Transforming into a Competency-based Education (CBE) Institution

12 Lessons from Prince George’s Community College

Design Insights Brief – an Education Design Lab publication series

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About the Education Design Lab + Design Insights Publication Series

The Education Design Lab (the Lab) is a national nonprofit that co-designs, prototypes, and tests education-to-workforce models through a human-centered design process focused on understanding learners’ experiences, addressing equity gaps in higher education, and connecting learners to economic mobility.

Design Insights is a publication series designed to share insights from initiatives led and supported by the Lab as part of the Learner Revolution. This series offers a glimpse into the Lab’s human-centered design approach to make learning visible, portable, affordable, flexible, and relevant.
Prince George's Community College (PGCC) provides higher education to over 11,000 students in Prince George's County, Md., in close proximity to Washington, D.C. The college prides itself in being a place where anyone can achieve their professional, educational and personal goals. PGCC is one of six community colleges and systems that are part of the inaugural cohort of the Community College Growth Engine Fund (CCGEF or the Fund, for short). Launched in the fall of 2020, the Fund is a design accelerator to work with community colleges and systems across the country to co-create a new class of credentials: micro-pathways. Designed with faculty, learners and employers, micro-pathways are defined as two or more stackable credentials, including a 21st century skill micro-credential, that are flexibly delivered to be achieved within less than a year and result in a job at or above the local median wage and/or a learner transitioning to a degree program at the college.

Prior to joining the CCGEF cohort, PGCC's leadership had set its sights on transitioning to a Competency-based Education (CBE) institution. They encouraged the PGCC design team to utilize the Fund and the micro-pathways design process and take it to the next level by designing CBE micro-pathways. The design team was thrilled about the prospect but was not sure they would be able to pull it off in the accelerated design timeframe. Fast forward to late-2022. Not only did they launch three micro-pathways — Healthcare Technician, IT Support Specialist, and Hospitality Leadership — but they added one more: Helper Mechanic.

PGCC calls their CBE micro-pathways Pathways to Employment. This communicates that upon completing one of these programs, learners will be ready to move into high-growth, high-wage employment opportunities. Since these are micro-pathways that were designed according to set of design criteria, we know that learners will:

+ Earn two or more stackable credentials that are validated by regional employers.
+ Gain both technical and 21st century skills.
+ Receive credit for their coursework that counts towards an associate degree.
+ Finish the pathway in one year or less, even if they are working part- or full-time.
+ Complete the pathway in a flexible delivery format.
+ Low cost.

In addition, since their micro-pathways are competency-based, we know that learners will:

+ Enroll in the program on a rolling basis rather than having to wait for set start dates.
+ Have up to one full year to complete their pathway or complete in an accelerated manner.
+ Participate in a 100% online program that is modular in nature.
+ Gain knowledge and skills that will be assessed at the end of each module prior to moving on to the next module, ensuring they are ready.
+ Receive customized support from faculty.
+ Demonstrate they have mastered the competencies that make up each credential, providing assurance of their competence to their future employers.
+ Interact with employers in creative ways, such as participating in online meet + greet sessions with employers.

Prior to joining the CCGEF cohort, PGCC’s leadership had set its sights on transitioning to a Competency-based Education (CBE) institution. They encouraged the PGCC design team to utilize the Fund and the micro-pathways design process and take it to the next level by designing CBE micro-pathways. The design team was thrilled about the prospect but was not sure they would be able to pull it off in the accelerated design timeframe. Fast forward to late-2022. Not only did they launch three micro-pathways — Healthcare Technician, IT Support Specialist, and Hospitality Leadership — but they added one more: Helper Mechanic. As was shared in the Lab’s Innovation Snapshots series featuring the college, PGCC sees competency-based education as a game-changer. From what PGCC has witnessed, most people, particularly adult learners, don’t want to go back to school due to the lack of flexibility. CBE micro-pathways offer that flexibility for a learner to gain new skills in a learning format that fits into their life at an educational pace that allows the learner to be successful.
What is a Micro-pathway?

Designed with faculty, learners and employers, micro-pathways are defined as two or more stackable credentials, including a 21st century skill micro-credential, that are flexibly delivered to be achieved within less than a year and result in a job at or above the local median wage and/or a learner transitioning to a degree program at the college.
Prince George’s Community College’s Healthcare Technician (Administrative) Certificate leads to a career as a Healthcare Technician (Administrative).

