

Competency-Based Education: Lessons Learned from the Illinois Backward Design Community





Plan for Today

- Introduction and Background
- Faculty Panel
- Lessons Learned, Student Insights, and Next Steps
- Closing and Questions



Introduction and Background

Level-setting: What is CBE?

Competency-Based Education focuses on **learning** (and the application of that learning) rather than **time** spent in the classroom (CAEL, C-BEN, 2021).

CBE is learner-centered.

CBE is flexible.

CBE is a strategy for advancing educational equity.

CBE is labor market-aligned.

Models: direct assessment, credit-hour based

Why CBE?

01

Expand access to
adult learners

02

Better respond to
workforce needs

03

Improve learning
outcomes

ICCB-led Initiative

2021: CBE Equity Collaboratory with CBEN and JFF

2022-2023: Grant initiative designed to support competency-based education program development in the community college system for high-demand sectors: Using an equity-guided, community of practice approach, the goal of this grant is to:

- a) build capacity in planning and program development,
- b) build institutional support, engagement, and knowledge, and
- c) ultimately, guide and support the institution in transitioning to implementation of a competency-based education program.

Grant Initiative

Grantees:

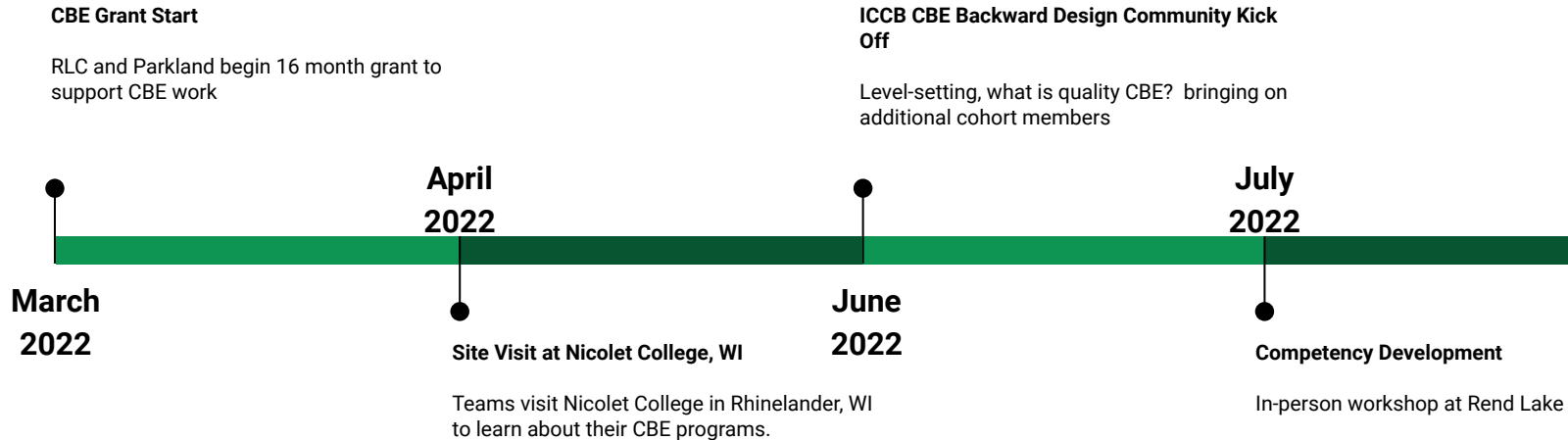
- **Parkland College** (Focus: Industrial Technology)
- **Rend Lake College** (Focus: Welding)

Partners:

- **NIU EdSystems:** documenting the CBE development journey, research on the regulatory environment, support on competency development
- **C-BEN:** facilitated backwards design workshops and coaching in developing a CBE Program
- **Lewis and Clark Community College:** peer coaching, hosting site visit

Participating Cohort Members: Shawnee Community College, Lincoln Land Community College, Southeastern Illinois College, Kankakee Community College, Kaskaskia College

