WHAT IS

By James R. Stone III

Jayden works underneath a car on a lift, pulling the lower oil pan off of a late model Ford Explorer. Nearby, an adult observes. Elsewhere in the shop, other adults perform a variety of mechanical repairs. Madison works underneath a car on a lift, pulling the lower oil pan off of a late model Ford Explorer. Nearby, an adult observes. Elsewhere in the shop, other students perform a variety of mechanical repairs.

Working alongside a chef mentor, Jordan assists in preparing a complex lunch meal. Around the kitchen are other students completing various dishes. Working alongside a chef mentor, Taylor assists in preparing a complex lunch meal. Around the kitchen are other adults completing various dishes.



hat is the difference between the workplaces where Jayden and Taylor are working and those where Madison and Jordan are working? The former students are engaged in authentic work-based learning (WBL).

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What is authentic work-based learning?

There are many similarities among these students. They all are learning skills required by employers. But there are differences. Perhaps the most important difference is that Jayden and Taylor are working among adult employees of the auto shop or restaurant — in an adult environment. Madison and Jordan are surrounded by other adolescents.

Authentic work-based learning includes four elements.

- 1. A partnership agreement that details the expectations for each partner: the employer, the participant and the school
- 2. An authentic work experience where the student is engaged in a real or authentic experience supervised and mentored by an industry professional
- 3. A structured learning component designed to connect theory with practice and workplace skills
- 4. A program that culminates in an assessment and recognition of skills by a third party, which ensures that recognition is aligned with the attainment of a credential and/or progress along a career pathway

(Hague, 2018)

Implicit in this description, of course, is that the work occurs in an authentic workplace. A workplace populated by adults engaged in their careers. Explicit in this description is a written plan where in-class instruction is linked to on-the-job work experiences.

High-quality career and technical education (CTE) programs of study are assumed to develop three kinds of skills.

- 1. Technical skills specific to an occupation or cluster of occupations
- 2. Personal effectiveness and foundational workforce competence (i.e., employability skills)
- 3. Applied academic skills

(Stone & Lewis, 2012)

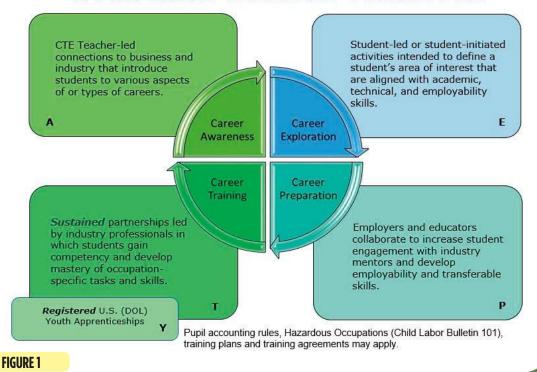
High-quality CTE programs should move students toward and into authentic WBL experiences as part of their career pathways.

Authentic WBL is a continuum.

There is value in all forms of work-based learning, from the least intensive, such as industry tours or guest speakers, to the most intensive, authentic WBL. For example, WBL can positively affect attendance, high school graduation, and college attendance (Stone, 2016). There is also evidence that authentic WBL improves reading scores and postsecondary achievement. Furthermore, work-based learning in CTE can help students determine how well their interests and abilities align with the occupations they are considering (Stone & Lewis, 2012).

Two similar but different frameworks for WBL each specify WBL as a continuum. The Michigan Department of Education (2023), for example, has identified WBL as beginning with career awareness and moving through career exploration to career preparation to career training (Figure 1).

WORK BASED LEARNING CONTINUUM



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The Colorado Workforce Development Council (2023) offers a similar model but progresses through stages as the learning moves from school to employer (Figure 2).

These and other models reflect an approach that increases students' engagement with employers and the workplace. Learning about work through guest speakers, career fairs, tours and the like can and, some argue, should begin during elementary school (Cai, 2019). For example, educators in Barren County, Kentucky, used Project Lead the Way (PLTW) as the framework to develop a pre-K through 12th grade approach to career awareness and exploration (Liebich, 2019).

The Wisconsin Youth Apprenticeship program, at the other end of the continuum, provides 11th and 12th grade students an integrated school- and work-based learning approach to skill development. While many states offer a youth apprenticeship program, Wisconsin's is unique in that it operates through the Department of Workforce Development (n.d.), not the Department of Public Instruction. Their framework includes:

- Industry-developed skill standards
- · Exposure to multiple aspects of the industry
- Skilled mentors assigned to train the students

- · Paid on-the-job work experience
- Related classroom instruction concurrent with work-based learning
- Curriculum guidelines for all programs
- · Performance evaluation of demonstrated competencies
- State-issued skill certificates

Schools cannot replicate occupational socialization.

Perhaps the most powerful argument for engaging students in authentic WBL is occupational socialization. Schools can replicate the appearance of a workplace in a CTE program, but schools cannot replicate occupational socialization. Industrial psychologists define occupational socialization as the process whereby individuals learn to become aware of organizational and occupational practices, internalize them, and carry them out as participating members of a work group. It is vital that students learn about attitudes and behaviors, informal work norms, peer-group values, and relationships for success in an occupational context (Scott & Marshall, 2009).

Authentic WBL also helps youth begin to develop social capital with adult supervisors, mentors, instructors and others who can provide access to valuable resources (e.g., information, assistance,

COLORADO'S WORK-BASED LEARNING CONTINUUM

Work-based learning is a continuum of activities that occur, in part or in whole, in the workplace, providing the learner with hands-on, real world experience.

