

HFTFS PRIZE 2017

APPLICATION PART 2

READING #3

HARBOR FREIGHT
TOOLS FOR SCHOOLS

Building a High-Quality Skilled Trades Program

[“The Promise of High Quality Career and Technical Education”](#) by Harry J. Holzer, Dane Linn and Wanda Monthey, Georgetown Center on Poverty, Inequality, and Public Policy and The College Board, October 2013.

High-quality CTE has great potential to expand opportunities for all students, including the disadvantaged, and generate highly skilled and career-focused employees for business, industry and the economy.

But too many CTE programs in high schools and colleges around the country today still appear to fit the stereotype of having out-of-date practices that prepare students neither for college nor for well paying careers. In many cases, teachers and equipment have likely not kept up with labor market changes, curricula have not been revised nor integrated with better academic programs, and the highest academically performing students avoid CTE classes and concentrations.

Although there are various models for high-quality CTE programs, here are key components that, research shows, characterize most, if not all, of them:

1. Career-Oriented Educational Systems

When students leave high school, if the pre-K–12 *system* has served them well, they will be both college and career ready. This means that their education has given them the academic skills to be prepared for their next step after high school, whether they will move on to higher education immediately or into the workforce. Rather than existing as separate programs, CTE programs need to be an integral part of secondary school systems.

2. Strong Options for All Students

High-quality CTE options need to be accessible to secondary and postsecondary students of all levels of academic ability. Students need to be presented with different options and provided with the guidance to plan and select a pathway that prepares them not for college or career but for both, and with excellent information to make their decisions along the way. And no decision should ever lock a student into a particular path and prevent changes to his or her plan.

3. Rigorous Academic Curricula

To ensure that CTE curricula are rigorous academically, they should be consistent with the rigorous state standards in core content areas. What really distinguishes CTE from more traditional academic programs is the strong emphasis placed on “contextualized learning,” in which even academic material is presented in the context of projects or workplaces. As much as possible, high-level academic courses and material should be integrated into project-, work- or community-based learning.

4. Rigorous Technical Skill Development

CTE programs are designed to meet the technical skills and knowledge required by business and industry. States and local districts can adopt/adapt/develop standards and curricula in collaboration with local businesses. Students must demonstrate competency in these skills in order to be competitive in the

workplace and to move to more advanced postsecondary programs. Successful demonstration of these competencies can lead to apprenticeship opportunities, industry-recognized certifications, as well as associate and bachelor's degrees and beyond.

5. Employability Skills

The third leg of a rigorous CTE program that promotes career readiness is the development of employability skills to be successful in the workplace. These skills are critically important for labor market success. While technical and academic skills may result in being hired, the employability skills are necessary to keep the job and advance in a career. These skills include communication, reasoning, problem-solving, the ability to work in teams, and other skills and behaviors deemed essential by most employers.

6. Professional Development for Teaching Staff and Leaders

To ensure that both the curricula taught and pedagogical techniques used by CTE teachers are fully up-to-date, professional development for CTE teachers is important. Many CTE teachers come straight from business and industry. They usually have the necessary technical skills and understand the employability skills demanded in the workplace, but they may need support to integrate academic skills into their instruction, and they may also need support in developing pedagogical skills that are developmentally appropriate for the age group they are teaching.

7. Support Services for Students

Support services are critically important for all students, and especially for disadvantaged students or those with weaker academic preparation, if they are to handle more rigorous academic and technical work.

8. Assessment and Accountability

In the current era of standards-based education with accountability, it is critically important that assessment tools measure all of the relevant skills—technical, academic and employability—that CTE students are developing. Assessments must serve multiple purposes, such as improving student learning and teacher/school accountability. The assessments also need to indicate to employers and postsecondary institutions that the student has successfully demonstrated the skills to be successful in both academia and industry.

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