Backward Design Journey



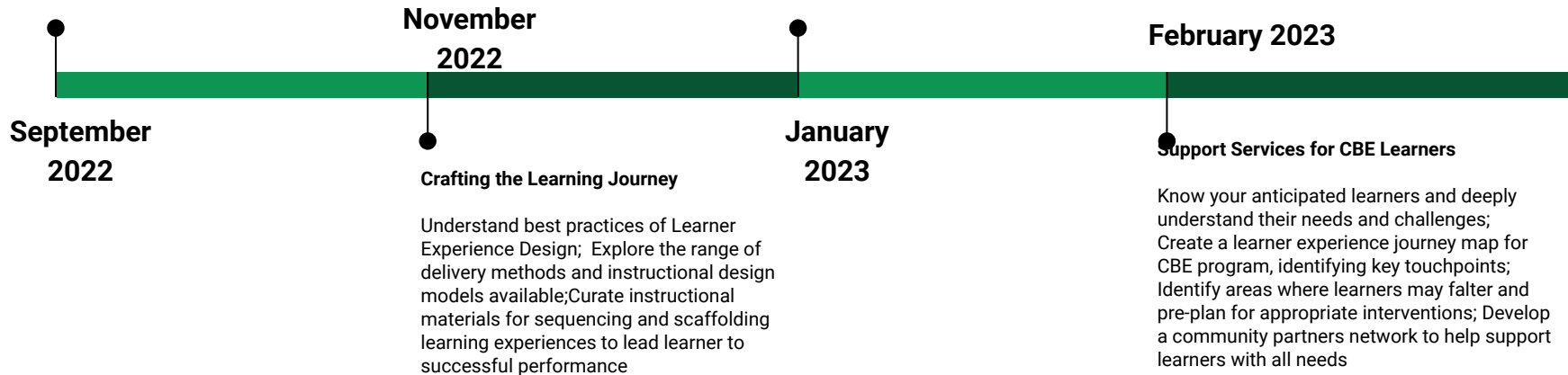
Backward Design Journey

Determine Assessment Strategy

In-person at Parkland: Establish performance-based levels of mastery for each competency; Explore the range of formative and summative cognitive and performance-based assessment methods

The Role of the Instructional Coach

Identify elements of effective instructional coaching; Strategies used by faculty who have shifted to instructional coach model



Backward Design Journey

Overcoming Barriers to Implementation

Identify common barriers to successful implementation; Develop specific strategies to overcome anticipated barriers

Deep Dive Series Begins

Deep Dive series with individual institution coaching begins. Curriculum and Learning; Financial Aid and Business Practices; Information Technology; Support Services





Faculty Panel Discussion



Lessons Learned from the ICCB CBE Design Team

Lessons Learned from the ICCB CBE Design Team



Information for this document was gathered by Education Systems Center at Northern Illinois University as part of the Community College CBE Pilot Project and supplemented by focus groups and interviews with design community participants. Funding for this project was provided through a grant agreement from the Illinois Community College Board, utilizing Perkins Leadership funding

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Background & Approach

Using an equity-guided, community of practice approach, the goals of the project were to:

- a. Build capacity in planning and program development,
- b. Build institutional support, engagement, and knowledge,
- c. Guide and support the institution in transitioning to implementation of a competency-based education program.

ICCB contracted with C-BEN for virtual meetings, in-person meetings, virtual office hours, and coaching sessions.

“I loved how we started with the end in mind, designing the competencies and considering what students should be able to do or know upon completion of the program. It was helpful to walk through a template and theme these out into buckets or sections.”

Participating Community Colleges

Industrial Maintenance

- Parkland College
- Kankakee Community College
- Kaskaskia College

Welding

- Rend Lake College
- Shawnee Community College
- Lincoln Land Community College
- Southeastern Illinois College
- Lewis and Clark Community College

A blue-tinted photograph of three technicians in a server room. They are wearing hard hats and safety vests, looking at a large server rack. One technician is holding a whiteboard. The room is filled with server racks and cables.