LEARNING ABOUT WORK

LEARNING THROUGH WORK

LEARNING AT WORK

Career awareness and exploration helps individuals build awareness of the variety of careers available and provides experiences that help inform career decisions.

- Career Counseling
- Career Planning
- Career Fairs
- Career Presentations
- Industry Speakers
- · Informational Interviews
- Mentoring
- Worksite Tours
- Project-based Learning

Career preparation supports career readiness and includes extended direct interaction with professionals from industry and the community.

- Clinical Experiences
- Credit-for-work Experiences
- Internships
- Pre-apprenticeship
- Industry-sponsored Project
- Supervised Entrepreneurship Experience

Career training occurs at a work site and prepares individuals for employment.

- Apprenticeship
- On-the-job Training
- Employee Development

Education Coordinated

Business Led

OUTCOMES:

Skilled Talent for Business + Meaningful Careers for Students & Job Seekers

FIGURE 2

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support, encouragement and connections). Occupational socialization is fostered by the formal and the informal elements of the workplace. Formal elements include company, team or organizational meetings where the student worker engages with adults; formal classes including those taught by external vendors demonstrating the newest tools or processes; mentor meetings; and meetings with other adult employees working on the same tasks. Informal elements include casual conversations with other employees; social gatherings; and the simple act of observing how adults in the workplace interact with each other, their supervisors and the work itself.

Address the challenges.

As Kermit the Frog mused, "It's not easy being green." So it goes with authentic WBL. It is not easy. Though work-based learning opportunities have surged in recent years as many states and districts seek to expand WBL, these efforts are characterized as uneven in availability and quality (Ross et al., 2020). But with a concerted effort, authentic WBL can grow to benefit more students in CTE. First, we must acknowledge some of the challenges.

Resource limitations

A recent shift from teacher-coordinators to schoolwide WBL coordinators — who supervise all students engaged in WBL regardless of program focus — presents unique challenges. WBL coordinators reduce some of the load for classroom educators and can support general work readiness skills, but they often lack the knowledge and resources for fluency in all CTE-related workplaces. In site visits conducted as part of comprehensive local needs assessments over the past several years, staff at the National Research Center for CTE have asked teachers about strategies they use to integrate students' WBL experiences, and the responses have varied widely.

Further, even ensuring that CTE programs have the capacity to build technical skills required by in-demand occupations and industries can be a challenge. Programs may not be able to provide students the most current equipment due to cost. Material costs may also limit skill development. It is not unusual to find two or three students sharing one computer in a computer maintenance program or students reusing carpentry materials due to insufficient resources.

Student and community limitations

Fewer teens are driving today. There has been a substantial decline in the percentage of 16-year-olds who hold a driver's license — from 46% in the mid-1980s to 25% today (Gibson, 2023). The

decline also shows in older teens. While 60% of 18-year-olds hold a driver's license today, that is down from 80% in the mid-1980s. So, absent transportation, leaving school to go to work becomes difficult. Public transportation may be a viable option in some communities, but most don't have reliable bus or train systems.

Geography may limit students to industries available in their immediate area.

Employer limitations

Building authentic WBL opportunities for high school students requires active employer engagement. This is often difficult to achieve for many reasons.

- While there are employers in many communities that actively support WBL (Rosen & Byndloss, 2020), some express concern about the extent to which students are job ready. The educators' response to this is to develop high-quality learning experiences that engage employers in establishing standards.
- Some industries and employers have age and liability restrictions that prohibit youth under the age of 16, or even 18, from participating in work. But they may offer limited WBL activities like job shadowing.
- Scheduling can be an issue. Aligning employer needs with student schedules can be tricky as work shifts may be incompatible with the high school day. Many construction jobs, for example, begin before 6:00 a.m. and end early in the afternoon. In secondary programs where rising seniors have completed all necessary academic requirements, and the regional CTE center has scheduling flexibility, these concerns can be addressed. Some districts have moved to a four-day week with Friday devoted to appropriate WBL for all CTE students.

What can you do when authentic WBL is not an option?

Moving all students into authentic WBL experiences as part of high-quality CTE programs of study is or ought to be our collective goal. But that may not be possible, at least not right away, for a myriad of reasons. So, consider the work of education researcher David Stern, of the University of California, Berkeley, and his colleagues (1994); they conducted an extensive review of the many forms of school-based enterprise (SBE) across the country. They visited and wrote about boat-building enterprises in Washington; credit unions managed and staffed by high school students in many states; auto repair shops that

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performed work on cars for actual customers; child care centers that served parents and children in their communities; a coffee shop focused on providing service for older clientele; a construction program that partnered with Habitat for Humanity; and many more. For the purpose of the study, SBEs were defined as serving customers not affiliated with the school. Students had to work in managerial and staff positions, with appropriate adult monitoring.

West Virginia pioneered the concept of the Simulated Workplace, wherein students transform their classrooms into businesses to create an authentic workplace environment (Advance CTE, 2021). Participants in the program are treated like employees. They are required to pass an interview for entry into the class, fill assigned roles within the company, write a company handbook and pass a safety training.

Innovative solutions like school-based enterprises & the Simulated Workplace can benefit students in underserved communities. And we know there are other options in use. The CTE community is quite creative!

Summary

As observed in *Techniques*, educators should strive to build stronger connections between students' work-based learning and classroom instruction (Alfeld, 2015). To achieve this goal, districts and local program administrators may consider the following.

- Create a K-12 career development approach that culminates in authentic WBL experiences.
- Engage business leaders from regional industries to work with CTE educators in your high schools and regional technology centers to identify and advise on WBL activities.
- Provide release time for CTE teachers to coordinate students' WBL with in-class instruction collaborating with employers and WBL coordinators and conducting professional development.

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