

Aligning & Assessing for Career Readiness



Learn how Region 10 Education Service Center in Texas ensures students are equipped with the necessary skills for success in the workforce and practical insights into assessing students' job-ready knowledge.

Setting the Stage for Today's CTE Landscape

What evidence do we have that points to a comprehensive understanding of a student's career readiness? Students can take assessments that point to what might be a good career, but what is actually going to show that they're going to be effective and ready to enter the workforce? Let's take a step back and take a look at the evolution of the career-ready mindset.

The Evolution of the Career-Ready Mindset

We can break up the evolution of the career-ready mindset into three eras: before Carl D. Perkins, after Carl D. Perkins, and modern CTE. Prior to Carl Perkins, the 1967 Vocational Education Act created a few vocational course opportunities for students including shop class, economics, and automotive shop. In 1984, the Carl D. Perkins Act was passed expanding the Vocational Education Act. This act introduced substantial

Texas Region 10 at a Glance

860,000 Students

48,000 Administrators

55,000 Teachers

130 Independent School Districts, Charter Schools, and Private Schools



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funding into the system and shifted to offering career-ready options to non-college-bound students.

In 2006, we saw another shift with the fourth iteration of the Carl D. Perkins Act. This act created career-connected learning pathways with hopes of fostering generative learning to build upon learning and goals from year to year, course to course, and skill to skill. It shifted the focus from only non-college-bound students to everyone, establishing the importance of career readiness for all students. Today's modern CTE system focuses on providing every student with opportunities to experience pathways-connected learning.

Generational Impact on the Career-Readiness Mindset

In order to understand the evolution of the career-ready mindset, we also need to look into the beliefs and differences of each generation. This is important to understand the current workforce as it is comprised of Baby Boomers, Generation X, Millennials, Generation Z, and soon Generation Alpha.

Baby Boomers grew up in the vocational education era. They have a very traditional mindset towards work including the beliefs that face-to-face interactions are the best interactions and dedication goes hand in hand with going into the office every day. Baby Boomers also believe in staying at the same company.

We saw a shift in Generation X as a result of the introduction of non-vocational education. They were the first to be able to experience courses like business management, technology, computer science, hardware working, and more. Gen X also got a taste of technology. They put an emphasis on experience in the workforce causing Gen X to become very self-reliant. Generation X, similar to

the Baby Boomers, believe employees have to work in person to build experience.

Millennials grew up during the birth of technology, learning how to use it while experiencing the whirlwind of its rapid evolution and the changes that came with it in every aspect of daily life. They were part of the first Carl D. Perkins Act. Millennials value purpose and philosophy over titles and companies and focus on the quality of work rather than the time at work.

Generation Z grew up in this pathways era where they were asked to choose what they wanted to do and love to do, thinking about what problems they felt passionate about solving to make their decision. They are our true technology pioneers. Gen Z is motivated by flexibility in the workplace and passion and mission over company loyalty.

The workforce is very diverse and comprised of mostly Gen X and Millennials with Baby Boomers and Gen X typically at the C-suite level. This information provides a frame of reference for the modern workforce and what beliefs each generation holds to frame career-technical education. So, what is happening in schools?

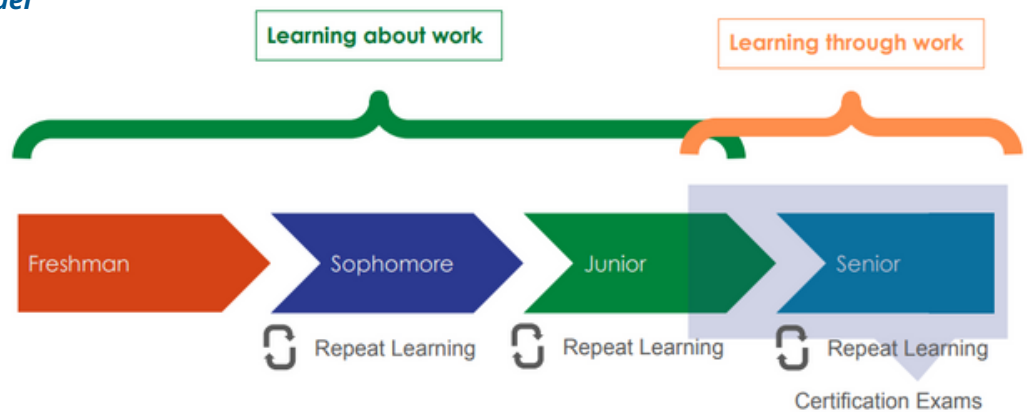
The Age Makeup of Teachers & Administrators in the Classroom



Today, 57% of teachers are Millennials between the ages of 30-49. Almost 30% of teachers are Baby Boomers and Generation X ages 50+. In terms of administrators or decision makers, over 50% are Baby Boomers or Gen X. This indicates that the majority of administrators likely have a different interpretation of work-ready compared to Millennial or Gen Z administrators. The messages in our education system are mixed; administrators and teachers are not aligned across the board on what it means to be work-ready.

