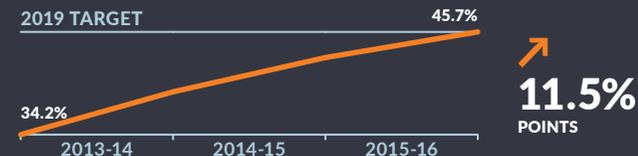
FIRST-TERM CREDITS
Percentage of students who complete at least 12 credits in their first term *(full-time FTEIC, fall term)*

2019 TARGET
21.2% — 33.6%
2013-14 2014-15 2015-16

12.4%
POINTS
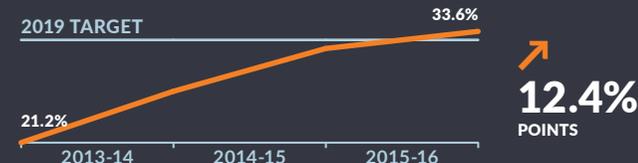
**FIRST-YEAR CREDITS**
Percentage of students who complete at least 24 credits in their first year *(full-time FTEIC, any term)*

2019 TARGET
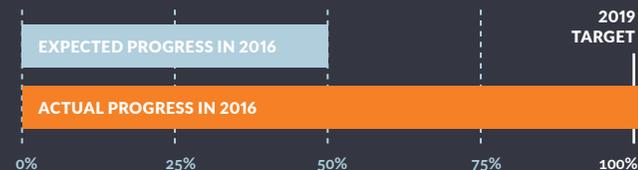19.2% — 28.6%
2013-14 2014-15 2015-16

9.4%
POINTS
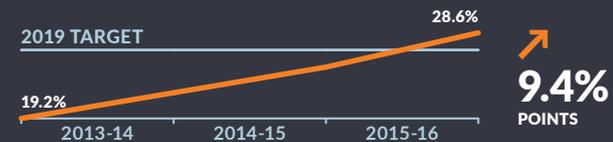
FIRST-YEAR CONCENTRATION
Percentage of students who complete three classes or nine credits in the same major area during their first year *(FTEIC, fall term)*

2019 TARGET
41.8% — 51.7%
2013-14 2014-15 2015-16

9.9%
POINTS
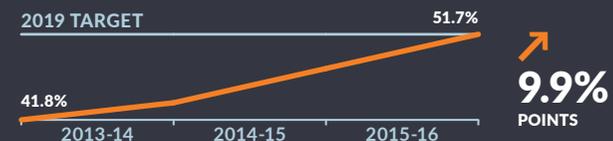
PROGRESS TOWARD 2019 TARGET, AS OF 2016
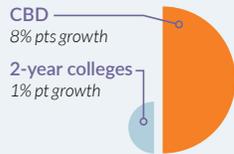On average, CBD colleges have already met or exceeded their 2019 targets for all five near-term KPIs

EXPECTED PROGRESS IN 2016

ACTUAL PROGRESS IN 2016

2019 TARGET

0%   25%   50%   75%   100%

*FTEIC = first time ever in college

by contrast, the initiative-wide rate increased by eight percentage points. Several CBD institutions saw increases well above the national average, with Wake Tech, Martin, and Guilford Tech improving on their 2009 rates by 17, 23, and 26 percentage points, respectively. Additionally, the increase in the total number of students awarded degrees or certificates across all CBD colleges was over 30 percentage points higher than the rest of the nation's public two-year colleges.[1] Included in those numbers are retroactive awards to students who had completed their credit requirements but never received their degree or certificate. In some cases students had never formally requested it and in other cases they had become eligible for newly developed stackable credentials that supported their progression towards a final degree.

While the data are encouraging, substantial challenges remain. For example, while several colleges saw a notable increase in students persisting to their second term, the CBD average has not yet improved overall. There was also significant variation among colleges in the amount of improvement for some near-term KPIs. For example, the change in the portion of students completing 24 credits in their first year ranged from a 20 percentage point increase at one college to a three percentage point decrease at another. Variation in how key strategies were implemented led to greater impact at some colleges. In addition, the diversity of colleges' size and student demographics, as well as the impact of state and local policy changes, meant that raising each KPI presented different challenges for every institution.

The change process started by the Completion by Design initiative is far from complete. These institutions have committed themselves to a mindset of continuous improvement. They understand that while their work thus far represents an important achievement, it is only the beginning.

TRANSFORMATIVE CHANGE IS POSSIBLE

Anthony Almanzar is no longer a struggling first-year student. He changed programs, earned his associate degree in arts, and became a student success counselor at Wake Tech. Almanzar now works on the front

lines of the Completion by Design effort, drawing on his own experience to help first-year students reach their academic and career goals. Almanzar sees students impacted by the CBD initiative reaching new levels of success because of the support they are receiving from the very beginning of their college journey. He talks about his students with excitement and hope. "We know that they're going to complete that degree," he says. "We know they're able to go the distance because of this program."

The redesigned system that Almanzar is now a part of is evidence that holistic reform is possible and that it is worth the effort. The nine Completion by Design colleges engaged in cultural change at an institutional level and have sustained their work over the past six years. This initiative has not been easy or straightforward. It has required unprecedented levels of humility, collaboration, and perseverance. And, as every CBD college knows, the effort to improve student success will continue well into the future. However, the impact they are seeing today on student outcomes has assured them that they are moving in the right direction.

These results also indicate that other institutions can chart a similar path towards greater student success. To support reform efforts across the nation, CBD colleges have shared many of the resources they used in their work, including readiness assessments, detailed planning guides, and in-depth data toolkits at completionbydesign.org. While these materials represent a great asset to institutions looking to redesign for completion, they are not a program or a list of solution steps. Rather, they are tools that require practitioners with vision, agency, and commitment to put them to good use.

CBD colleges will be the first to assert that there are no shortcuts or silver bullets. Completion by Design is itself a journey and not a destination. The approach requires a thoughtful and generative process that prioritizes the wisdom of the field and the full collaboration of everyone involved. It is grounded in the belief that meaningful change in student outcomes is possible for any institution willing to commit its entire organization to a culture-changing focus on student success.

"We know that they're going to complete that degree. We know they're able to go the distance because of this program."

ANTHONY ALMANZAR,
Student Success Counselor, Wake Tech

REFERENCES

1. Coffey Consulting and Integrated Postsecondary Education Data System (IPEDS): U.S. Department of Education. Institute of Education Sciences, National Center for Education Statistics. Retrieved October 2017 from https://nces.ed.gov/

2. Carnevale, A.P., Smith, N., and Strohl, J. (June 2013): "Recovery: Job Growth and Education Requirements Through 2020." Washington, D.C.: Center on Education and the Workforce, McCourt School of Public Policy, Georgetown University. Recovery2020.FR.Web.pdf

3. Bailey, T., Jaggars, S.S., and Jenkins, D. (March 2015): "What We Know About Guided Pathways." New York: Columbia University, Teachers College, Community College Research Center. ED562052

4. Offenstein, J., Moore, C., and Shulock, N. (April 2010): "Advancing by Degrees: A Framework for Increasing College Completion." Washington, D.C.: Institute for Higher Education Leadership & Policy and the Education Trust. ED511863

5. Rassen, E., et al. (April 2013): "Understanding the Student Experience Through the Loss/Momentum Framework: Clearing the Path to Completion." New York: Columbia University, Teachers College, Community College Research Center. https://doi.org/10.7916/D8N58JC7