Lessons Learned from the ICCB CBE Design Team

November 2023

ICCB
ILLINOIS COMMUNITY COLLEGE BOARD

EdSystems
EDUCATION SYSTEMS CENTER at NORTHERN ILLINOIS UNIVERSITY

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.

AUTHORS

Ginger M. Reynolds, PhD
Senior Fellow
Education Systems Center at NIU

Heather Penczak
Innovation and Implementation Director
Education Systems Center at NIU

ABOUT ICCB

The Illinois Community College Board (ICCB) is the state coordinating organization for the Illinois Community College System, the third largest in the country and the leading public workforce development trainer in the state. The ICCB has statutory responsibility for administering state and federal grants to community college districts and adult education providers and managing high school equivalency testing for Illinois. Illinois community colleges serve more than 600,000 residents each year in credit, noncredit, and continuing education courses. Illinois is home to 48 colleges in 39 community college districts which provide high quality, accessible, cost-effective educational opportunities to the entire state. Learn more at iccb.org.

ABOUT EDSYSTEMS

Education Systems Center (EdSystems) is a mission-driven policy development and program implementation center based within Northern Illinois University's Division of Outreach, Engagement, and Regional Development. EdSystems' mission is to shape and strengthen education and workforce systems to advance racial equity and prepare more young people for productive careers and lives in a global economy. Learn more at edsystemsniu.org.

ABOUT C-BEN

The Competency-Based Education Network (C-BEN) is revolutionizing how we design, experience, and measure learning throughout a lifetime. We believe learning should be measured by what you can do—the knowledge, skills, and behaviors that lay the foundation for your success—and for more than 10 years we have been guiding our expansive network of education leaders, employers, policymakers, and changemakers towards quality competency-based models and practices. C-BEN is a U.S.-based non-profit organization.

Table of Contents

Background & Approach

Background

Building on work in fall 2021 and spring 2022 with the Competency-Based Education Network (C-BEN) and Jobs for the Future (JFF) through The Equity Collaboratory, the Illinois Community College Board (ICCB), led by Deputy Director for Workforce Education Whitney Thompson, engaged a group of community colleges to develop a competency-based education (CBE) program in the high-demand sectors of industrial maintenance and welding. One of the goals of the project was to create examples and resources that can be shared with other programs and colleges across the state that are interested in pursuing CBE. In alignment with the State's Career and Technical Education Plan (Perkins V) and the Higher Education Strategic Plan, ICCB supported the colleges as they planned and developed a CBE program for implementation in academic year 2023–24. 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, and
c. ultimately, guide and support the institution in transitioning to implementation of a competency-based education program.

ICCB contracted with C-BEN to guide the colleges through its backward-design process of capacity building. Education Systems Center (EdSystems) provided support to coordinate discussions among colleges between C-BEN workshops, to build consensus on deliverables, and to provide guidance on legal and regulatory issues in Illinois. The following describes the process and the colleges' lessons learned.

"C-BEN applauds the Illinois Community College Board for strategically thinking about how the State's institutions could collectively respond to a skills-based economy and workforce shortages with competency-based education. Their vision of bringing together multiple institutions to create unified competencies, assessments, and instruction is a model for other states."
— Charla Long, President, C-BEN

Approach

The design team participated in a series of virtual meetings, in-person meetings, virtual office hours, and coaching sessions. Parkland College, Kankakee Community College, and Kaskaskia College engaged in the program for industrial maintenance and Rend Lake College, Shawnee Community College, Lincoln Land Community College, Southeastern Illinois College, and Lewis and Clark Community College engaged in the program for welding. Lewis and Clark Community College had the only approved CBE welding program in Illinois so they were able to provide insights throughout the process. The first steps of the process were dedicated to introducing participants to the idea of CBE and to helping them understand its goals. To provide this context, in March 2022, ICCB held an introductory webinar for colleges interested in participating in the work and in April the colleges visited Nicolet College in Rhinelander, Wisconsin to see its CBE program in person.

