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
- Carl Sandburg College
- Rock Valley College
- Saint Clair County Regional Office of Education
- Woodruff Career & Technical Center
Table of Contents

I. Executive Summary ................................................................. p. 4
II. Methodology ........................................................................ p. 8
III. Findings ............................................................................. p. 12
   CTE’s Powerful Impact .......................................................... p. 14
   Factors Affecting Entry to CTE .............................................. p. 18
   Exploration of Career Pathways .......................................... p. 22
   Emphasis on Work-Based Learning ..................................... p. 29
   Relevant + Contextualized Learning ..................................... p. 34
   Additional Findings ............................................................... p. 38
I. Executive Summary

Purpose + Process
Key Themes
Leading Recommendations
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 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
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:

<table>
<thead>
<tr>
<th>Host Institution</th>
<th>Location</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saint Clair County Regional Office of Education</td>
<td>Belleville, IL</td>
<td>09.19.19</td>
<td>430-600pm</td>
</tr>
<tr>
<td>Woodruff Career &amp; Technical Center</td>
<td>Peoria, IL</td>
<td>09.27.19</td>
<td>400-530pm</td>
</tr>
<tr>
<td>Rock Valley College</td>
<td>Rockford, IL</td>
<td>10.01.19</td>
<td>400-530pm</td>
</tr>
<tr>
<td>Buffalo Grove High School</td>
<td>Buffalo Grove, IL</td>
<td>10.07.19</td>
<td>130-300pm</td>
</tr>
<tr>
<td>Carl Sandburg College</td>
<td>Galesburg, IL</td>
<td>10.08.19</td>
<td>400-530pm</td>
</tr>
</tbody>
</table>
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:

<table>
<thead>
<tr>
<th>Total participants</th>
<th>57</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants by site</td>
<td>Belleville – 13</td>
</tr>
<tr>
<td></td>
<td>Buffalo Grove – 18</td>
</tr>
<tr>
<td></td>
<td>Galesburg – 10</td>
</tr>
<tr>
<td>School level</td>
<td>High School – 31 (54%)</td>
</tr>
<tr>
<td></td>
<td>Community College – 26 (46%)</td>
</tr>
<tr>
<td>Enrolled in CTE program</td>
<td>Yes – 47 (82%)</td>
</tr>
<tr>
<td></td>
<td>No – 10 (18%)</td>
</tr>
<tr>
<td>Gender</td>
<td>Male – 33 (58%)</td>
</tr>
<tr>
<td></td>
<td>Female – 24 (42%)</td>
</tr>
<tr>
<td>Most common sectors for CTE participants</td>
<td>Information Technology – 12 (26%)</td>
</tr>
<tr>
<td></td>
<td>Business – 10 (21%)</td>
</tr>
</tbody>
</table>

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’s Powerful Impact

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:

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

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

<table>
<thead>
<tr>
<th>Quote</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>“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.”</td>
<td>Community College Student</td>
</tr>
<tr>
<td>“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.”</td>
<td>High School Student</td>
</tr>
<tr>
<td>“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.”</td>
<td>Community College Student</td>
</tr>
<tr>
<td>“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.”</td>
<td>High School Graduate</td>
</tr>
<tr>
<td>“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.”</td>
<td>Community College Graduate</td>
</tr>
<tr>
<td>“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.”</td>
<td>High School Graduate</td>
</tr>
<tr>
<td>“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.”</td>
<td>Community College Graduate</td>
</tr>
<tr>
<td>“The 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.”</td>
<td>Community College Graduate</td>
</tr>
</tbody>
</table>
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 under-emphasis 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:

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

<table>
<thead>
<tr>
<th>Starting Early</th>
<th>Knowledge of Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>• <strong>Middle School Opportunities</strong> – Many students wished they had been able to explore career possibilities and their own interests in middle school. They suggested career-oriented field trips, workshops, sample classes, and questionnaires as tools to cultivate curiosity and start exploring CTE offerings.</td>
<td>• <strong>Student Agency to Access Info</strong> – Centralized sources of information on CTE options – like course catalogue, booklets, and school websites – are often a valuable resource and enable students to take initiative in understanding their CTE choices.</td>
</tr>
<tr>
<td>• <strong>High School Curricular Structure</strong> – Most students expressed a desire for CTE options and advising to begin 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.</td>
<td>• <strong>Benefits of Career Events</strong> – Students found events like career fairs helpful in gaining familiarity with their options, and many expressed that more students should have the opportunity to attend.</td>
</tr>
</tbody>
</table>
Students commonly expressed that effective, individualized advising enables them to explore career options and select the best pathway.

Findings below capture student input:

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

Findings below capture student input:

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

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

<table>
<thead>
<tr>
<th>Quote</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>“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.”</td>
<td>High School Student</td>
</tr>
<tr>
<td>“I’d like to figure out my major before college, before it costs me a fortune.”</td>
<td>High School Student</td>
</tr>
<tr>
<td>“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.”</td>
<td>High School Graduate</td>
</tr>
<tr>
<td>“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.”</td>
<td>High School Student</td>
</tr>
<tr>
<td>“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.”</td>
<td>Community College Student</td>
</tr>
<tr>
<td>“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.”</td>
<td>Community College Student</td>
</tr>
<tr>
<td>“A lot of guidance counselors focus on the credits you need to pass, not how to build for your future.”</td>
<td>Community College Student</td>
</tr>
<tr>
<td>“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.”</td>
<td>Community College Student</td>
</tr>
<tr>
<td>“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.”</td>
<td>High School Graduate</td>
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<td>“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.”</td>
<td>High School Student</td>
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<tr>
<td>“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.”</td>
<td>Community College Student</td>
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<tr>
<td>“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.”</td>
<td>Community College Student</td>
</tr>
<tr>
<td>“A lot of guidance counselors focus on the credits you need to pass, not how to build for your future.”</td>
<td>Community College Student</td>
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</table>
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

December 3, 2019
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 apprenticeships

December 3, 2019
Emphasis on Work-Based Learning: Emerging Recommendations

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 work-based learning as essential to exploring career options and building a foundation for success.