Common High School Model

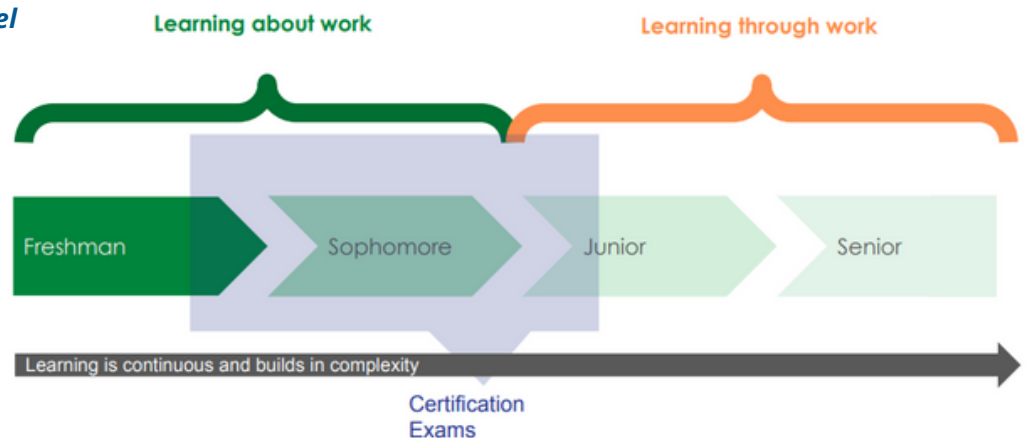
This is an example of the traditional high school model. Students take courses during their four years that often aren't connected year to year through pathways, causing students to think of classes as requirements to complete and move on.



Work-based learning often occurs junior and senior year through interviews, job shadowing, internships, and more. This education and skills do not reach freshmen. This causes repetitive learning year after year because educators are unsure of how to take it to the next level. Oftentimes, extending education to a deeper level is not happening.

Multi-Year Pathways Model

Consider this multi-year pathways model. This model moves students through a specific course sequence, emphasizing continuous learning and building upon complexity. The multi-year pathways model shifts learning



about work down to the freshman and sophomore levels, creating a more pathway-driven, cohesive education. This model should extend beyond the beginning of high school into elementary and middle school. The focus on work-based learning allows deeper learning year after year, allowing high school students to already have a solid foundation to be able to participate in simulated or actual work.

How do we make the transition to a multi-year pathway model? We must shift our focus to essential skills.



Essential Skills

In order to understand the role and importance of essential skills, a shift in mindset must take place. Instead of focusing on inputs, we must focus on outputs. What do we want students to be able to do as a result of learning? This is where outcome-based curriculum mapping comes in. **Outcome-based curriculum mapping** allows educators to guarantee student outcomes and assess exactly what students should be able to accomplish.

This ties directly back to essential skills. **Essential skills** are skills and by virtue knowledge that we are guaranteeing all students, regardless of background, will master in the given career pathway. In terms of pathways, these are the things that students are guaranteed to master.

There are three critical components of essential skills: endurance, leverage, and readiness. Essential skills have endurance; they're skills that have value beyond a single test, course, semester, certification, etc. Essential skills also have leverage, possessing value across multiple disciplines. They also have readiness qualities, meaning essential skills are necessary for success in the next level of instruction.

Implementing Essential Skills

When it comes to integrating essential skills into the curriculum, essential skills should be standards of courses that educators spend time on and students are evaluated on. In terms of pathways, a complete sequence spanning years must be considered, integrating essential skills into different courses across the pathway. Every course will support essential skill growth through a different lens.

Identifying Essential Skills

When identifying essential skills, it is important to turn to labor market data and identify areas of need. In Region 10 in Texas, Michael Pflug, Program Coordinator for Teaching and Learning at Region 10 Education Service Center, and his team establish committees comprised of industry experts, educators, administrators, and workforce partners to compile the qualities of a candidate who is ready for an entry-level position. They then categorize those qualities, craft brief descriptions, and develop a rubric for evaluating students based on those categories.

To ensure students are developing proficient skills, developing a rubric is key.

Developing a Rubric

The structure of rubrics in Region 10 (see page 4) spans from novice to expert. Educators start with the essential skill description of what an expert student in a pathway looks like and work their way down to the novice level. Teachers then design and implement performance tasks, or cornerstone tasks, around essential skills based on student growth and how they will leave the classroom, not how they entered.

Most students starting a career pathway enter as a novice or an advanced novice. Students should be advancing one indicator level every year. Identified essential skills should be directly aligned to identified industry-based certifications given in the chosen career pathway. Students reaching the competent level should be able to pass a certification exam.

Pflug has seen most students come in at the advanced novice level because most of them have some kind of exposure to the area that they're selecting because it is something they enjoy. He has seen students who enjoy the pathway grow up to two levels or a level and a half.