Design Process Lessons Learned

“The biggest takeaway for me has been the transition from a credit-based, course- focused structure to a module/ outcome-based learner-focused structure.”

“The majority of the competencies are already in the programs as learning outcomes. They just needed to be broken down into smaller segments.”

Lessons Learned: Developing Competencies

- **Focus on backward design.** Start with what the student should know and be able to do at the end.
- **Align program outcomes across colleges** for common competencies that address different program outcomes.
- **Keep language open-ended**, for example using the word “tool” rather than stating a specific tool.
- **Employability skills are more difficult** to put into competencies than technical skills.

College Insight

Lake Land Community College has been working with a core of faculty to think more about learning outcomes and not specific courses to be intentional about what measures they are using and how students are being supported to achieve them.

Resources

[Industrial Maintenance Competencies](#)

[Welding Competencies](#)

“Having a bigger outlook (program outcomes, very general) then getting specific later was helpful, rather than being super granular at the beginning.”

Lessons Learned: Developing an Assessment Strategy

- Develop a curriculum map early to show where competencies are introduced, reinforced, and assessed.
- Use unit-level assessments and projects to combine competencies.
- Build on current college processes and assessment practices
- Examples of activities and assessments would be helpful.
- A repository of assessments would be helpful.

“They don’t need to be able to know the skill, they need to be able to master the skill.”

College Insight

At **Lewis and Clark Community College**, one asynchronous assessment randomly pulls 20 questions from a bank of 300 options. If students need to reassess, the program auto-generates a different set of questions.

Lessons Learned: Creating Learning Journeys

- Colleges address essential employability and basic reading, writing, and math skills differently.
- Provide gen ed faculty examples of how students use reading, writing, and math in their workplaces.
- Build in opportunities for students to talk with and learn from each other.
- Build in regular faculty/student engagement to help students stay on track.
- Instructional designers are particularly helpful.

College Insight

Lewis and Clark Community College uses a cohort model based on student progress for collaborative assignments. Cohorts can adjust over time as students progress unevenly, and varied cohorts can help students develop essential employability skills.

Resources

[Industrial Maintenance: Industrial Wiring](#)

[Industrial Maintenance: Circuits & Components](#)

[Welding: Accountability](#)

[Welding: Communication](#)

“Learn from the experts and best practices instead of figuring it out on your own. Faculty must be on board and an instructional designer is critical.”

“The learning journeys for us were the biggest challenge. We did not complete all of these and could use additional support in moving through this step.”

Lessons Learned: The Instructional Coach and Student Support

- Advisors should be expert in CBE, be onboarded so they can explain it to students.
- Advisors need lower caseloads to manage more adds, drops, and trajectories.
- Dedicate an advisor to CBE students who understands the instructional model and logistics so they can help students navigate support resources.

College Insight

At **Lewis and Clark Community College** students can begin a CBE course every four weeks, though all work needs to be completed by the end of the semester. Students are assigned an advisor based on their program rather than their last name, so CBE advisors can become experts financial aid, admissions, scheduling, etc. A goal is for advisors to have regular office hours in the welding building so students don't have to walk across campus and wait for an appointment.

Rend Lake College uses grant funding for traditional programs to hire success coaches to support student transitions to CBE. New students will be able to start at the beginning of every month and can move at their own pace.

Resources

[Welding Learner Journey Map and Persona](#)

“CBE focuses on a student’s learning. The amount of time it takes can vary by student but the learning is fixed.”

“We are working to ensure that we are consistent across campus of what CBE is and what it is not. This will help with student recruitment and success.”

Lessons Learned: Hurdles to Implementation

- **Getting Started:** Determine who needs to be included when so everyone understands their role in the process.
- **Student Enrollment:** Faculty and staff need CBE orientation and training.
- **Faculty and Staff:** Workload and pay structures are a struggle.
- **Faculty Turnover:** Building a new program in the midst of faculty turnover is difficult.
- **Employer Buy In:** Some employers express hesitation about CBE. Colleges can explain that:
 - Each student must master all competencies, which were developed in partnership with employers.
 - The college is fully accredited, using mostly the same faculty.
 - The college is using CBE to respond to employer concerns and to develop students into better employees.
- **Accreditation:** Colleges are cautious about accreditation for CBE as it is a new process.