**Findings below capture student input:**

### Exploration + Discernment

- **Continuum of Work-Based Learning** – Students stated a desire for a progressively deepening continuum of work-based learning opportunities. In particular, workplace exposure is a key means of exploring which career pathways are (and equally important, are not) a match for their skills and interests. Students suggested:
  - *Field trips to a variety of workplaces* early in high school, middle school, or even elementary grades
  - *Conversations with professionals* from various fields
  - *Mini-internships* in a narrowed set of sectors and/or workplaces to advance students’ career choice
  - *Longer-term apprentice/internships* with real responsibility to further test students’ career choice

### Essential Experience

- **Technical Skill Building** – Students recognized the substantial value of work-based learning, especially internships and apprenticeships. These longer-term placements advance students’ job-specific skill development in the context of industry standards and facilities.
  - *Field trips to a variety of workplaces*
  - *Conversations with professionals*
  - *Mini-internships*
  - *Longer-term apprentice/internships*

- **Interpersonal Intelligence + Workplace Norms** – In internships and apprenticeships, students reported building their interpersonal capabilities in a professional setting, connecting with colleagues, forging relationships with mentors, and receiving feedback. They also shared that they gained valuable exposure to professional expectations, employer culture, and adjacent career tracks. This learning has lasting value well beyond any single work-based placement.
Most students wanted greater access to work-based learning: to professionals in their field, to learn from peers, and especially to internships.

Findings below capture student input:

<table>
<thead>
<tr>
<th>Classroom as Workplace</th>
<th>Peer Learning</th>
<th>Insufficient Opportunity</th>
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<tr>
<td>• <strong>Professionals in the Classroom</strong> – 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 to mirror the workplace.</td>
<td>• <strong>Prep for Higher Expectations</strong> – 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.</td>
<td>• <strong>Stronger Role for Education</strong> – Students wanted schools to more ardently advocate for employers to create internships and commit spots. They also envisioned a central listing of internships.</td>
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<td>• <strong>Facilities Matter</strong> – 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.</td>
<td>• <strong>Pathway Insights</strong> – 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.</td>
<td>• <strong>Lack of Employer Investment</strong> – 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.</td>
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### Emphasis on Work-Based Learning: In Their Own Words

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

<table>
<thead>
<tr>
<th>Quote</th>
<th>Source</th>
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<tr>
<td>“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.”</td>
<td>High School Graduate</td>
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<td>“In fire science, we’re getting info from three actual firefighters, and we get to use their actual gear.”</td>
<td>High School Student</td>
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<td>“Having onsite tours for classes would be good, like field trips to employer locations.”</td>
<td>High School Student</td>
</tr>
<tr>
<td>“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.”</td>
<td>Community College Student</td>
</tr>
<tr>
<td>“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.”</td>
<td>High School Graduate</td>
</tr>
<tr>
<td>“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.”</td>
<td>Community College Student</td>
</tr>
<tr>
<td>“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.”</td>
<td>Community College Student</td>
</tr>
<tr>
<td>“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.”</td>
<td>High School Student</td>
</tr>
<tr>
<td>“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.”</td>
<td>Community College Student</td>
</tr>
<tr>
<td>“Offering internships benefits a company eventually. The companies need to realize this.”</td>
<td>Community College Student</td>
</tr>
<tr>
<td>“The volume of internships needs to be increased. Employers need to take responsibility and open their doors.”</td>
<td>Community College Student</td>
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December 3, 2019
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
- **Tailored Course Content** – Curricula with clear and useful application in students’ career pathways
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:

<table>
<thead>
<tr>
<th>Unnecessary Requirements</th>
<th>Tailored Course Content</th>
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<tr>
<td>• <strong>Unnecessary and Irrelevant Classes</strong> – 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.</td>
<td>• <strong>Contextualized Gen Ed Content</strong> – 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.</td>
</tr>
<tr>
<td>• <strong>Applicable Learning in CTE Courses</strong> – 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.</td>
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</tbody>
</table>
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

“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

“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

“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

“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

“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

December 3, 2019
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.”
Additional Findings, Cont’d

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 under training in the field.

- In order to accommodate more classes, perhaps make the classes more condensed to have college-like classes with alternating days of attendance. This way you could take multiple CTE classes.

- Experience! There should be a larger exposure to real-world applications and internships.

- Your choice for your learning
- Classes that focus on your major that you are pursuing
- Teachers for the right classes
- On job learning
Additional Findings, Cont’d

Ideal CTE System, Cont’d

1. Choose Your Adventure: Students should be encouraged to explore different career paths.

2. Everyone should be challenged and encouraged. Each student should have a path to success.

3. Classes should be more career-oriented and provide opportunities for exploration.

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 opportunities. I didn’t know about a lot of options offered until junior/senior year.

1. To prepare for college credit and background knowledge under belt.
2. Ideal school day: 50% of time learning material... 50% of time applying it in a real world setting.
Project Consultants + Report Authors: Simon Moore + Laurel Foglia

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