Beginning in June 2022 ICCB held monthly meetings, mostly alternating between C-BEN-led in-person sessions focused on a particular design component and virtual college collaboration sessions in welding and industrial maintenance design groups facilitated by EdSystems. C-BEN assigned coaches who generally met once between each design component session with the welding and industrial maintenance groups. C-BEN led the first virtual workshop in June to define CBE and to introduce the development process. The following pages outline the lessons learned throughout the steps of the process.

In June 2023 the teams met virtually to wrap up, discuss lessons learned through the process, and hear from Illinois early childhood educators who also have been working on implementing CBE. In July, 2023 ICCB held a statewide webinar to showcase the welding and industrial maintenance teams' work for the field.

"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."

Design Process Lessons Learned

Developing Competencies

In July 2022, the colleges began developing their competencies at an in-person meeting at Rend Lake College. They started with a discussion of what is essential for students to succeed in the program and persist in the welding or industrial maintenance field, based on what they have heard from employers. Guided by C-BEN, they began by breaking down overall goals into competencies and ensuring the competencies were measurable, observable, and aligned with industry standards. The colleges were tasked with a next step of validating the accuracy of the competencies by reviewing them with faculty, industry, subject matter experts, and existing literature.

Lessons Learned

- It was important to focus on backward design; starting with what the student should know and be able to do at the end. Even if at first the college is only moving one course to CBE, it is useful to lay out the whole program and where that course fits within the whole.
- Part of the work involved aligning program outcomes across colleges to come to a common definition for the competencies that address different program outcomes. Naming and categorizing competencies in a way that reflects the diversity of the programs, but that also is specific enough to be useful, was initially difficult.
- The welding group used the American Welding Society standards as a starting point but took some time to come to consensus about the appropriate grain size for competencies. Similarly, the industrial maintenance group used the national standards from the Smart Automation Certification Alliance to align as they began their work.
- It was helpful to keep language open-ended, for example using the word "tool" rather than stating a specific tool, so that the competency can grow with changing industry needs.
- The colleges paid attention to those skills that employers have consistently said graduates perform well, and those that need improvement.
- Employability skills were more difficult to put into competencies than technical skills. Participants were able to reference the Illinois Recommended Technical and Essential Employability Competencies but it also would have been helpful for them to review competencies and performance indicators from other colleges.
  - Colleges kept in mind that employability competencies should reflect the specific program. For example, problem solving for welding is different from problem solving for accounting.
  - Similarly, skills like writing should be contextualized to the program. For example, welding students may need to be able to write a work order, but they may not need to know how to correctly cite an academic journal.

College Insight

Kaskaskia 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

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

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

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

Developing an Assessment Strategy

In September, 2022 the colleges again met in-person, this time at Parkland Community College, to develop an assessment strategy and determine levels of mastery: Developing, Developed, and Highly Developed. The technical competencies for both welding and industrial maintenance are demonstrable so creating formative and summative assessment criteria for them was more straightforward. Assessments for employability competencies are less straightforward and so some are still in development.

"They don't need to be able to know the skill, they need to be able to master the skill."

Lessons Learned

- Colleges struggled to delineate levels of mastery for some technical skills since they are used to considering the skills as either mastered or not mastered.
  - They found it helpful to think about the mastery level of "Developed" as indicating a student is able to perform a task independently and "Highly Developed" as indicating a student is able to teach the task to others.
  - They also found the example of mastery levels in the context of getting into a canoe helpful. One might first be able to board without tipping in calm water. A higher level of mastery would be the ability to board in rough waters.
- It was useful for colleges to develop a curriculum map early in the process to show where each competency is introduced, reinforced, and assessed. This also will be useful documentation when applying to the Higher Learning Commission (HLC).
- Unit-level assessments and projects allow individual competencies to be combined and assessed simultaneously.
- It would have been helpful for the colleges to have access to examples of activities and formative and summative assessments from other CBE welding and industrial maintenance programs.
- It would be helpful to have a repository of assessments faculty are willing to share.
- It is helpful to build on current processes, and colleges are thinking through how existing assessment practices can segway into CBE.

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.