This micro-pathway can be completed in up to 12 months in a Competency-based Education format. It offers six stackable credentials, including two industry certifications, two college certificates, and two 21st century skill credentials. Learners can apply credits towards higher credentials.
Prince George’s Community College’s IT Support Specialist Certificate Micro-pathway

**CREDENTIALS EARNED**

- CompTIA Security+
- AWS Cloud Practitioner
- CompTIA Network+
- CompTIA IT Fundamentals
- Creative Problem Solving
- Critical Thinking

12 months, full-time/part-time
Offered in noncredit Competency-based Education format

**FUTURE GROWTH OPPORTUNITIES**

- IT Support Specialist
  - Wage: $75,200/yr
- Cyber Security/Cloud Architect
  - Wage: $124,267/yr
- Cyber Security/Cloud Architect Manager
  - Wage: $250,000/yr

1-2 additional industry certs. In cybersecurity or Cloud
A.S. + possibly B.S Degree(s) in Information Systems

Validated by regional employers including:
- WSSC Water
- Pepco/Exelon
- Carter Enterprise Solutions, LLC
- AWS
- Signature Technology
- Dai Technologies
- Leidos
- WGL/Alta Gas

Legend

- 2+ Stackable Credentials
- Direct Entry into Workforce
- Technical Skills Credential
- 21st Century Skills
- Digital Micro-Credential
- Continued Learning and Upskilling Opportunities

Prince George’s Community College’s IT Support Specialist Certificate leads to a career as an IT Support Specialist.

This micro-pathway can be completed in up to 12 months in a Competency-based Education format. It includes either four or six stackable technical skills credentials and a 21st century skill credential. Learners can apply credits towards higher credentials.
Prince George’s Community College’s Hospitality Leadership Micro-pathway

CREDENTIALS EARNED

Sales + Marketing
AHLEI Certification

Making a Connection Gold Standard
Customer Service
AHLEI Certification

Digital Literacy

Creative Problem Solving

12 months, full-time/part-time
Offered in noncredit
Competency-based Education Format
Credits apply towards higher credentials

FUTURE GROWTH OPPORTUNITIES

Hospitality Leadership Certificate
Validated by regional employers including:
+ MGM Resorts
+ Marriott
+ Hilton
+ Southern Management Corporation

Continued Learning

Work Based Learning

21st Century Skills
Digital Micro-Credential

Technical Skills Credential

Legend

2+ Stackable Credentials

Credits + Courses articulate to Credit

Credits count towards a Degree.

Direct Entry into Workforce

Continued Learning and Upskilling Opportunities

Mid/Senior Level Hospitality Services Manager or Supervisor
Wage: $55,000/yr

Mid-Level Hospitality Services Manager or Supervisor
Wage: $45,000/yr

A.A.S Degree in Hospitality Services

Prince George’s Community College’s Hospitality Leadership Certificate leads to a career as a Leader in Hospitality Services.

This micro-pathway can be completed in up to 12 months in a Competency-based Education format. It offers 10 stackable credentials, including four industry certifications, four college certificates, and two 21st century skill credentials. Learners can apply credits towards higher credentials.
Prince George’s Community College
Helper Mechanic Micro-pathway

CREDENTIALS EARNED
- Flagger Certification
- EPA 608
- First Aid/CPR
- OSHA-30
- NCCER Core + HVAC Level 1

Validated by regional employers including:
+ Miller Pipeline
+ Pepco
+ WSSC
+ NPL

16 weeks, full-time/part-time
Offered in noncredit Competency-based Education Format
Credits apply towards higher credentials

WORKFORCE OPPORTUNITIES
- Helper Mechanic: Wage: $45,000/yr
- Service Mechanic: Wage: $71,916/yr
- A.A.S. Degree in Construction Management

FUTURE GROWTH OPPORTUNITIES

Continued Learning and Upskilling Opportunities

Legend

- 2+ Stackable Credentials
- Credits articulate to Credit
- Credits count towards a Degree
- Work Based Learning
- Direct Entry into Workforce
- 21st Century Skills Digital Micro-Credential
- Technical Skills Credential

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Prince George’s Community College’s Helper Mechanic Certificate leads to a career as a mechanic.

This micro-pathway can be completed in up to 16 weeks in a Competency-based Education format. It offers six stackable credentials. Learners can apply credits towards higher credentials.
12 Lessons

Prince George’s Community College co-designed four CBE micro-pathways – called Pathways to Employment – with the Education Design Lab. This brief features lessons learned during each stage of the Learner Journey, from enrollment to completion.
As part of the micro-pathways design process, CCGEF colleges use a human-centered design tool called a Learner Journey Map. The Learner Journey is divided into four stages—a community college learner experiences, as shown in the diagram on the right.

In designing their Pathways to Employment, the PGCC design team then used another design tool called a Service Blueprint where they examined their internal processes and identified what needed improvement throughout the Learner Journey.

PGCC has curated their top three lessons learned for each stage of the Learner Journey to share with their leadership and other community colleges who may want to start their own CBE journeys.
Use a wide range of marketing tactics to attract adult learners.

Rather than integrating into the current Continuing Education website, PGCC decided to create a new, separate landing page for their Pathways to Employment programs, given there were differences stemming from a CBE approach.

