Informing Perkins V: Student Input on Career and Technical Education in Illinois

Commissioned by the
Illinois State Board of Education
and the
Illinois Community College Board

December 2019

Background + Acknowledgments

With the generous support of the Joyce Foundation, this report was commissioned by the Illinois State Board of Education and the Illinois Community College Board to ensure that student voice informs the Illinois Perkins V plan. Independent consultants Simon Moore and Laurel Foglia were contracted to facilitate student input sessions and synthesize input in this report.

Many thanks are due, first and foremost, to the 57 high school and community college students who volunteered their time and insight and openly shared their experiences – victories and appreciation, challenges and frustrations – in the interest of creating the best possible career and technical education experience for those following in their footsteps. Gratitude is also due to the sites across that state that hosted community input sessions and to the educators at these sites who recruited student participants. This report is only possible through their generosity. Thank you to:

Buffalo Grove High School

Saint Clair County Regional Office of Education

Carl Sandburg College

Woodruff Career & Technical Center

Rock Valley College

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I. Executive Summary

Purpose + Process

Key Themes

Leading Recommendations

December 3, 2019

Executive Summary: Purpose + Process

Illinois is currently developing its proposal for Perkins V Career and Technical Education (CTE) funding from the U.S. Department of Education. This report is a component of engagement efforts coordinated by the Illinois State Board of Education (ISBE) and the Illinois Community College Board (ICCB) to ensure the state's Perkins V proposal is informed by community stakeholders.

Specifically, this project was commissioned by ISBE and ICCB to gather input from students, who are the primary stakeholders of our CTE systems. Students are the population most impacted by education funding and policy decisions. They care deeply about the effectiveness of CTE initiatives. They also have invaluable lived experience and insight into what works for learners and how to create the best possible CTE system for Illinois.

With the support of the Joyce Foundation, consultants Simon Moore and Laurel Foglia facilitated **student input sessions at five geographically diverse locations across Illinois**. A total of 57 students participated. There were roughly even numbers of high school and community college students, and the vast majority were enrolled in CTE programs.

Students were enthusiastic to participate in the project. During input sessions, they collectively shared a powerful mix of keen observation, gratitude, and critical candor when reflecting on their CTE experiences. They also articulated an inspiring vision for the the future of CTE in Illinois that includes autonomy for learners to map their own educational paths, expansive and equitable access to career exploration and preparation, and strong instruction and advising – all of which ultimately open doors to fulfilling, family-sustaining careers. This report aims to convey this student input in all its energy and insight.

Executive Summary: Key Themes

This report is a synthesis of student input and identifies points of commonality. Dialogue during the input session converged around five key themes:

- **1. CTE's Powerful Impact** CTE often benefits students' engagement, depth of learning, sense of purpose, and access to family-sustaining careers.
- 2. Factors Affecting Entry to CTE Many students feel that career-focused education is stigmatized, and there is major variation in how and why students enter CTE.
- **3. Exploration of Career Pathways** A vast majority of students strongly value access to information, personalized advising, and having flexibility and agency in choosing a career pathway.
- **4. Emphasis on Work-Based Learning** Nearly universally, students expressed that work-based learning is hugely valuable and should be integrated into every phase of CTE programs.
- 5. Relevant + Contextualized Learning Many students want their coursework, both CTE and general education, to have clear connection to their lives and their careers.

Executive Summary: Leading Recommendations

Leading recommendations are the project's primary findings. These are the ideas for strengthening CTE that students most frequently and enthusiastically raised during input sessions. In accordance with student input, leading recommendations are listed in priority order:

- Reimagine the CTE course structure to maximize student exposure to a breadth of career pathways and provide students more ability to change directions in order to facilitate better-informed and more confident career choices.
- Integrate **progressively deepening work-based learning opportunities** into students' CTE trajectories. Ranging from career exploration to job-specific skill building, **work-based learning is critical at every step**.
- **Expand the commitment and capacity of employers to offer internships**. There is widespread and firmly held student demand for work-based learning, yet **the supply of opportunities is limited** and only marginally accessible for many.
- Provide students with advisors who build strong relationships with students and help them navigate decisions about whether to participate in CTE programs and which career pathways to pursue.
- Reduce CTE stigma among students, families, and educators by (1) increasing visibility of student success stories, (2) raising awareness that many technical careers and skilled trades provide family-sustaining wages, and (3) reinforcing the message that many CTE credentials are stackable and can lead to a bachelor's degree and beyond.
- Ensure that student entry into CTE is intentional, either because it is a universal school experience or because they are empowered to opt in based on their talents, interests, and aspirations.

II. Methodology

Sites + Schedule

Participant Characteristics

Role of Consultants

December 3, 2019

We solicited student input through five facilitated discussions at sites across Illinois.

ISBE and ICCB created the overall project structure, which was a series of group input session with students at sites representing a variety of geographies in Illinois. Additionally, ISBE and ICCB identified host sites and timeline for the input sessions. The following details the sites and schedule:

Host Institution	Location	Date	Time
Saint Clair County Regional Office of Education	Belleville, IL	09.19.19	430-600pm
Woodruff Career & Technical Center	Peoria, IL	09.27.19	400-530pm
Rock Valley College	Rockford, IL	10.01.19	400-530pm
Buffalo Grove High School	Buffalo Grove, IL	10.07.19	130-300pm
Carl Sandburg College	Galesburg, IL	10.08.19	400-530pm

A mix of high school and community college students, the vast majority of participants were involved in CTE programs.

Each host site was responsible for recruiting students to participate in the input sessions. They were directed to invite primarily, though not exclusively, students involved in CTE programs representing a variety of career pathways. The following provides insight on participant characteristics:

Total participants	57	
Participants by site	Belleville – 13 Buffalo Grove – 18 Galesburg – 10	Peoria – 4 Rockford – 12
School level	High School – 31 (54%) Community College – 26 (46%)	
Enrolled in CTE program	Yes – 47 (82%) No – 10 (18%)	
Gender	Male – 33 (58%) Female – 24 (42%)	
Most common sectors for CTE participants	Information Technology – 12 (26%) Business – 10 (21%)	Art + Design - 6 (13%)

Additional Note: Participants were not asked to self-identify regarding race and age. Facilitators made an anecdotal assessment, based on observation, that the large majority of all participants were White and the preponderance of community college participants were of traditional age (18-24).

Facilitation was designed to elicit candid input from participants; this report highlights the most prevalent ideas conveyed during input sessions.

ISBE and ICCB generated a preliminary set of questions about student engagement in CTE. We shaped those questions into a facilitation plan, which was reviewed by ISBE and ICCB before implementation. The plan was designed to build students' readiness to share their experiences with and hopes for CTE in Illinois. We communicated to students that we would be neutral facilitators and made clear that their input would be anonymized in both session notes and this report.

Input Session Agenda:

- Background on project, CTE, and Perkins V
- Group introductions
- Icebreaker activity
- Discussion on prior CTE experience
- Discussion envisioning ideal future of CTE

Selected Discussion Questions:

- What's one experience, person, or resource that has helped you think about your career options?
- If you're participating in a CTE program, what have you gained so far in that program?
- Ideally, what would you like to gain from participating in CTE programs?
- Describe the ideal system for helping students choose and prepare for careers.

This report synthesizes student input and focuses on the themes students most frequently communicated during input sessions. The aim is to bring attention to those points of convergence rather than reporting every idea we heard. Quotes are provided to enable the reader to hear from students in their own words. Some quotes have been edited for the purposes of readability and anonymity.

III. Findings

Overview

CTE's Powerful Impact

Factors Affecting Entry to CTE

Exploration of Career Pathways

Emphasis on Work-Based Learning

Relevant + Contextualized Learning

Additional Findings

Student input centered around five key themes that were prevalent across sites and participant backgrounds.

Findings are organized by these common themes.



CTE's Powerful Impact – CTE often benefits students' engagement, depth of learning, sense of purpose, and access to family-sustaining careers.





Factors Affecting Entry to CTE – Many students feel that career-focused education is stigmatized, and there is major variation in how and why students enter CTE.





Exploration of Career Pathways – A vast majority of students strongly value access to information, personalized advising, and having flexibility and agency in choosing a career pathway.