Resources

[Legal and Regulatory Considerations for Community College Innovation](#)

[Higher Learning Commission: CBE](#)

“Hard to get some others involved at the beginning because they didn’t see how it impacted them.”

“I like the example of an airplane pilot. They can’t be mediocre at the skill. They need to master the skill. And that’s very helpful for employers because they hired somebody but they can’t do X. But maybe they weren’t great at X, but because they were great at Y and Z they were able to successfully complete the program. So that’s what I like about the CBE. The employer knows exactly what students can master, what they can do.”

Overarching Lessons Learned



“It requires a change in mindset.”

“One size does not fit all; do what works for your institution.”

“Students are not mediocre at skills but master each skill. Employers know exactly what an individual can do.”

“I am most proud of the group’s collaborative efforts.”

“Learn from the experts — (C-BEN), those who have put a lot of time and effort into research and best practices — and follow a model like that instead of trying to figure it out on your own.”

Overarching Lessons Learned

- Everyone needs to be involved, but everyone doesn't need to be in every conversation.
- Student Support - Financial aid, the registrar's office, and advisors need to understand the process so they can identify and help address possible problems but don't need to be in content-specific conversations.
- Faculty should be involved from the beginning and throughout the entire process.
- Administrators connect faculty and other departments
- Collaboration is essential. Colleges consistently said that the collaboration part of the process was the most useful.
- The process takes time. Protected time to collaborate is a crucial part of building a common understanding so everyone works toward the same goal.

College Insight

Kaskaskia College is spending time with teams to examine what they are already doing that is not explicitly CBE but is connected to those best practices to build from what they already have in place.

"So many lessons learned...from curriculum development to analyzing student influences to the advising/financial aid/ credentialing impact. This has been the most beneficial professional development endeavor I have completed in my short time teaching."

"Really proud of the competencies we were able to put together. To be able to make a master competency list that works for everyone and all the programs/certificates is no small feat."

"It takes time. I thought we could jump right in and get it done, but to do it right and have a quality CBE program, take baby steps."



Student Insights

Students value CBE's scheduling flexibility and the freedom to work at their own pace.



"CBE has done nothing but benefit me because I'm working 40-hour weeks and I can just show up when I need to. I get to work at my own pace now. I get to come in right after work. That's perfect for me."

"If you knock out a class earlier than another student, instead of sitting around waiting you can take the final and move on to the next class."

"It's kind of a shock. I didn't realize CBE could help me as much. It is possible to work a full-time job and still make your grades."

It is crucial to have someone for students to connect with who understands the program and how financial aid works.



"The coordinator of the program was really helpful in telling me which courses I needed to complete and which were elective. I could talk to him and felt more comfortable talking face-to-face than through email."

"There's a learning curve with the financial aid aspect of things."

"Since students can enroll and complete at different points in the semester, financial aid communication isn't as consistent and streamlined. You need a financial aid advisor who understands the program."

To be successful, students have to be motivated and responsible.



"Knowing me at 18 years old, I would have looked at it differently than at 25. I would have not shown up. But now I want to get as much as I possibly can out of it."

"If a student couldn't schedule themselves or wasn't motivated to come in, and they skipped the first few weeks, then they might not be able to catch up."



Case Study: Lewis and Clark Community College

“Be prepared for work. A lot of work.”

Student Recruitment

The program coordinator and faculty are proactive.

- **Visit feeder high schools** once or twice each year to talk with students.
- **Connect with welding instructors** at the high school.
- **Explain to high school counselors** that students can use visitation days to see students go at their own pace and that they don't spend much time sitting in class.
- **Give tours** of the shop to high school and traditional welding students.
- **Participate in career fairs** at the high school.
- **Include banners with a welding logo and a QR code** on the website to access a promotional video, an outline of program options, and a link to the scholarship tab.
- **Recruit businesses** to talk to students when they visit and remind businesses that the program can help existing employees with specific skills.
- **Connect with employment agencies** so they can share about the program's benefits.