While learners could find the Pathways to Employment page through using search terms, the design team also invested in digital ads for each pathway and a social media campaign as the primary marketing strategies. Based on PGCC’s tracking data, digital ads and social media campaigns were not highly successful. Their theory is that people are typically overloaded with information and the target audiences really need to be segmented. In addition, they also received feedback from learners enrolled in their Pathways to Employment program that it is important to use a wide range of tactics, including print and word-of-mouth to reach adult learners.

Upskillers are a primary audience for CBE micro-pathways.

PGCC’s Hospitality Leadership CBE micro-pathway is designed for upskilling individuals with some experience in the hospitality industry. This was an important pathway for the college given hospitality is one of the leading industries in Prince George’s county. Hospitality jobs are available at hotels and casinos, but these roles are also available at government agencies, associations, and corporate employers.

With PGCC’s location in the national capital area, there are a wide range of these employers in the county and nearby. The enrollment numbers have been lower than expected for this pathway. While the design team engaged with local employers throughout the design process and pilot launch, these were more traditional hospitality employers, such as MGM. They plan to cast the net wider to connect with the wide range of employers that have hospitality roles. They will be showcasing the value of the credentials in the micro-pathway as well as the learner-earner friendly nature of CBE to meet the upskilling needs of their current employees.

Simplify the learner interest-to-enrollment process with one form.

As is the practice at many community colleges, a learner interested in PGCC’s Pathways to Employment program completed an online interest form at the start of the pilot. That form went to the program coordinator who then emailed an application form to the interested learner. The learner then needed to complete the application to enroll in a Pathway to Employment. The PGCC design team realized the interest and application overlapped and were capturing some of the same information. They decided to simplify the process by combining both the interest and application form into one form. Now learners just have one step. The form includes both important enrollment information for the college and baseline survey questions for CCGEF data collection and evaluation.
Orientation + Onboarding

Orientation and onboarding prepares learners for starting a micro-pathway. This includes setting up a school email account, getting a student ID, logging into the LMS, and securing textbooks.

Lesson #4
Learners enrolled in CBE programs need a specialized orientation.

PGCC hosts group orientations specifically for their Pathways to Employment learners given the significant differences from their other CE and credit programs, such as being self-paced and a modular 100% online format. The group orientation sessions were offered live from the start since the design team knew there would be a lot of learner questions. It has also been important to record the session both for learners who could not make a live session and for all CBE learners to be able to go back and review what was covered at a later time. The orientation session covers a lot of ground for learners to digest.

Lesson #5
Develop an easily accessible onboarding course for the college’s LMS.

The design team discovered early on that many learners did not know how to set up and access their college email, how to use their student ID, and more. In addition to the custom CBE orientation session, PGCC created an onboarding module in an online training platform called Rise. Rise is easily accessible through just clicking on a link and covers various onboarding activities, including how to use the college’s LMS. The onboarding module is also available inside PGCC’s LMS so that learners can go back and review any aspect of using the LMS on an as-needed basis. The design team had to think through every step learners needed to take to become skilled at using an LMS to include in the course, down to the smallest details. This required extensive design, testing, and troubleshooting.

Lesson #6
First-in teachers need both LMS technical expertise and ability to build positive relationships with adult learners.

Even with the orientation and Rise onboarding course, PGCC’s experience is that learners still need a lot of technical assistance with the LMS to prepare for starting their course modules and mental reassurance to overcome the anxiety of starting a new self-paced program. It is typically the “first-in” teacher (the faculty member teaching the first module in the CBE micro-pathway) who needs to address these issues, though PGCC also trained support staff to use the LMS and other technology. This requires not only in-depth LMS technical expertise, but a teacher who is willing to be available when learners are experiencing difficulties, which may be evenings, weekends, and holidays. PGCC’s design team shares that the most important traits of a first-in CBE teacher are responsiveness, charisma, friendliness, patience, and warmth (in speaking and writing to learners). The first-in teacher role is not for everyone, so it is important to find faculty who are a good match.
Micro-pathway

The next stage of the Learner Journey involves the learning experiences in the micro-pathway. In CBE, the learner moves through each online module asynchronously, is assessed at the end of each module before moving on to the next, and engages with the teacher on an as-needed basis.

Lesson #7

CBE module development requires the subject matter expertise of faculty along with e-learning skills of instructional designers.

PGCC contracts with an instructional designer with extensive e-learning experience to work side-by-side with faculty members. Together, they carefully examine whether content from the credit version of the course is appropriate for CBE or if it needs updating. It can be challenging to design self-paced activities as well as the assessments, which is a hallmark of CBE. There needs to be a deeper level of evaluation of the competencies and the content to be able to assess the learners. PGCC’s e-Learning expert was critical in advising faculty on the best ways to do this, which sometimes meant trying new approaches.