Emphasis on Work-Based Learning –

Nearly universally, students expressed that work-based learning is hugely valuable and should be integrated into every phase of CTE programs.





Relevant + Contextualized Learning -

Many students want their coursework, both CTE and general education, to have clear connection to their lives and their careers.



CTE often benefits students' engagement, depth of learning, sense of purpose, and access to family-sustaining careers.

What we heard: Student responses focused on three common areas:

Discovering
Direction –
Identification of passion for learning and pathways to a career

Inspirational Instructors –

Teacher influence on students' familiarity with career options and confidence in pursuing them

Pathways to Prosperity –

Entry into family sustaining career pathways as a result of CTE participation



Student input informs the following recommendations drawing on the powerful impact of CTE:

- Continue to solicit community input to guide state policy. Students compellingly articulate the positive impact of CTE initiatives and clearly identify the program elements that are most valuable to them.
- Emphasize building a pipeline and hiring high-quality CTE instructors. Students often name a relationship with a particular teacher as a uniquely powerful element of their experience.
- Amplify student voice in articulating the impact of CTE in Illinois. Successful graduates are among the most convincing champions of CTE efforts, and they are often enthusiastic to share their CTE stories. Many graduates of CTE programs have good jobs that they believe would not have been possible without their CTE experience.



Students shared various ways CTE has positively impacted their learning and career trajectories.

Findings below capture student input:

Discovering Direction Inspirational Instructors Pathways to Prosperity Alternative Means of Engagement – Guided Exploration – Classroom **Experiential Learning, Tangible** For some students who have teachers often played a key role in **Outcomes** – Graduates of CTE struggled in school, CTE's emphasis helping students identify career programs frequently expressed that on experiential, applied learning paths by providing exposure to a their participation was integral to variety of options and/or inspiring provided an alternate path that their success. CTE's emphasis on deeper student engagement in their applied learning and career sparked their passion and created a newfound sense of purpose. development inspired deeper subject. engagement, and focus on particular Opening Eyes, Opening Doors – CTE **Building Assets for Success –** content built their readiness to often exposed students to career Students often credited instructors enter a professional environment options they were previously with building job skills and upon graduation, which many did. unfamiliar with. As a result, some developing the professional students found career pathways connections that provide an aligned with their skills and interests entryway into a job. This and offering new possibilities for combination of skills and social capital is a foundation for success. success.

The following illustrative quotes highlight the areas of focus relating to the powerful impact of CTE:

"I wanted to find something I love to do. I didn't like my classes in business when I started college. It was like torture. CTE changed all that. I switched to trades and I've been so happy ever since I did." – Community College Student

"My professor got me a job as a student worker. When I was getting ready to graduate, he helped me get a job at my college working in the print shop. And I just bought a house and I'm doing renovations." – Community College Graduate

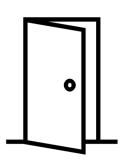
"One woman in the adult education department is helping me think about switching careers. She asks me questions that lead me in the right direction. She meets with me to talk about what I like and my experiences, and based on that she makes suggestions. So far she has been right on." — Community College Student

"Being the first to go to college, I was able to say I did it. Now I want to do a bachelor's. With my associate's degree, I got the flex. Now I want the super flex." – Community College Graduate

"I don't know how many places there are like my high school where you can come learn about everything from Barbering to Auto Body. Make more high schools like mine. I have so many friends who went here who are working in their field now." – High School Graduate

"The general CTE and multimedia teacher at my high school inspired me. We were already making webpages in 10th grade. It was hands-on and challenging and got me interested in tech." – High School Student

"My Agriculture teacher has been influential. She was getting frustrated with the class and asked me to help out with grading. I thought it was fun, so I started to take on other odd jobs like stocking the classrooms. Then she let me start to help run classes. And then we got to go to an Agricultural Education seminar. That's when I really realized it was what I loved." – High School Student



Factors Affecting Entry to CTE

Many students feel that career-focused education is stigmatized, and there is major variation in how and why students enter CTE.

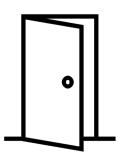
What we heard: Student responses coalesced around two areas of focus:

Perceptions of CTE –

Negative effect of stigmas and underemphasis on CTE participation

Entry Levers –

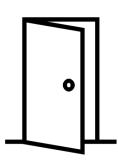
Forces that influence whether students join CTE programs



Factors Affecting Entry to CTE: Emerging Recommendations

Student input informs the following recommendations for increasing CTE participation:

- Reduce CTE stigma among students, families, and educators by (1) increasing visibility of student success stories, (2) raising awareness that many technical careers and skilled trades provide family-sustaining wages, and (3) reinforcing the message that many CTE credentials are stackable and can lead to a bachelor's degree and beyond.
- Ensure that student entry into CTE is intentional, either because it is a universal school experience or because they are empowered to opt in based on their talents, interests, and aspirations.
- Train educators to present CTE as a viable and respectable path for all students, not just for those who are struggling in traditional academic courses.
- Create conditions that encourage high schools to prioritize entry into careers and postsecondary career
 pathways on a similar level as and not exclusive from four-year college enrollment.

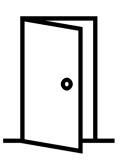


Students recognized that negative perceptions of CTE deter participation, yet in- and out-of-school factors can overcome this stigma.

Findings below capture student input:

Perceptions of CTE Entry Levers Influential Stigma – Many students felt that career-**CTE Integration + Function in High Schools –** CTE is a focused or vocational education is presented, both universal element of student experience in some high implicitly and explicitly, as a less preferable option. They schools, yet in others, a small but significant number of students were placed into CTE simply to add credits or fill stated that this discouraged many from pursuing CTE. For others, it resulted in delayed entry to CTE. Alternately, schedules. students at high schools that integrate and celebrate CTE **Visibility** – A critical mass of students were unaware of as foundational seemed to avoid the effect of this stigma. the available CTE options during high school. As a result, they expressed regret at entering career pathways later **Impact of 4-Year College Emphasis** – The pervasive push to earn a four-year degree led some students to subvert than they would have preferred. their interests in both CTE and community colleges. More **Family Influence** – A number of students stated that broadly, many students expressed that four-year college family members influenced their decision to participate in enrollment was the primary priority in their high schools, CTE, either because an older sibling was enrolled or resulting in less attention and visibility for CTE. because their parents worked in a related profession.





Factors Affecting CTE Participation: In Their Own Words

The following illustrative quotes highlight the areas of focus relating to entry to CTE:

"My mom always told me I was going to college. But I wanted to work with my hands and do something creative. Looking back, I would've gone straight to community college. At the time, I felt like going to a community college wasn't going to amount to much. Most of my high school classmates were going to fouryear colleges and I just joined the pack. Having more students share their experiences would've helped or going to a career center while I was in high school."

- Community College Student

"Where I'm from, there's a stigma attached to vocational ed versus a traditional degree. We are told to get a degree. Instead, it should be you study what you want without any backlash or negative stigma. You shouldn't have to be a nurse if you want to be a mechanic."

Community College Student

"I learned about CTE because I failed. I failed a class and then they suggested I go into trades." – High School Graduate

"My dad was a psychology professor and for 25 years I heard, 'Go to college!' It should've been, 'Learn a trade!' When I went to apply for a job at a factory in town, I scored highest on a pre-test of any female in 5 years and second highest of anyone on the day we tested. But they said, 'You don't have experience,' and wouldn't hire me." – Community College Student

"I was in 10th grade and needed another class to fill my schedule. I was already ahead and had completed most of my requirements. They just put me into nursing because it was a 3-hour class to fill my schedule and it took up a lot of time. But then I really liked it." — Community College Student

"I think guidance counselors don't push career opportunities enough. They focus on the average college experience."

- Community College Student



Exploration of Career Pathways

A vast majority of students strongly value access to information, personalized advising, and having **flexibility and agency in choosing a career pathway**.