Essential Skills Rubric

	Novice	Advanced Novice	Intermediate	Competent	Proficient	Expert
Essential Skill Identified by Career Pathway	Description of skill at difference performance levels	Description of skill at difference performance levels	Description of skill at difference performance levels	Description of skill at difference performance levels	Description of skill at difference performance levels	Description of skill at difference performance levels

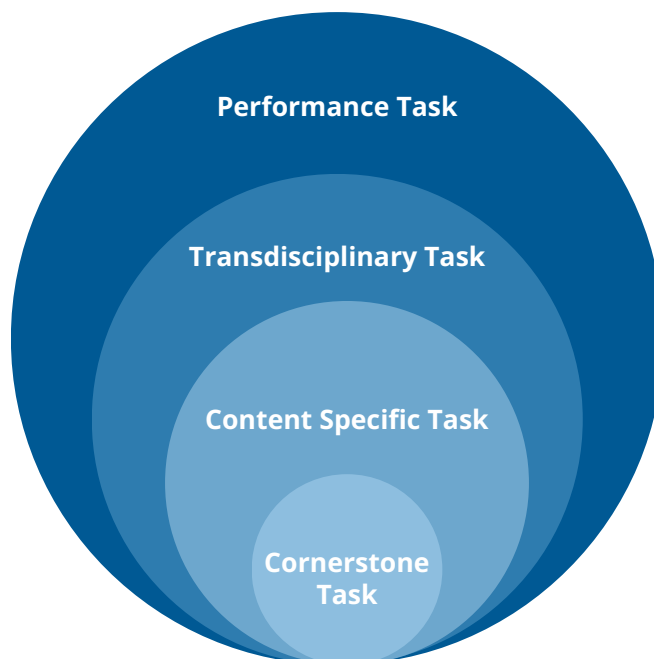
So how do we measure this? Through the use of cornerstone tasks.

Cornerstone Tasks

First, let's review what a [performance task](#) is. According to Jay McTighe, "A **performance task** is any learning activity or assessment that asks students to perform and to demonstrate their knowledge, understanding, and proficiency. Performance tasks yield a tangible product and/or performance that serves as evidence of learning. Unlike a selected-response item (e.g. multiple choice or matching) that asks students to select from given alternatives, a performance task presents a situation that calls for learners to apply their learning in context."

A **cornerstone task** is a performance task that is transdisciplinary and addresses content-specific outcomes. Performance tasks contain different tiers of tasks, starting with transdisciplinary tasks, content-specific tasks, and cornerstone tasks.

Cornerstone tasks are a combination of all of these forms of tasks, incorporating content-specific and transdisciplinary outcomes while measuring essential skills.





Why Cornerstone Tasks?

Cornerstone tasks engage learners by applying learning to authentic contexts as a means of providing evidence of their ability to transfer knowledge and skills from unit to unit, course to course, and year to year. The complexity and sophistication of cornerstone tasks can be strategically increased, allowing for their use across grade levels. In Region 10, educators want to see students demonstrate and transfer their knowledge and understanding into different contexts. A multi-year plan with pathways and cornerstone tasks allows students, parents, and educators to have a true vision and understanding of where students will be in coming years.

This case study was written based on Michael Pflug's session from Defined's Virtual STEM & PBL Symposium. In this informative session, uncover the key links between CTE and the acquisition of essential employability skills. Explore the incorporation of Cornerstone Tasks within the Understanding by Design and Performance Task Framework. Hear practical insights into assessing students' job-ready knowledge and discover effective ways to ensure students are equipped with the necessary skills for success in the workforce. To access Michael's session recording, please [click here](#). To access the full Virtual Symposium along with presenter slides and resources, please [click here](#).

About Michael Pflug

Michael is currently serving as the Program Coordinator for Teaching and Learning at the Region 10 Education Service Center in Texas. He previously served as the CTE CCMR Grant Consultant in the Region 10 ESC. He has managed and provided leadership for over \$1,000,000 in competitive federal and state grants focusing on innovative CTE pathways. Michael has built valuable partnerships with industry stakeholders including the Texas Workforce Commission, the Texas Education Agency, the Higher Education Coordinating Board, and local education agencies. Michael's rich background includes serving as the K-12 STEAM Curriculum Coordinator at Prosper ISD where he played a key role in designing curriculum, developing pathways, and coaching instructional best practices and CTE. He has also taught science at all grade levels from 5th grade to 8th grade he has extensive knowledge of state and federal CTE programs and funding methods.

About Defined

Defined empowers educators to engage K-12 students in deeper learning opportunities that build future-ready skills. Through our Defined Learning and Defined Careers programs, we provide teachers with the online tools they need to engage students in hands-on career-connected learning opportunities. Our Defined Academy program provides customizable synchronous and asynchronous opportunities for educators to engage in personalized professional learning. Defined helps teachers bring the real world to the classroom and empowers students to build critical future-ready skills.

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