Creating Learning Journeys

In November 2022 the colleges met in-person at Parkland College to create learning journeys. A learner's journey starts with knowledge, moves to watching others perform, then to demonstrating competence, then to being able to transfer the competency to other settings and the workplace. The colleges chose between starting with their existing programs and starting with a blank slate. The learning journeys allowed the teams to see gaps and redundancies in their programs. The teams also spent time discussing addressing and assessing essential employability skills. They saw a demonstration of the AI-assisted product Mursion, which uses avatars to fill the gap of controlled demonstration of behavior.

Lessons Learned

- It was useful for instructors across colleges to share and collaborate about their programs in general, unrelated to CBE. These conversations helped to inform curriculum and assessment strategy conversations.
- Different colleges address essential employability skills differently. One offers a specific classroom course, another teaches and assesses essential employability skills through a work experience course, and a third spreads the skills across the curriculum and an internship experience.
- Different colleges also address basic reading, writing, and math skills differently. One college administers an assessment to ensure adequate skills, while another uses its LMS to direct students to campus resources if a problem surfaces in a course.
- It can be useful to provide general education faculty specific examples of how students will use reading, writing, and math skills in their workplaces to help faculty engage students in their courses and so students can understand the application of general education skills in the context of their industry area.
- It is important to build in opportunities throughout a program for students to talk with and learn from each other. This helps students develop essential employability skills in communication and teamwork.
- It is important to build in regular faculty/student engagement to help students stay on track, and to provide pacing plans that show how students would complete a course in a traditional term to help students manage their progress.
- It is important for students to understand that they cannot rely on discussion or participation points in CBE programs to insulate their grade from underperformance.
- Colleges found their instructional designers were particularly helpful in developing learning journey outlines.

College Insight

At **Lewis and Clark Community College** they use a cohort model based on student progress for collaborative assignments. The cohorts can adjust over time as students progress unevenly, and the varied cohorts can help students develop essential employability skills such as interpersonal communication. They also provide students with a check sheet of competencies for instructors to sign off on.

Resources

- Industrial Maintenance: Industrial Wiring
- Industrial Maintenance: Circuts & 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 to assist faculty."

"The overall logistics of implementing and the time to finish the learning journeys for all courses and the entire program [continues to be a barrier]. Another year of grant funding and coaching would help provide release time for faculty and guidance from experts to continue work on the curriculum."

"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."

The Role of the Instructional Coach and Student Support

In January 2023 the colleges met virtually, led by C-BEN, to discuss the role of the instructional coach. Understanding how the program is designed, including what technology is employed and how the enrollment cycle works, helps to determine the roles of faculty and staff. Support includes curriculum design, instruction, assessment, advisors, and coaches; and these roles may be distributed differently than they are in a traditional program. A helpful role for CBE students is an instructional coach who serves as a student's partner throughout their learning journey, providing support in goal setting, offering constructive feedback, and pointing to resources.

In February 2023, the colleges participated in a C-BEN workshop at Rend Lake College to discuss student support services. They discussed how to integrate academic and non-academic supports, including community-based organizations, and how to align them along a learner's journey. To understand students' needs the colleges created personas, fictional representations of different types of students, to help differentiate supports. They also created journey maps to visualize how students would progress through the program; identifying milestones, touchpoints, pain points, and success points.

Lessons Learned

- Advisors need to know about CBE, be onboard, and be an expert in how the program works so they can explain it to students.
- CBE advisors need lower caseloads (with a suggested ratio of 125:1) since they manage more adds, drops, and trajectories.
- It is helpful to have an advisor dedicated to CBE students who understands the program's instructional model and logistics so they can help students seamlessly navigate. Some colleges are considering incorporating their current Resource Navigator to support this work.

College Insights

In the transition to CBE 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 the advisors for CBE students can become experts at CBE financial aid, admissions, scheduling, etc. A goal is for advisors to have regularly-scheduled office hours in the welding building so students don't have to walk across campus and wait for an appointment.

At **Rend Lake College** they are utilizing grant funding for traditional programs to hire success coaches to support student transitions to CBE programs. New students will be able to start at the beginning of every month and then 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 greatly help with student recruitment and success."

Hurdles to Implementation

In a March 2023 convening led by C-BEN, the teams met to discuss hurdles to implementation and the resources needed to overcome them. Common hurdles across colleges included business processes, student aid, start-up costs, and a college's other priority initiatives. Resources that can help include technology, leadership support, state policies, evidence of potential impact, and demand from students and employers.