Student Selection

To determine who is a good fit for the program:

- **The program coordinator has a personal conversation** with each student, emphasizing self-motivation. If students have a history of putting things off, he suggests the traditional program.
- **The program coordinator meets with parents** to explain what students will be expected to do.
- **Advisors also are asked to stress** that the program is self-motivated and self-paced.

Student Support and Retention

To help with support and retention:

- **Students use time cards** to track time in the shop. Instructors email students who aren't attending.
- **The program coordinator is often in the shop** and monitors student attendance. When a student isn't attending they have an in-person conversation.
- **The program coordinator follows up** with students about financial aid. Since students enroll and complete courses at non-traditional times, they can mistakenly be dropped.
- **A goal is to have someone in financial aid dedicated** to working with CBE students.
- **Students are assigned an advisor based on program** rather than last name so advisors become expert at CBE financial aid, admissions, scheduling, etc.
- **Advisors are asked to check in** with students every 14 to 21 days at minimum.
- **A goal is for advisors to have regularly-scheduled office hours** in the welding building.
- **Gen Ed instructors will be in the shop** at least one hour a week so students can access support.

Advice for Other Programs

- **Get buy-in from all groups:** advising, financial aid, etc.
- **Put a process in place to assess students** with previous experience. At Lewis and Clark, an advisor sends students to the lab where they can take final exams and place out if they pass.
- **Scheduling and faculty reimbursement is tricky**, particularly if you have both traditional and CBE students in the shop at the same time.
- **Order and prepare materials** so students can access them whenever they're ready. At Lewis and Clark they use a closet with racks to store materials with printed directions and assignments, and they monitor supplies so they can refill.

“Much of this work has been on my shoulders, but when setting up programs it is vital there is buy in from all groups.”

A woman with curly hair, wearing a dark blue work jacket and white gloves, is working on a ceiling structure in a factory or warehouse. She is looking upwards and to the right. The background is blurred, showing other workers and industrial equipment. The overall lighting is dim and blue-toned.

Moving Forward

Continuing the Collaboration

ICCB and EdSystems will continue to provide support and technical assistance to the colleges, including:

- **Continued collaboration through a community of practice**
 - Course implementation
 - Collaborative building of competency assessments
 - Designing and assessing essential employability competencies
 - Panel of colleges (inside and outside Illinois) implementing CBE
 - Panel of students in CBE programs
- **In-depth technical assistance**
 - Financial aid
 - Faculty pay models
 - Transcription
 - Tracking students in a Student Information System
 - Services on a term basis such as rental agreements for books
 - Prior learning assessment
 - Marketing and messaging to prospective students
- **Repository** of competency maps, learning journeys, and projects, along with assessments.
- **In-person visit** to Lewis and Clark Community College

Resource

[Student Insights into Postsecondary CBE](#)

Internal College Progress and Development

Plans and suggestions emerged for colleges.

- **Engage employers as partners** in this work.
 - Involve industry in competency and program development to ensure it fits their needs.
 - Document stories from employers
- **Spend time helping faculty** develop a common understanding of CBE.
 - Leverage assessment of outcomes as a perspective to support instructors to teach in a different way.
- **Talk to learners.**
 - Ask existing students where they're struggling and how a CBE program might help.
 - Get pricing feedback from learners.
 - Pay attention to creating credentials that are stackable.

College Insight

Rend Lake College and **Southeastern Illinois College** intend to engage a targeted group from industry so they have a set of students to pilot an initial course before rolling out a full certificate.

Resources

- [Student Insights into Postsecondary CBE](#)
- [Legal and Regulatory Considerations for Community College Innovation](#)
- [EdSystems' Community College CBE Pilot Project webpage](#)
- [ICCB CBE Google Drive](#)



Closing and Questions