What we heard: Student responses coalesced around five areas of focus:

Starting CTE Early –

Benefits of earlier career exposure and exploration

Knowledge of Options –

Sources of information on potential career pathways

High-Quality Advising –

Role of educators and other adults in helping students understand career pathways

Insight on Industry –

Job opportunities and financial benefits each career pathway may provide

Choice and Flexibility –

Ability to consider multiple paths and change directions



Exploration of Career Pathways: Emerging Recommendations

Student input informs the following recommendations on exploration of career pathways:

- Reimagine the CTE course structure to maximize student exposure to a breadth of career pathways and
 provide students more ability to change directions in order to facilitate better-informed and more confident
 career choices.
- Provide students with advisors who build strong relationships with students and help them navigate
 decisions about whether to participate in CTE programs and which career pathways to pursue. Advisors
 should have meaningful familiarity with relevant industry sectors and labor market trends so that they can
 help students plan for long-term career opportunity and economic flourishing.
- Increase student agency by providing equitable access to information on CTE opportunities and career pathways available at their schools, possibly via widely distributed print materials or web resources.
- Offer structured career exploration opportunities in earlier grades so that students feel more confident and informed when the time comes to make decisions about career pathways.
- Ensure schools' number and variety of CTE pathways reflect student interests, advances in technology, and the demands of local industries.





Many students stated that career exploration should begin earlier, and they value access to useful information on career pathways.

Findings below capture student input:

Starting Early **Knowledge of Options** Middle School Opportunities – Many students wished **Student Agency to Access Info** – Centralized sources of information on CTE options – like course catalogue, they had been able to explore career possibilities and booklets, and school websites – are often a valuable their own interests in middle school. They suggested career-oriented field trips, workshops, sample classes, and resource and enable students to take initiative in questionnaires as tools to cultivate curiosity and start understanding their CTE choices. exploring CTE offerings. Benefits of Career Events – Students found events like career fairs helpful in gaining familiarity with their options, **High School Curricular Structure** – Most students and many expressed that more students should have the expressed a desire for CTE options and advising to begin opportunity to attend. no later than 9th grade. Yet a significant number stated that they were not able to begin CTE courses until the second half of high school. Earlier career exploration would allow more time to consider options and more confidently choose a pathway.





Students commonly expressed that effective, individualized advising enables them to explore career options and select the best pathway.

Findings below capture student input:

High Quality Advising Insight on Industry Relationships at the Forefront – When advisors build **Opaque Economic Implications** – Students communicated multidimensional relationships with students and know that they often select a career pathway without a clear their interests, aspirations, capabilities, and challenges, understanding of economic context. For example, how they are more effective in facilitating discovery of a wellmany jobs will be available when they graduate? Will they matched career pathway. This type of relationship is earn a family-sustaining wage? How does compensation compare to other fields? And what will the job market in foundational to effective career advising. their field look like in 10 years? **Course Selection and More** – At the community college level, a critical mass of students felt that advising was **Advising Personnel Matters** – Community college primarily focused on course selection to facilitate degree students expressed that advisors are most effective when attainment. Yet students' ideal would expand advising to they have job market insights and professional experience be more holistic in scope and take a long view, focusing on beyond education. Often, though, students felt that lifelong career development. advisors' experience and training do not match these criteria, creating a barrier to meaningful industry insight in the advising process.



Many students conveyed a desire for better mechanisms to explore and sample a range of career pathways.

Findings below capture student input:

Choice and Flexibility Choice and Flexibility, Cont'd Course Structure – Many students reported a **Limited Offerings** – Some students felt restricted by the fundamental mismatch between how courses are offered limited range of CTE offerings in their school or region. Nearly all expressed a desire to explore more options - typically semester- or year-long classes on a single area of focus – and the kind of flexible exploration they are with lower commitment. Even those satisfied with CTE looking for. High school students in particular requested offerings said that exposure to more career options would that the structure of CTE allow for the following: help them feel more prepared to enter the workforce. **Short-term classes** that offer brief exposure to a Ongoing Exploration – Many community college broader array of pathways students, even those who had already chosen a pathway, stressed the importance of opportunities for continued Exposure to *multiple pathways at once* exploration within their field and beyond it. Easy procedures for adding and dropping a **Anxiety of a Life Decision** – A critical mass of students pathway expressed anxiety around career indecision. Many felt Options to combine pathways into *hybrid* pressure to choose a career, a decision with lifelong disciplines aligned with individual interests implications, without adequate time or information.



Exploration of Career Pathways: In Their Own Words

The following illustrative quotes highlight the areas of focus relating to exploration of career pathways:

"The high school presented at my middle school, so we knew a little about our options. But you really learn through conversations with your counselors. That doesn't really start until 10th or 11th grade.

We should start those conversations in 9th grade at the latest." – High School Student

"I'd like to **figure out my major before college**, before it costs me a fortune." – *High School Student*

"Start earlier. Freshman and sophomore year, you take all these general classes. Then, junior and senior year, you're asked to figure out the rest of your life real quick. It's too fast." – High School Graduate

"Schools should start the career questionnaire in middle school, evaluate student strengths, offer workshops for applied experiences, repeat the career questionnaire throughout HS, and bring in guests to speak about different careers." – Community College Student

"A lot of kids have an idea of what they want to do but at the same time they don't. Keep in mind that kids are trying to figure it out." – High School Student

"Have counselors guide you, show they care, and make it more relevant. They need someone like our advisor. He got to know us and by the end of the first semester, he knew where everyone needed to go. And then he pushed us there."

— Community College Student

"The whole process of trying to get into the right program is hard. I'm in the position of having to go back to school because I'm a dislocated worker. The advisors were not helpful in directing me or in understanding my background and clarifying all my options." — Community College Student

"A lot of guidance counselors focus on the credits you need to pass, **not how to build for your future**." – Community College Student



Exploration of Career Pathways: In Their Own Words, Cont'd

The following illustrative quotes highlight the areas of focus relating to exploration of career pathways:

"You shouldn't get penalized or get set back for switching pathways. If we started earlier in high school, this might not be an issue." – CTE High School Graduate

"Students have to find out what they want to do by exploring. Even if you know what you want to do, you need to go out constantly to learn new things. But you need a counselor to help reflect these experiences back to you." — Community College Student

"There's no room in our schedules to explore or take multiple areas at once, and you can't integrate subjects. I really want to go into the fine arts. But I also want to do business. But the programs don't allow for me to do both at once or see how they connect." – High School Student

"Whenever we went on tours to see what jobs we could do and toured manufacturing, it's an eye opener to the many options that might be out there." – High School Student

"College students still don't have a clue what they want to do. The school needs to be conscious of what it costs when you're finding your way." — Community College Student

"I wish we had more opportunities at the high school. We only have four main programs through the vocational center: auto, welding, nursing, and culinary. Our agriculture programs aren't dual credit. The dean won't listen that we need more options." – High School Student

"Good counselors listen and give a lot of options. When I started in arts and didn't like it, they helped me find a change. They made a suggestion based on learning about me through conversations." – High School Student

"We need easily accessible CTE classes (not 3 hours away, not detrimental to the bank account, not exclusive), experience, and professional guidance." – High School Student



Emphasis on Work-Based Learning

Nearly universally, students expressed that work-based learning is hugely valuable and should be integrated into every phase of CTE programs.

What we heard: Student responses coalesced around five areas of focus:

Exploration + Discernment

 Work-based learning as a key means of choosing a well-matched career pathway Essential Experience –

High value of meaningful, sustained on-the-job experience

Classroom as Workplace

Integration of career simulations into coursework

Peer
Learning –

Guidance from more advanced CTE students Insufficient Opportunity-

Lack of access to internships and apprentice-ships

Emphasis on Work-Based Learning: Emerging Recommendations

Emphasis on Work-Based Learning

Student input informs the following recommendations on work-based learning:

- Integrate progressively deepening work-based learning opportunities into students' CTE trajectories.
 Ranging from career exploration to job-specific skill building, work-based learning is critical at every step.
- Expand the commitment and capacity of employers to offer internships. There is widespread and firmly held student demand for work-based learning, yet the supply of opportunities is limited and only marginally accessible for many. Help employers see how they benefit from offering these opportunities.
- Strengthen the ability of schools and education systems to empower students to participate in internships. Key elements of this work include cultivating employer relationships, advocating for students, centralizing searchable information on opportunities, and setting standards to ensure internships facilitate meaningful learning.
- Enhance workplace simulation in classrooms by **engaging more adults with relevant field experience**, including both lead instructors and time-limited visitors.
- Increase **opportunities for peer-to-peer learning in CTE**. Students trust their more advanced peers as valuable sources of insight on selecting and preparing for career pathways.