Lessons Learned

- **Getting Started**: Determining who needs to be included when, and where to start, should be mapped from the beginning for faculty and other departments such as enrollment and financial aid so everyone can understand their role in the process.
- **Logistics**: To accommodate CBE students in the lab, one option is to dedicate specific days of the week to them.

College Insight

To accommodate traditional and CBE students in the welding shop, **Lewis and Clark Community College** sets aside a few booths for CBE students, uses time cards to record when students are in the shop, and dedicates an instructor to them when possible.

- **Student Enrollment**: To make sure the right students are enrolling, both faculty and staff need CBE orientation and training.
- **Faculty and Staff**: Workload and pay structures are areas where the colleges continue to struggle.
  - It would be helpful to connect with colleges in other states with workforce protections similar to those in Illinois.
  - It can be hard to find adjuncts, but sometimes graduates can get all the credentials they need and are willing to teach.
- **Faculty Turnover**: Building a new program in the midst of faculty turnover makes it difficult to keep the process moving.

College Insights

Shawnee College is working with their new welding instructor, who comes from industry, to review their CBE program and help address any competency gaps.

- **Employer Buy In**: Some employers have expressed hesitation about the format of CBE. A few ways colleges have found to ensure that they find value in a CBE program are:
  - Making sure they understand that each student has to master all of the competencies to complete the program, and the competencies were developed in partnership with employers.
  - Reminding employers that the college still is fully accredited and they are using most of the same faculty.

Resources

Legal and Regulatory Considerations for Community College Innovation

Higher Learning Commission: CBE

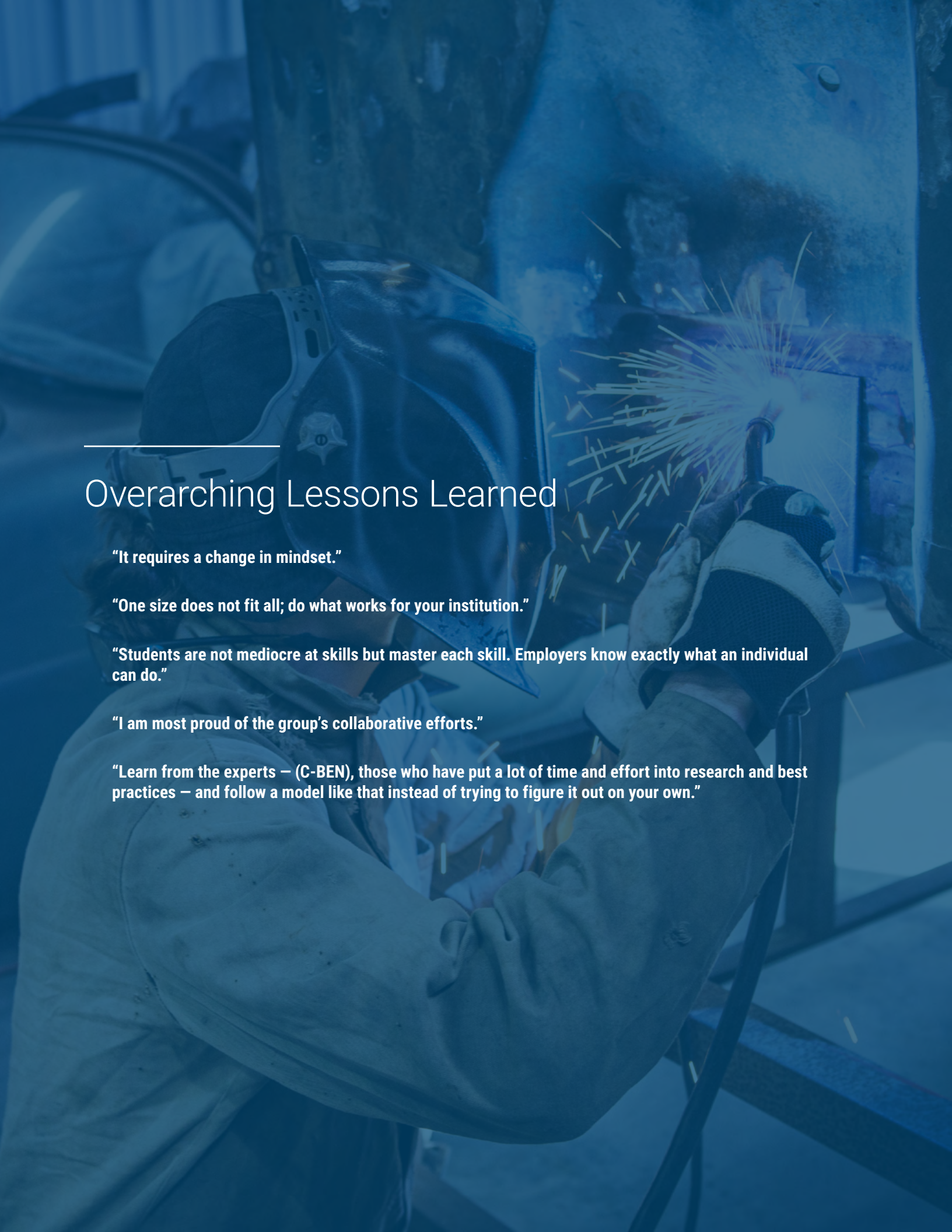
"I like the example of an airplane pilot. They can't be mediocre at the skill. They need to master the skill. And that's very helpful for employers because they hired somebody [from our program] but they can't do X. But maybe they weren't great at X, but because they were great at Y and Z they were able 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."