Lesson #8

Provide faculty with training and tools for teaching CBE courses.

CBE is a paradigm shift from traditional postsecondary education. Learner-driven training is different and requires a different mindset. PGCC has provided professional development centered on understanding and building expertise in teaching in a CBE environment.

With CBE, learners are coming and going due to rolling enrollment and the self-paced nature of the program. This requires faculty to continuously check on learners and help them stay engaged and on track. To make this easier, the design team created email templates and a pacing/progression calendar for faculty. For example, if a learner has not logged into the LMS in a while or is falling behind, there are ready-to-go messages they can drop in an email. This also ensures that any messages going to learners are communicated in a friendly, supportive and consistent way.

Lesson #9

Provide learners with pacing calendars to help them stay on track.

PGCC’s Pathways to Employment learners are mostly adults juggling multiple responsibilities, which means logging on as their schedule allows. A big lesson learned is to provide pacing calendars for each pathway. The PGCC design team found this out the hard way when they realized they had learners that were falling off and were not going to finish their pathways in one year. See the example for the digital literacy module below. Once they started providing pacing calendars, learners were completing modules/lessons more efficiently and completing their pathways on time.
CBE requires re-imagining career services and employer engagement.

Given the self-paced, 100 percent online format, learner engagement with employers can be challenging. However, the design team found some innovative, scaleable ways to connect learners with employers as they near completion and transition. One example is inviting employers to serve as mentors by meeting virtually with learners every other week. This was a 10- to 20-hour commitment that felt doable to employers. PGCC intentionally did not include too many guidelines, but instead wanted to demonstrate their flexibility and appreciation of employers who could give this time to learners. Mentors typically present a challenge, create a project, or just spend time with the learner sharing about the company. Another example is “Meet and Greets,” which are very popular with employers. PGCC hosts live, virtual events where employers who are actively looking to hire learners attend these events and interact with learners in a less formal setting.

Develop standardized articulation processes for awarding credit and document them in a guidebook.

PGCC did not have standardized articulation processes in place to award learners credit for their noncredit coursework when they launched their Pathways to Employment. However, they made progress, and learned:
- Articulation requires competencies match on the credit and noncredit sides. When there are competencies that exist only on the noncredit side, it makes the articulation more difficult and time-consuming.
- Given learners may be assessed differently in CBE, get the department chair’s review and approval on the assessment processes.
- In addition to awarding credit for the CBE coursework, maximize academic credit awarded for each learner’s prior and experiential learning.

Next steps for PGCC is to standardize and document these processes in a guidebook, which is especially critical given they are going to be expanding and scaling CBE across the college.

An existing badging system can help facilitate the articulation process.

In the past, PGCC learners were not always aware they needed to take steps to trigger the articulation process within a certain period of time. PGCC wanted to ensure Pathways to Employment learners did not lose out on that opportunity. The design team discovered they already had a tool that could help: Credly, which the college uses to award digital credentials/badge, can also be used to manage the internal steps of the articulation process to award learners credit. When a learner passes the assessment for a CBE module, the department chair initiates the badging award process. The badge goes to the learner, who “accepts” the badge, and is free to use the badge. This also triggers notification to the college’s registrar that the learner has earned credit for the course(s), and this information is added to the learner’s transcript.
Conclusion + Acknowledgments

While Prince George’s Community College has learned some valuable lessons, its own journey as a CBE institution is still in progress. The design team leaves us with a few valuable insights:

+ Creating a new CBE program requires input from several different stakeholders. At the start of the design journey, make sure all the right stakeholders are in the design room and are aligned to the overall mission.
+ Faculty technical skills (LMS system), communication tone, and communication style all matter to new learners starting the CBE process. Make sure faculty in the start-up phase possess a blend of technical and interpersonal skills.
+ Every learner’s reason for choosing the program is different. As a result, the faculty-to-learner interaction becomes a one-to-one relationship to help and motivate a learner to success.
+ Because adult learners tend to be the majority in CBE programs, evenings, weekends, and holidays tend to be the times learners are doing work. CBE faculty need to understand this shift in learner style and be prepared to accommodate.

Thank you to the tireless work of the PGCC design team and their partners: Former Center for Innovation & Entrepreneurship | Innovation Hub (INNOHUB) Director, June Evans, Richard Baptiste, John T. Deadwyler, Darren Gibson, Shawnell Joyner, Tracy Lloyd, Colleen Mallory, Michael Smith and Wynonna D. Ware.

Stay Connected

Learn more about: Lab’s micro-pathways + the Community College Engine Growth Fund: eddesignlab.org/project/growthenginefund/

Learn more about: Prince George’s Community College’s Pathways to Employment pgcc.edu/pathwaystoemployment/

Get an inside look on: the Lab’s on-the-ground work—delivered right to your inbox. Join the Innovator Network

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