The vast majority of students identified workbased learning as essential to exploring career options and building a foundation for success.

Findings below capture student input:

Essential Experience Exploration + Discernment Continuum of Work-Based Learning – Students stated a **Technical Skill Building** – Students recognized the desire for a progressively deepening continuum of worksubstantial value of work-based learning, especially based learning opportunities. In particular, workplace internships and apprenticeships. These longer-term exposure is a key means of exploring which career placements advance students' job-specific skill pathways are (and equally important, are not) a match for development in the context of industry standards and their skills and interests. Students suggested: facilities. Field trips to a variety of workplaces early in high Interpersonal Intelligence + Workplace Norms - In school, middle school, or even elementary grades internships and apprenticeships, students reported building their interpersonal capabilities in a professional **Conversations with professionals** from various setting, connecting with colleagues, forging relationships fields with mentors, and receiving feedback. They also shared *Mini-internships* in a narrowed set of sectors and/or that they gained valuable exposure to professional workplaces to advance students' career choice expectations, employer culture, and adjacent career **Longer-term apprentice-/internships** with real tracks. This learning has lasting value well beyond any responsibility to further test students' career choice single work-based placement.

Most students wanted greater access to workbased learning: to professionals in their field, to learn from peers, and especially to internships.

Emphasis on Work-Based Learning

Findings below capture student input:

Classroom as Workplace	Peer Learning	Insufficient Opportunity
Professionals in the Classroom – Students benefited when industry- experienced adults were in their classrooms. This can occur via visits from professionals and via teachers who set industry-aligned expectations and design assignments	 Prep for Higher Expectations – High school students knew expectations would be higher in college, yet they were often not sure how. Engagement with college students is a means of closing this information gap and enabling better preparation. 	 Stronger Role for Education – Students wanted schools to more ardently advocate for employers to create internships and commit spots. They also envisioned a central listing of internships. Lack of Employer Investment –
 Facilities Matter – Classrooms with industry-standard equipment facilitate workplace simulations. Conversely, when equipment is outdated, students build false confidence that is shattered when they enter a real workplace. 	Pathway Insights – Many students wished they had been able to speak with more advanced students to learn about career pathways. These near-peer interactions offer relatable information about what to expect in a variety of career pathways and support well-matched choices.	There was a prevailing community college student belief that employers are not collectively committed to offering a robust array of internship opportunities. Further, many suggested that existing positions are menial in nature and/or do not fit the schedule constraints of students.



Emphasis on Work-Based Learning: In Their Own Words

The following illustrative quotes highlight the areas of focus relating to work-based learning:

"At my apprenticeship, I have a foreman who'll let me know. I could be screwing something up all day. He'll let me work at it all day to try figure it out. But if I don't, he'll show me how to fix it and do it better next time." — High School Graduate

"In fire science, we're getting info from three actual firefighters, and we get to use their actual gear." – High School Student

"Having onsite tours for classes would be good, like **field trips to employer locations**." – High School Student

"We should get to experience multiple jobs, not just get told about them. Sometimes you hear about a career and it sounds boring or dumb. But when you're there, you experience different problems and have to work out solutions. That makes it interesting." – High School Graduate

"In our nursing program, we get to bounce around and see which areas we'd like. I've tried out the emergency room and other specialties, so I know what my options are." —

Community College Student

"I work in insurance. There are so many systems that you would never touch unless you work for a company. Some of the learning has to be on the job. When you go to find jobs, the positions are all entry level. No one wants those, but that's where you have to start and that's where you learn the rest." – Community College Student

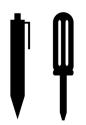
"For those in med tech, the equipment you have in schools is out of date or broken and then you go into the real world and realize you're out of touch." – High School Student

"My summer internship required me to learn different platforms. You have to have a hands-on experience to learn the kinds of design and media tools we worked with." – Community College Student

"Offering internships benefits a company eventually. The companies need to realize this." — Community College Student

"The volume of internships needs to be increased.

Employers need to take responsibility and open their doors." – Community College Student



Relevant + Contextualized Learning

Many students want their **coursework**, both CTE and general education, to have **clear connection to their lives and their careers**.

What we heard: Student responses coalesced around two areas of focus:

Unnecessary
Requirements –
View that many
mandatory courses
are not relevant to
career development

Content –
Curricula with clear
and useful application
in students' career
pathways

Tailored Course





Relevant + Contextualized Learning: Emerging Recommendations

Student input informs the following recommendations on relevant and contextualized learning:

- Support educators to compellingly communicate how course content will support students' future success.
 This is especially important in general education courses, which CTE students may perceive as far removed from their educational interests. Alternately, offer students more autonomy in course selection.
- Reevaluate whether currently required courses and content present a logical connection to each career pathway's learning objectives.
- Recruit teachers who have both an understanding of subject-based pedagogy and first-hand experience in their field of instruction.
- Build stronger connections between CTE program administrators and employers or trade unions to coordinate curricula that match hiring requirements and meet up-to-date industry standards. Ensure students understand that these partnerships inform curriculum development.

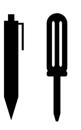




A critical mass of students communicated that more coursework should be relevant to their career pathway and applicable in the workplace.

Findings below capture student input:

Unnecessary Requirements	Tailored Course Content
Unnecessary and Irrelevant Classes – Many students expressed frustration with required courses that they perceived as not measurably contributing to their knowledge and experience in a particular career pathway. They did not see value in general education and liberal arts courses and felt like they created superfluous demands on their time and a longer path into the workplace.	 Contextualized Gen Ed Content – When general education courses were required, many students wanted coursework that was adapted to their career pathway. For example, healthcare track students who must complete an English course preferred that assignments focused on health-related topics. Applicable Learning in CTE Courses – Most students wanted learning in CTE courses to focus on technical skills that are up to date and well aligned with employer practices and needs. Students felt more confident when courses included simulated workplace experiences and/or access to workplaces.



Relevant + Contextualized Learning: In Their Own Words

The following illustrative quotes highlight the areas of focus relating to relevant and contextualized learning:

"For each welding certificate, you have to take some courses that have nothing to do with the actual work. I've talked to people in the field, and they've told me I'll never use courses like electric or sociology in the field." – Community College Student

"I feel pretty prepared by my accounting class because my teacher used to be an accountant. She has real-world experience that she shares with us." – High School Student

"If you really know what you want to do, you shouldn't have to take pre-calculus or calculus, for example. Instead, you'd take a math class that's connected to what you want to study. It would be more relevant." — High School Student

"Require classes and then have a counselor who shows you what the classes can be used for. A lot of people don't know what you're going to use English for. But you will. The counselor can make it relevant." – Community College Student

"Everyone needs math. But it would be better if the class was specific to the actual work we do in our IT program. A more specialized version of the class would be more beneficial." — Community College Student

"For many of us, high school felt like we were just passing time until college. In math, instead of spending a whole theoretical unit on slope, take us outside and have us actually calculate the slope of a shadow of a tree or something in the real world." – Community College Graduate

"Nursing school seems like a really long time, but there are still people wondering if they're going to be able to save a life. We learn so much, but we cover a bunch of things every day that are unnecessary busy work. Let's practice what we're actually going to do." — Community College Student

Additional Findings

Students voiced several additional issues. Although not raised as frequently as our key themes, they warrant consideration.

Extracurricular CTE

Students only raised the benefit of extracurricular CTE activities at two sites, which leads us to infer they are not widely available. Yet those who shared extracurricular experiences were enthusiastic about the benefits.

- A community college student reflected that extracurricular activities are a means of building visibility of certain career pathways, suggesting, "Offer students the opportunity to attend Skills USA trade competitions. It opens your eyes to just exactly how the workforce needs the trades."
- A 12th grader explained that through extracurricular involvement, he explored multiple career pathways in ways that his high school curriculum didn't allow for. He said, "I've had an interest in computer science for a long time. It started with my interest in game design. I was also interested in business but there's only so many classes you can take and I didn't have space. So DECA helped because it allowed me to explore business while I was still taking computer science courses."

Equity Considerations

As students spoke about access (more often, lack of) to internships and apprenticeships, a number of equity concerns were raised. As policies and systems evolve, these considerations are central in **determining whether CTE further reinforces inequalities or is a driver of social mobility and self-determination**.