  - Explaining that the college is utilizing a CBE program to respond to employer concerns and to develop students into better employees.
- **Accreditation**: Colleges are cautious about accredition for CBE as it is a new process.

College Insights

Wisconsin launched CBE with one non-credit course so it could learn before engaging with regulatory issues.

Kaskaskia College is adapting its previously-completed exercises in credit compliance to a CBE time-based model.



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.”

Lessons Learned

Everyone needs to be involved, but everyone doesn't need to be in every conversation.

As colleges navigated the content of workshops and expectations for deliverables as part of the design process, they learned who needed to be present for certain conversations and who did not. It is important for all the departments to understand how the program will affect them from the beginning so they will engage, and it would be helpful to start the process with a roadmap and clear understanding of who needs to be involved, when, and how CBE will impact their work. A few key learnings for having the right people involved at the right time include:

Student Support

- It is crucial to get the departments who will be key in making the logistics of a CBE program work involved at the start. Departments including financial aid, the registrar's office, and advisors need to understand the process, enrollment and progression through the program so they can identify and help address possible problems.
- These departments should be kept updated on the progress of the work but do not need to be included in more content-specific conversations such as competency development and the creation of learning journey outlines.

Faculty

- Faculty should be involved from the beginning and throughout the entire process.
- At the beginning of the process there were more administrators involved than faculty, and it required additional effort from faculty to provide technical background to administrators so they could participate in activities such as competency development. Once faculty became more consistently engaged, the welding and industrial maintenance groups were able to have content-specific conversations to drive the work in a more productive way.

Administrators

- Administrators play a key role in the process by coordinating with faculty to ensure they are engaged, deliverables are completed, and any questions or faculty needs are addressed.
- Administrators are a key connector between the work of faculty and other college departments so the content and logistical adaptations for the program are aligned.

"Build a solid CBE implementation team from the start to ensure people know their departments and processes are being included and their input is needed for success."

"It takes a village! It is not as simple as just moving course content to competency-based achievements but the behind the scene tasks that must be addressed."

"The more input you can have the better."

"This process requires comprehensive teamwork. Capitalize on any existing channels for gathering the necessary data and explore new channels for expanding resources."

Collaboration is essential.

Building competencies and learning journey outlines that work across multiple colleges is a challenging task, but colleges consistently said that the collaboration part of the process was the most useful. A poll of participants found that the most valuable aspects of this collaboration were (1) offering a mix of in-person and virtual engagements, (2) speaker sessions on targeted topics, and (3) opportunities to develop materials as a collective.

The process takes time.

Scheduling protected time for teams to collaborate on each step of the process is a challenge, but it is a crucial part of building a common understanding of CBE so that everyone contributes to and works toward the same goal. Faculty especially need time to have focused conversations on course implementation.

Suggestions and Requests

For states, boards, or institutions embarking on a similar journey, here are some lessons learned from this project to consider.

- Having access to examples of activities and formative and summative assessments from similar CBE programs is critical.
- It is helpful to build a repository of assessments that faculty are willing to share.
- Consider developing a roadmap that lays out the process from the beginning through HLC, including who needs to be involved in which steps.
- Develop a chart describing how each department (registrar, financial aid, etc.) will be affected to they can understand why they're being asked to participate and what they will need to adjust.
- Include employers at the beginning of the design process so they understand what CBE is, what the college is trying to accomplish, how it will help them, and that CBE is a legitimate instructional model.
- Consider asking other colleges who have instituted CBE and students who have been through a CBE program to share their experiences with employers.
- Connect with colleges in other states with workforce protections similar to yours to hear how they developed staff workload and pay structures.

College Insight

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

"I am proud that we were successful in "developing state-wide competencies and levels of mastery in welding and that we came together across the state to strengthen our programs."

"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."

Case Study: Lewis and Clark Community College

The welding Program at Lewis and Clark Community College is the first fully-approved CBE program in the Illinois Community College System. EdSystems sat down with Associate Professor Travis Jumper, PhD, the Welding Technology coordinator, to learn how it works.

"Be prepared for work. A lot of work."

Student Recruitment

To get the word out to students about the program, the program coordinator and faculty are proactive. They:

- Visit feeder high schools once or twice each year to talk with students.
- Make an effort to connect with high school welding instructors.
- Explain to high school counselors that students can use visitation days at the college to see that students can go at their own pace and that they don't spend much time sitting in a 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 their website, and another link that auto generates a response, to access a promotional video, an outline of program options, and a link to the scholarship tab.
- Recruit businesses to talk to high school and traditional welding students when they visit. This also is an opportunity to tell businesses that the program can help their existing employees who need assistance with a few specific skills.
- Connect with county employment agencies so they can share about the program and its benefits to people looking for a job. Sometimes agencies are able to help with expenses as well.

Student Selection and Preparedness

To determine who is a good fit for the program:

- The program coordinator has a personal conversation with each student. They warn students that they have to be self-motivated and able to make the time in their schedule. If students have a history of putting things off, the program coordinator suggests they might be a better fit for the traditional program.
- The program coordinator also sometimes meets with parents to explain what students will be expected to do.
- Advisors also are asked to stress with potential students that the program is self-motivated and self-paced.

Student Support and Retention

To help with support and retention:

- Students use time cards to keep track of when they are in the shop. Each student's assigned instructor checks timecards every few weeks and sends an email to any students who aren't attending to let them know what they have left to do and how much time is left in the semester.
- The program coordinator is in the shop a lot and so can monitor who is and isn't there. When a student isn't attending they try to have an in-person conversation.
- The program coordinator follows up with students about financial aid. Since many CBE students are working, they don't check their school email consistently. Since email is how the financial aid

office communicates processes and deadlines, and since students enroll and complete courses at non-traditional times, this can lead to students being dropped. A goal is to have someone in financial aid dedicated to working with CBE students.

- Students are assigned an advisor based on their program rather than their last name so the advisors for CBE students can become experts 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 so students don't have to walk across campus and wait for an appointment.
- Moving forward, general education instructors will sit in class at the shop at least one day a week for one hour so students can access support for their general education courses in an environment they're comfortable with and with other students they know.

Advice for Other Programs

- It is important to have buy-in from all groups, including advising, financial aid, etc.
- It is important to have a process in place to assess students with previous experience if they want to test out of a class. 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, which may not be on your traditional yearly course schedule. 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."