- For the few students who had secured meaningful **paid internships**, a significant number mentioned it was **facilitated by family connections rather than CTE programs designed to build social capital**. A student explained how he secured his apprenticeship: "My parents played darts at the country club with the guy who ended up hiring me."
- There is significant gender imbalance in many of the trades, which is sustained in part through **hostile workplace culture**. Although the ultimate outcome was positive, another student relayed an experience: "We just got the first woman in our apprenticeship program this year. The older guys were talking about it a month before it happened. There was an uproar. But now she's there and works harder than any of those guys do, so she's shown them all up."
- More broadly, what is the role of CTE initiatives in ensuring that all students, and particularly those from underrepresented groups, have equitable access to supportive work-based learning environments?

Interpersonal + Communication Skills

At the start of each input session, we asked participants, "What is one skill that everyone should learn?" It is noteworthy that responses focused overwhelmingly on interpersonal skills. Common responses included listening, empathy, being able to clearly articulate one's point of view, and public presentation.

Geographic Implications

Student input sessions covered a range of geographies, including suburbs of major cities, small cities, and rural areas. **For rural students in particular, geography had a powerful and often limiting effect** on their CTE experiences. The following quotes are illustrative:

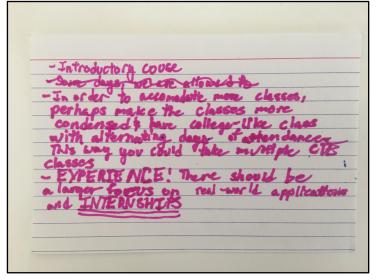
- A community college graduate said, "How do we get the chance to venture out to places in Peoria and have access to more opportunities? Where I'm from, it's cornfields near a river."
- A high school student wanted "easily accessible classes, not 3 hours away."
- A community college student suggested building on local assets: "When I think about it, **there's farming all around us**. We should have more programs on that. Western Illinois University has the biggest agriculture program in the area, but **we should have an option here in Galesburg** that doesn't cost \$40,000 per year."



Ideal CTE System

During the input sessions, we asked participants to imagine the ideal system for helping students choose and prepare for careers. They put their ideas on index cards. The following are illustrative examples of student responses:

Students should be encouraged, to join a CTE Pathway their freshman year, and not have to seek it out themselves at a later point in time. The classes should be progressive, and offer college credit and/or training in the field.



· Your choice for your learning

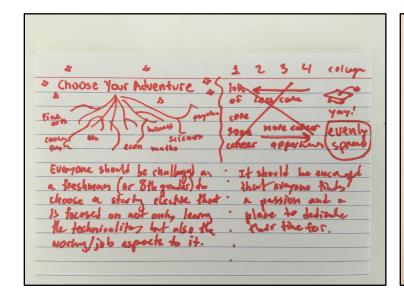
· Classes that focus on your major that you are persusing

· Teachers for the right classes

· On Job learning



Ideal CTE System, Cont'd



Ideally, classes would be more flexible. It would be nice if classes were only a semester long vs. a whole year so I could explore Other CTE opportunities. It would help if there was more guidance coming into freshman year about classroom apportunities. I didn't know about a lot of options offered until junior/senior year.

bucksound knowledge under bett.

'I deal school day: 50% of time learning material... 50% of time applying It in a seal world setting.

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Support From: The Joyce Foundation

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Informing Perkins V: Employer Input on Career and Technical Education in Illinois

Commissioned by the
Illinois State Board of Education
and the
Illinois Community College Board

December 2019

Background + Acknowledgments

With the generous support of the Joyce Foundation, this report was commissioned by the Illinois State Board of Education and the Illinois Community College Board to ensure that employer perspectives inform the Illinois Perkins V plan. Independent consultants Simon Moore and Laurel Foglia were contracted to facilitate employer input and produce this synthesis report.

Many thanks are due to the 74 employers and 8 workforce development leaders from across Illinois who volunteered their time and perspectives in the interest of building a robust Career and Technical Education system in the state. Gratitude is also due to to our colleagues who encouraged employers to participate and to the sites that hosted employer input sessions: Carl Sandburg College, Rock Valley College, the Saint Clair County Regional Office of Education, and Woodruff Career & Technical Center.

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December 3, 2019

I. Executive Summary

Purpose

Process

Leading Recommendations

December 3, 2019

Executive Summary: Purpose

Illinois is currently developing its proposal for Perkins V Career and Technical Education (CTE) funding from the U.S. Department of Education. This report is a component of engagement efforts coordinated by the Illinois State Board of Education (ISBE) and the Illinois Community College Board (ICCB) to ensure the state's Perkins V proposal is informed by community stakeholders.

Specifically, this project was commissioned by ISBE and ICCB to gather input from employers, who are key stakeholders in CTE initiatives. Our education systems play a central role in developing the talented workforce that business and industry needs to thrive, so employers have a vested interest in the effectiveness of CTE. Further, employers have unique insight into the capabilities workers need to succeed and the extent to which recent graduates of our education systems have developed those capabilities. As such, the employer input captured in this report provides a valuable perspective on the best path forward for CTE in Illinois.

Executive Summary: Process

With the support of the Joyce Foundation, project consultants Simon Moore and Laurel Foglia gathered employer input via **five group input sessions**, **1-on-1 phone interviews**, and **an online survey**. A total of **74 employers participated**. Over **40% of respondents work in manufacturing**, which was by far the most highly represented sector. This was followed by Agriculture, Food, and Natural Resources and Health Sciences, each of which constituted just over 10% of respondents. Participants are based in geographically diverse communities across the state, but **the Chicagoland area**, **Central Illinois**, **and Metro Saint Louis accounted for the vast majority of responses** with 37%, 25%, and 19% respectively.

When offered various avenues for providing input and the possibility of remote participation, employers were enthusiastic to share their perspectives. They offered candid views on the quality of the workforce pipeline, the state of CTE, and how business and education can better coordinate efforts.

This report is a synthesis of employer input and identifies points of commonality among participant views. Across all modes of participation, **employer input was guided by five key questions**:

- 1. How well do the capabilities of recent high school and postsecondary graduates align with your needs as an employer?
- 2. What are the primary strengths of the current state of CTE in Illinois?
- 3. What are the primary challenges with the current state of CTE in Illinois?
- 4. In your opinion, how can our education systems better coordinate with business and industry?
- 5. How would you like to be involved in developing career pathways at the state and local level?

Executive Summary: Leading Recommendations

Leading recommendations are the project's primary findings. These are the ideas for strengthening CTE that employers most frequently and clearly raised. In accordance with employer input, leading recommendations are listed in priority order:

- <u>Forge relationships between employers and education institutions</u> that are grounded in shared purpose, mutual commitment, and a willingness to be transparent and vulnerable. Authentic relationships between education and industry are foundational to both localized career pathways and system-level coordination.
- Raise the profile of skilled trades and technical careers. Employers believe that these pathways are stigmatized and often considered less desirable than a four-year degree, to the detriment of both students and employers. A key element of these efforts is crafting a contemporary image of CTE as a high-tech space that offers family-sustaining careers.
- Expand work-based learning opportunities. This serves the dual purpose of (1) giving students more exposure to career options and fostering their interest in high-demand, high-pay, high-growth sectors and (2) enabling students to develop a valuable combination of soft skills and technical skills.
- <u>Prioritize the development of students' soft skills</u>, including communication, interpersonal intelligence, adaptability to new cultures and expectations, and basic professionalism. The extent to which students are proficient in these areas is a strong predictor of their success in the workplace, yet employers reported recent graduates are often unprepared.
- <u>Capitalize on employers' desire to contribute</u> to the development of a robust array of career pathways. Approximately 85% of respondents expressed interest in involvement or were already involved in the development of career pathways.

II. Methodology

Modes of Engagement
Participant Characteristics
Role of Consultants

During two phases of employer engagement, participants chose from multiple modes of providing input.

Phase I: ISBE and ICCB designed the structure of Phase I, which comprised a series of facilitated group input sessions at four sites across Illinois. ISBE and ICCB identified host sites and the timeline for the input sessions. Additionally, ISBE and ICCB led outreach efforts, which included individual invitations to Local Workforce Board Chairs and requests for community colleges and Education for Employment Directors to invite employers in their regions. Employer participation in Phase I was very limited, necessitating Phase II.

Host Institution	Location	Date	Time
Saint Clair County Regional Office of Education	Belleville, IL	09.19.19	630-800pm
Woodruff Career & Technical Center	Peoria, IL	09.27.19	600-730pm
Rock Valley College	Rockford, IL	10.01.19	600-730pm
Carl Sandburg College	Galesburg, IL	10.08.19	600-730pm

Phase II: ISBE, ICCB, the project consultants, and a Joyce Foundation representative collaboratively planned Phase II, which offered employers greater choice in how to provide input and the option to participate remotely. Phase II ran from October 31, 2019 to November 8, 2019. The project team identified a small group of allies – district administrators, community college administrators, and CTE/workforce development leaders – who were asked to encourage their employer colleagues to participate. This approach yielded a far stronger response from employers, who provided input via the following avenues:

- Online survey
- 1-on-1 phone interview with a project consultant
- Facilitated group input session via conference call hosted by ISBE from 300-400pm on November 6, 2019

December 3, 2019

Employer participants represented a diverse mix of industries and geographies, although the manufacturing sector was a strong plurality.

The following provides insight on participant characteristics:

Total participants	74	
Participants by mode of engagement	In-Person Group Session – 3 (4%) Remote Group Session – 9 (12%)	1-on-1 Phone Interview – 2 (3%) Online Survey – 60 (81%)
Most Common Participant Sectors	Manufacturing – 32 (43%) Agriculture, Food, and Natural Resources – 9 (12%) Health Sciences - 8 (11%)	Marketing, Sales, and Service – 7 (9%) Transportation, Distribution, and Logistics – 5 (7%)
Participants by Region	Chicagoland Area* – 25 (37%) Central Illinois – 17 (25%) Metro Saint Louis – 13 (19%)	Northern Illinois – 7 (10%) Western Illinois – 4 (6%) Southern Illinois – 2 (3%)

The input process was designed to elicit candid participant perspectives. This report highlights the most prevalent ideas conveyed by employers.

ISBE and ICCB generated a preliminary set of prompts about employer engagement with CTE. We shaped those into a core set of guiding questions, which was reviewed by ISBE and ICCB before implementation. The guiding questions served as the central element of all modes of input we utilized. Additionally, each input mechanism incorporated background on the project, CTE, and Perkins V, which aimed to address employers' varying levels of familiarity with the field. Finally, we communicated to employers that we would be neutral facilitators and made clear that their input would be anonymized in notes and this report.

This report synthesizes employer input and focuses on the themes they most frequently communicated through their participation. The aim is to highlight those points of commonality. Quotes are provided to enable the reader to hear from employers in their own words. Some quotes have been edited for the purposes of readability and anonymity.

III. Findings

Overview
5 Guiding Questions
Additional Findings

Five core questions guided employer input, and findings are organized around these areas of inquiry.



1. How well do the capabilities of recent high school and postsecondary graduates align with your needs as an employer?



2. What are the primary strengths of the current state of CTE in Illinois?



3. What are the primary challenges with the current state of CTE in Illinois?



4. In your opinion, how can our education systems better coordinate with business and industry?



5. How would you like to be involved in developing career pathways at the state and local level?



How well do the capabilities of recent high school and postsecondary graduates align with your needs as an employer?

Employer responses coalesced around the following themes:

- 1. Varied Perspectives Employers did not have a clear consensus on the extent to which there is a pipeline of recent graduates who are well prepared for the workforce.
- 2. Points of Alignment Employers who viewed recent graduates' capabilities as aligned with their needs frequently described general satisfaction with CTE and recognized high-performing postsecondary programs.
- 3. Points of Misalignment Employer perspectives on the ways recent graduates are underprepared for the workforce converged around a lack of soft skills, technical skills, and commitment to their field.



How well do the capabilities of recent high school and postsecondary graduates align with your needs as an employer?

What we heard from employers:

1. Varied Perspectives

- Evenly Distributed Perspective, No Consensus About one third of employers reported that the capabilities of recent graduates align well with their needs. One third reported variation in the degree to which capabilities align. And one third reported that capabilities fall short of employer needs.
- No Industry Specific Viewpoints Perspectives on the skillsets of recent graduates did not correspond to specific industries. There was a broad spectrum of opinion within each of the industries represented.

2. Points of Alignment

- General Satisfaction with CTE The employers who reported being pleased with recent grads feel that CTE allows students to gain both relevant technical knowledge and sufficient employability skills to meet or exceed hiring requirements. These employers feel that recent grads adapt easily to the work environment and make valuable contributions right away.
- The More Training, the Better About 30% of employers expressed greater satisfaction with postsecondary CTE graduates and/or those who have completed a specialized program in a relevant pathway. They feel the technical capabilities and leadership potential of these applicants are significantly more aligned with employer needs.



How well do the capabilities of recent high school and postsecondary graduates align with your needs as an employer?

What we heard from employers:

3. Points of Misalignment

- **Missing Soft Skills** A significant number of employers described recent high school and community college grads as lacking interpersonal, professional, and communication skills. They noted that many applicants and first-time employees struggle with punctuality, motivation, and critical thinking.
- Lacking Technical Proficiency Of the employers who view recent grads as underprepared, many noted inadequate technical skills. Half find advanced skills lacking, and half find basic skills lacking. Several employers explained that some degree of on-the-job training is often necessary for new hires, even for those with postsecondary credentials.
- Less Familiar, Less Committed Employers speculated that the shortage of qualified candidates is due to a decrease in familiarity with career opportunities in skilled trades. Some employers also noted a lack of desire for long-term engagement in a trade field.



Talent Alignment: Employers in Their Own Words

The following illustrative quotes highlight the relevant themes:

"High school diploma candidates transition well into our assembly positions and are able to easily bid for forklift, quality tech, more advanced assembly roles, and team leaders. Skilled trade positions require a postsecondary certificate, training, or degree."

- Manufacturing Employer, Nashville "They often do not have the skills required to perform the tasks that we utilize in our business as most high schools have eliminated their technical skills training programs."

- Manufacturing Employer, Geneva

"The capabilities of recent grads don't match with our needs as an employer. We are learning that we need to get out in front as early as junior high to build qualified candidates." - Healthcare Employer, Peoria

"I feel they are improving. The focus of high schools and community colleges to prepare a student for a working career as opposed to next level academics is helping. My observation of our industry is that the challenge we face is 1) finding a person that 2) is able to hold the job (attendance, communication, and accountability) and that 3) has the desire to be educated and prosper. It is exciting when we find a 3rd-level candidate." - Manufacturing Employer, Schaumburg

"We have had mixed results with employees directly out of high school. They are the greatest opportunity for improvement per our experience. The candidates that have struggled the most lacked life skills such as self-discipline, reasoning, and critical thinking. We have had better success with employees that were graduates of Danville Area Community College, both technically and life skill related." - Manufacturing Employer, Danville



What are the primary strengths of the current state of CTE in Illinois?

Employer responses coalesced around the following themes:

- 1. Positive Momentum in High Schools A significant number of employers reported that high schools are taking positive steps to strengthen CTE programs.
- 2. High-Quality Community College Programs Many employers stated that postsecondary degree and certificate programs produce qualified job candidates and are a key source of talent.



What are the primary strengths of the current state of CTE in Illinois?

What we heard from employers:

1. Positive Momentum in High Schools

- Changing Priorities + Perceptions Of employers who
 commented on the strengths of CTE, many reported a slow but
 tangible increase in interest and investment in CTE. They observed
 that some high schools are starting to prioritize preparing students
 to be career-ready, not just college-ready.
- Employer Partnerships Employers noted that certain high schools are forging stronger and more sustained relationships with local industries in order to jointly address skill gaps and negative perceptions of careers in the skilled trades.
- More Guidance, Earlier Some employers saw an increase in applicants from high schools that incorporate CTE and career counseling in earlier grades. Employers found that the combination of academics and hands-on experience enables these applicants to develop the technical knowledge and employability skills to succeed in an entry-level position.