Moving Forward

Continuing the Collaboration

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

1. Continued collaboration through a community of practice. In response to specific requests from colleges, the group will address at least the following:
    a. Designated time for instructors to collaborate on course implementation issues.
    b. Competency assessments the groups want to build together, with potential assistance from coaches.
    c. Designing and assessing essential employability competencies.
    d. If possible, engage with a panel of colleges (including outside of Illinois) that are implementing CBE welding and industrial maintenance programs.
    e. If possible, engage with a panel of students in CBE programs.
2. In-depth technical assistance and time for strategizing on logistical implementation issues. In response to specific requests from colleges, the following will be addressed:
    a. Financial aid
    b. Faculty pay models
    c. Transcription
    d. Tracking students in a Student Information System including financial aid eligibility and course completion, and flags for CBE involvement for evaluation and continuous improvement
    e. Services that are on a term basis such as rental agreements for books
    f. Prior learning assessment
    g. Marketing and messaging to prospective students
3. A repository of competency maps, learning journeys, and projects, along with assessments that the colleges build, that individual faculty are willing to share, and any available examples from other states.
4. An in-person convening for learning and collaboration in Fall 2023.
5. An in-person visit to Lewis and Clark Community College to see a CBE welding program in action, facilitated by Travis Jumper, Lewis and Clark Welding Technology Coordinator.
6. A menu of support options for the colleges including focus groups and role-alike discussions for faculty, administrators, staff, and advisors.
7. A published report on the alignment of the welding and industrial maintenance competencies with high school model programs of study and dual credit.

Internal College Progress and Development Opportunities

Several plans and suggestions emerged for how colleges can continue to grow interest and support in the CBE programs. They include:

- Engage employers as partners in this work.
    - Involve industry in competency and program development to ensure it fits their needs. This also will help assure employers that CBE students will be good hires.

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.

    - Document stories from employers who say they are hiring CBE program graduates and finding value in their preparation.
- Spend time helping faculty develop a common understanding of CBE.
    - Leverage assessment of student outcomes rather than course completion as a perspective to support instructors to teach in a different way for CBE.
- Talk to learners.
    - Ask existing students where they're struggling and how a CBE program might help.
    - Get pricing feedback from learners. What would they pay for the program you're offering?
    - Pay attention to creating credentials that are stackable to allow students to grow past that first job.

Resource

Student Insights into Postsecondary CBE

Implementation Timeline

Kankakee Community College

Kankakee Community College is engaging its team of staff and faculty in fall 2023 to prepare to offer a full industrial maintenance technology CBE program in fall 2024. It plans to include program alumni, local industry partners, and adjunct instructors as instructional coaches and other student supports to supplement the campus-wide student support services already available.

Kaskaskia College

Kaskaskia College is working to finalize its plans for CBE scheduling and financial aid and intends to begin offering CBE courses in the fall of 2024.

Lincoln Land Community College

Lincoln Land Community College currently has a CBE program for information technology and plans to have a welding CBE program for certifications ready by spring 2024.

Parkland College

Parkland College submitted its industrial maintenance CBE program to HLC for approval and is waiting for a response. In fall 2023 it will run pilot open lab sections of existing CBE courses with a plan to offer additional courses and the full program in spring 2024. It also is hiring a CBE navigator who will be the primary advisor/academic success coach for CBE students.

Rend Lake College

Rend Lake College plans to pilot a set of CBE welding courses in fall 2023 and continues to develop courses in its 12-credit welding certificate so that it can obtain HLC approval and offer a CBE welding certificate in spring 2024. Rend Lake also continues to make improvements on prior learning assessment strategies and is hiring success coaches for traditional programs who will support student transitions to CBE programs. It also is making 1-credit courses available to employers looking to develop particular skills in their employee(s).

Shawnee College

Shawnee College is focusing efforts on hiring additional part-time faculty to provide release time for its welding instructor to devote to CBE program design, and it is hiring a curriculum development manager to lead CBE efforts. It also is working closely with WIDS to support the move to a CBE model and plans to have a program ready to launch in spring 2025.

Southeastern Illinois College

Southeastern Illinois College is using the 2023–24 school year to develop additional content and improve infrastructure to prepare for launching a CBE welding program in fall 2025.

Final Products

Welding Competencies

Welding Learner Journey Map and Persona and Support Options

Sample Learning Journey Outlines

- Welding: Accountability
- Welding: Communication

Industrial Maintenance Competencies

Welding Competencies

Learn More

Student Insights into Postsecondary CBE

Legal and Regulatory Considerations for Community College Innovation

EdSystems' Community College CBE Pilot Project webpage