2. High-Quality Community College Programs

- Resources and Services Employers expressed appreciation for the range of community college programs that are available to high schoolers, college students, and continuing education students. They consider the strongest programs to be those with passionate teachers, up-to-date equipment, and a commitment to remaining responsive to industry needs.
- Industry-Standard Technical Training –
 Employers spoke highly of postsecondary programs that are designed to meet the specific technical needs of an industry.

CTE Strengths: Employers in Their Own Words

The following illustrative quotes highlight the relevant themes:

"Strengths include increasing partnerships and networks between employers, schools, and community colleges for communicating about the skill gap and actively engaging to change the perception."

- Manufacturing Employer, Nashville "A strength is the resources and services available through community college programs.

Our local community college is very attuned and responsive to employer needs."

- Manufacturing Employer, Peru

"I think the strength lies in the partnerships with community colleges and that it now appears that it's making its way into high schools. Kids are understanding what their options are at an earlier age than in the past." - Recycling Employer, Danville

"Career counseling at the local high schools and dual enrollment at Danville Area Community College is a difference-maker for area employers in my opinion. Students are being challenged to think in structured ways about what they would like to do after high school much earlier in their high school career due to career counseling. This opens the door to young people being challenged academically for those that wish to continue their education. Graduating with an associate's degree from high school is huge for the student and the family supporting the student." - Building Products Employer, Danville

"The culinary department at our healthcare company has been our one pocket of success where we have managed to find and retain employees from HS programs. We are only **finding success with programs that have counselors to support the students**."

- Healthcare Employer, Peoria



What are the primary challenges with the current state of CTE in Illinois?

Employer responses coalesced around the following themes:

- **1. Limited Coordination** Employers conveyed that opportunities to work in concert with schools are limited, which results in mismatched priorities and practices.
- 2. Lack of Technical and Soft Skills Many employers stated that the talent pipeline is insufficient in terms of both quantity and quality of candidates to meet their hiring needs.
- 3. Under-Emphasis on CTE Employers observed that preparing students for trades and technical careers is often not a priority in high schools, which has a detrimental effect on the talent pipeline.



What are the primary challenges with the current state of CTE in Illinois?

What we heard from employers:

1. Limited Coordination

- No Seat at the Table Many employers expressed frustration about limited collaboration between educational institutions and industry. They feel that better coordination between employers and schools would accelerate the process of reshaping CTE to meet current industry demands.
- Outdated Material Some employers suggested that limited interaction with area manufacturers and other businesses has left some CTE curricula far behind industry standards. They also feel that improved partnerships would enable company policies and practices to evolve in step with the motivations of the current generation of students.

2. Lack of Technical and Soft Skills

 Underqualified Applicants: Many employers reported finding it a challenge to meet their staffing needs due to both a shortage of applicants and applicant skill deficits. They often assess the applicants to be lacking in technical skills, work ethic, and the necessary soft skills. Many of these employers stated that their businesses do not have the capacity to provide all the necessary training, so they would like more on-the-job training integrated into CTE programs to bridge these gaps.



What are the primary challenges with the current state of CTE in Illinois?

What we heard from employers:

3. Under-Emphasis on CTE

- **Limited CTE Offerings in School** A significant number of employers felt that a reduction in high school vocational programs is responsible for decreased student interest in the trades and technical fields and, as a result, a shortage of job applicants. They feel that schools are not encouraging students to engage in career exploration, especially not into areas that do not require a bachelor's degree.
- Over-Emphasis on 4-Year College According to many employers, there is a pervasive belief among teachers, counselors, and parents that trades and technical careers are a less desirable option than pursuing a bachelor's degree. They feel that this contributes to a gap in awareness of and participation in training opportunities and in-demand careers.
- **Delayed Introduction** Employers noted that offering CTE too late in a student's academic trajectory decreases the likelihood that the student will discover and develop an interest in a skilled trade.



CTE Challenges: Employers in Their Own Words

The following illustrative quotes highlight the relevant themes:

"The system is fragmented and often does not allow for incumbent worker training under the standard semester model. Many of the schools operate in silos and see business as a threat as opposed to a partner they can collaborate with. Many programs lack proper funding and the students struggle to receive the financial support to upskill themselves." - Manufacturing Employer, Geneva

"Mom and Dad think of the stigma against manufacturing: that it's dangerous, dirty, old... But it's not. It's cutting edge, clean, and safe. We need to change that narrative. Some parents look down on 2-year schools. They feel like they have failed if their kid attends a 2-year school. I attended Harper's career day with my young kids and it was amazing. There are so many options for a meaningful career." - Manufacturing Employer, Schaumburg

"A primary challenge is overcoming the lack of knowledge in families and communities regarding the industries, opportunities, and training programs available." - Manufacturing Employer, Nashville

"As we have become more active in partnering with local high schools, we have found many don't even have a program that matches our industry any longer. The courses that were related to auto, machinery, engines, diagnostics etc. have been removed from many metropolitan high school career curriculums. Many of the school faculty are not even familiar with our industry opportunities and the priority is getting students into 4-year schools. We have found a few vocational programs that provide a great introduction to our industry, but they severely lack exposure to the new technology and innovation within our industry." - Heavy Equipment Employer, Naperville

"The students and graduates seem under-prepared even after completing the programs. There is a clear need for more robust on-the-job training and experience as part of their education in order to be competitive in the job market." - Manufacturing Employer, Danville



In your opinion, how can our education systems better coordinate with business and industry?

Employer responses coalesced around the following themes:

- Expanding Work-Based Learning Employers placed a high value on experiential learning and suggested various ways to provide students with more opportunities for workplace engagement.
- 2. Strengthening Relationships Employers expressed that committed, honest relationships with schools are a key building block for effective CTE programs.
- 3. Raising the Profile of CTE Employers consistently communicated that emphasizing career outcomes and highlighting career opportunities will grow the pipeline of qualified workers.



In your opinion, how can our education systems better coordinate with business and industry?

What we heard from employers:

1. Expanding Work-Based Learning 2. Strengthening Relationships Site Visits + Shadowing – Many employers stated a **Honest Dialogue** – Many employers expressed a desire for dialogue with schools to communicate their needs and willingness to host field trips and shadow days – not just the extent to which they are (or are not) being met. for students, also for parents. They suggested it is a means of generating awareness and enthusiasm. **Building Alignment –** Employers believe these conversations enable CTE programs to align with industry **Employers in Schools -** Many employers said they should spend more time in schools, sharing their experiences, needs and standards. Further, a number of employers explaining jobs in their industry, and even mentoring. expressed that schools need the freedom and flexibility to respond quickly, adapting both what programs they Internships + Apprenticeships – Employers recognized operate and what is taught in those programs. that internships and apprenticeships are highly valuable in preparing students for careers. A number of employers **Educator Awareness** – Sustained relationships with even suggested making it a graduation requirement. employers enable educators to stay current on evolving industries and job markets, positioning them to better communicate effective career advocacy and advice to students.



In your opinion, how can our education systems better coordinate with business and industry?

What we heard from employers:

3. Raising the Profile of CTE

- **Prioritizing Career Outcomes** Employers communicated that emphasis on career entry as a positive student outcome conveys a value statement and creates an incentive for schools to focus on CTE, build employer relationships, and develop career pathways.
- Changing Perceptions through Engagement Employers expressed hope that more engagement with students and parents would be a means of changing negative perceptions and generating interest in the trades and technical fields. Many employers believe in their ability to cultivate interest in their fields if they have the opportunity to connect with students and their families.
- Educators as Advocates Employers think that equipping educators with the information to champion careers and trades to students and their families would make schools more effective at generating enthusiasm for careers and building a workforce pipeline.
- **No Mutual Exclusivity** A significant number of employers suggested emphasizing the message, and ensuring the reality, that CTE and a four-year degree are not mutually exclusive. Ideally, they want college and career paths to be concurrent and credentials to be stackable.



Coordination: Employers in Their Own Words

The following illustrative quotes highlight the relevant themes:

"The schools are short on funding so most have discontinued technical classes such as shop. Offering this to students earlier may help foster students who like to work with their hands. If businesses could partner with the schools for field trips or opportunities for students to learn more and see first hand what it is like to be a technician (for my industry) or other trades, students' interest may be sparked." - Automotive Employer, Metro Saint Louis

"Education systems need to be in very close contact with industry to keep apprised of the industry needs and to assess skills gaps in graduates of their programs. This is also very important for certification testing - schools have to teach to the test but sometimes the test is not reflective of the industry, which leaves students unprepared upon exit and being taught from the ground up in the field." - Healthcare Employer, Decatur

"A barrier to partnership is the wide breadth of requirements in the industry. To combat that, education and industry need to work very closely together to ensure the base knowledge is present that the employers can then build upon. **Never will education perfectly and completely train an employee** but the base knowledge needs to be in place for the employers to build upon. Employers need to understand that **there will be more industry and business-specific training required** for employees." - *Manufacturing Employer, Danville*

"Set up and develop forums for the **counselors and parents to be able to tour plants and talk to the people doing the job**. They will then see that a shop is not a dirty place but a clean and high-tech place to work." - *Manufacturing Employer, Belleville*



How would you like to be involved in developing career pathways at the state and local level?

Employer responses coalesced around the following themes:

- 1. Desire to Contribute The vast majority of employers stated an interest in supporting the development of career pathways.
- Varying Levels of Commitment Employers expressed a diversity of sentiments on how and how deeply they would like to engage.



How would you like to be involved in developing career pathways at the state and local level?

What we heard from employers:

1. Desire to Contribute	2. Varying Levels of Commitment
Widespread Interest in Involvement – Approximately 85% of respondents expressed interest in involvement or were already involved in the development of career pathways. It is clear that across industries and geographies, the cultivation of a strong worker pipeline is a primary concern for employers, and they want a role in building it.	 Dearth of Depth – Many employers said that deep, sustained work-based learning is integral to effective CTE, yet roughly a mere 10% of respondents expressed willingness to offer internships or apprenticeships.* Awareness + Advising – The most frequently shared employer preference for involvement was building the profile of trades and technical careers by offering windows into industry and information on compensation. Employers suggested accomplishing this via a variety of one-time activities like field trips to workplaces and employer visits to schools. Many employers are also interested in serving in an advisory capacity through local workforce boards and other councils to help align industry and education.

^{*} Note that employers were not directly asked whether they would offer internships or apprenticeships. This statistic is gleaned from responses to the question in the header.



Future Involvement: Employers in Their Own Words

The following illustrative quotes highlight the relevant themes:

"We can contribute by speaking to students, community members, and groups about the opportunities and providing a window into manufacturing and the skilled needs. Also, we can connect our leadership with local institutions to develop and implement training programs that align with our true needs."

- Manufacturing Employer, Nashville "We have been part of discussions of curriculum and position requirements, to giving educators and students tours, and being involved in strategic plans for school districts." - Manufacturing Employer, Danville

"We are already involved with our local high school. We work together and offer internships. Some of our skills cannot be learned strictly from books but rather hands-on training."

- Manufacturing Employer

- Manufacturing Employer, Wheeling "I would be glad to be a resource to explain what we need in a future employee. We may be interested in hosting an apprenticeship program that is coordinated with the college."

- Agriculture Employer, Sullivan

"I would like to serve on an advisory board and/or to work and partner with local high school teachers and parents to help **educate them on what employers are looking for in candidates**, and most importantly how they can best help facilitate their children to meet the demands."

- Manufacturing Employer, Crystal Lake

+ Additional Findings

Although not as prevalent as our key findings, there are additional topics that warrant attention.

Employers' Role in Building the Pipeline

While not one of the most frequently voiced views, there was a small but vocal cadre of participants who shared the sentiment that employers need to be more self-reflective and commit deeply, work collaboratively, and be conscious of the the barriers they create. The following bullets summarize these sentiments:

- Step Up and Open Doors A higher education employer said, "Businesses need to be more open to taking students on in shadowing, internships, and professional practice settings. Too many businesses won't allow students in, don't allow them to do anything hands-on, or claim they are too busy to take students."
- Own the Work and Be Collaborative A common refrain in employer input was, "Schools need to..." A manufacturing employer offered an alternative perspective, saying, "We would be willing to invite young adults into our facility for class or school tours, speak at career nights at the high schools, or offer internship opportunities, job shadows or cooperative work opportunities, etc. The possibilities are endless and until employers stop complaining about the lack of workforce and do something about it, they will not see the movement."
- **Break Down Policy Barriers** Some employers maintain HR policies that are barriers to both attracting the best candidates and equitable hiring. A healthcare employer explains, "Employers are among the biggest barriers to success relative to policies and procedures. **We need to ask ourselves what we may be doing to limit success**. For example, convictions is more of an issue in healthcare. We have so many people in the community who need a job, but if they have a criminal conviction, they can't work in any of our facilities."

Workforce Development Leader Input

During Phase I of this project, 8 workforce development leaders* attended facilitated input sessions at sites around Illinois. This group included school administrators, economic development executives, and government staff. These participants have extensive experience with CTE and they shared valuable insights, most of which closely overlap with employer input. The following are prevalent themes from workforce development leaders that are distinct from employer findings:

- CTE program design should be developmentally appropriate. We often ask students to make singular (and what are perceived to be lifelong) career choices at ages when they are not yet ready, both as a function of human development and limited exposure to options.
- Core academic skills are critical. Many students are unable to enter certain postsecondary programs because they lack the basic math and literacy skills to pass entry exams or succeed once enrolled.
- Equity in CTE demands a holistic approach to student development. Students are more likely to succeed when their basic needs are met. For example, if a student lacks reliable transportation or stable housing, it is incredibly difficult for them to take advantage of internships.
- **Employers are inundated with requests** from education institutions and workforce development entities. Because the sector is fragmented, employers may perceive this outreach to be disorganized and ineffective. Further, schools and workforce development organizations often ask employers about immediate job openings for students, which is short-term transactional engagement rather than an invitation to a long-term, reciprocal partnership.
- Both employers and educators value the **development of soft skills, but there needs to be a common definition** of what the term means. Without that shared understanding, they often approach the work with divergent purposes. There is also a lack of clarity on whether it is the role of educators or employers to support students in building these skills.

IV. Conclusions

Leading Recommendations

Additional Recommendations

Leading Recommendations

Leading recommendations are the project's primary findings. These are the ideas for strengthening CTE that employers most frequently and clearly raised in their input.

- Forge relationships between employers and education institutions that are grounded in shared purpose, mutual commitment, and a willingness to be vulnerable. Authentic relationships between education and industry are foundational to both localized career pathways and system-level coordination.
- Raise the profile of skilled trades and technical careers. Employers believe that these pathways are stigmatized and often considered less desirable than a four-year degree, to the detriment of both students and employers. A key element of these efforts is crafting a contemporary image of CTE as a high-tech space that offers family-sustaining careers.
- **Expand work-based learning opportunities**. This serves the dual purpose of (1) giving students more exposure to career options and fostering their interest in high-demand, high-pay, high-growth sectors and (2) enabling students to develop a valuable combination of soft skills and technical skills.
- **Prioritize the development of students' soft skills**, including communication, interpersonal connection, adaptability to new cultures and expectations, and basic professionalism. The extent to which students are proficient in these areas is a strong predictor of their success in the workplace, yet employers reported recent graduates are often unprepared.
- Capitalize on employers' desire to contribute to the development of a robust array of career pathways. Approximately 85% of respondents expressed interest in involvement or were already involved in the development of career pathways.

Additional Recommendations

Although less frequently voiced than leading recommendations, these additional recommendations reflect other views commonly expressed by employers. Some address next steps or additional details that flow from leading recommendations.

- Affirm the idea that postsecondary education and CTE are complementary and should be integrated. Many employers
 report that candidates with a postsecondary certificate or degree tend to be better prepared in terms of both technical
 and soft skills.
- **Support educators to be effective CTE champions.** To prepare students for post-graduate success, advisors need up-to-date and accurate information on a breadth of career pathways, and instructors must be well versed in current industry standards and practices. A component of this professional development is ensuring that educators have significant exposure to workplaces.
- Assess school performance based on career outcomes, not just college outcomes. School practices and programs are shaped, in part, by system-level priorities. Currently, employers perceive there is an emphasis on four-year college enrollment to the exclusion of other career pathways.
- Cultivate a sense of shared responsibility among employers. As long as business and industry sees its role as telling education what to do, it will be highly challenging to forge the reciprocal relationships and trust that are key building blocks for coordination.

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