



Business and Industry Playbook

Unlocking Career Success



This playbook provides ways in which business and industry can blur the lines between high school, postsecondary education, and the workforce. Business and industry play a significant role to Raise the Bar for student success by developing an *education-to-workforce system* focusing on Unlocking Career Success.

Step 1

Signal
Labor Needs

Step 2

Support Work-Based
Learning

Step 3

Strengthen
Alignment

Signal skill and labor needs

How employers articulate the types of skills and occupations that they need is foundational to informing classroom instruction, work-based learning, and students' education and career plans. Business and industry can share labor market information to inform educators and students, ensure instructional programs and resource allocation reflects the needs of employers, and support students to continue their education and enter the workforce. When signaling skill and labor market needs, employers should consider how to:



Discuss in-demand skills and occupations by translating the needs of employers and the industry to help students develop the skills they need to be successful, including analysis of quantitative and qualitative data, past-, present- and future-occupational trends, and direct input from employers.



Plug into existing routines as states and many local communities have existing processes to collect and publish labor market information, typically through a state LMI (Labor Market Information) office, which can help employers better understand the types of data that are collected, when and how data are presented, and how employers can provide additional data.



Partner with other employer groups which can include employer associations, chambers of commerce, business roundtables, and other groups to collect and share employer and industry needs, signal skill and occupational needs within and across industries, and build the capacity of employers to work with education and workforce systems.

Tools for signaling:

Provide Timely Labor Market Information

Numerous staff in the education and workforce system use labor market information to align career-connected learning programs with in-demand careers and the advisement of students

In Vermont, the Business Roundtable and Vermont Agency of Commerce organized almost 100 employers to forecast new jobs across 11 critical job categories, which mobilized education partners to align resources and curricula to support this market need.

In Virginia, the Shenandoah Valley Career Hub is a collaborative effort among business, education, and economic development communities to broaden awareness of high-demand, high-wage careers in the region including through a partnership with a local TV station that featured 24 different career pathways that are high-wage and do not require a 4-year degree.



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Tools for signaling (continued):

Leverage Perkins and WIOA Funding

There are two key federal laws that influence our education and workforce systems: (1) the Carl D. Perkins Career and Technical Education Act of 2006 (Perkins V), and (2) the Workforce Innovation and Opportunity Act (WIOA). Perkins V, administered by the U.S. Department of Education, and WIOA, administered by the U.S. Departments of Education and Labor, provide a range of opportunities for business leaders to get involved and embed industry needs and skills across the education and workforce systems.

At the state level, business and industry can provide LMI and guidance to inform CTE programs and Perkins V and WIOA state plans, specifically the states' visions and goals, sector strategies, and in-demand occupations.

At the local level, business and industry feedback is an important element of local CTE applications; in particular, LMI is necessary to complete the Perkins required Comprehensive Local Needs Assessment (CLNA). Materials published by AdvanceCTE, the Association for Career and Technical Education (ACTE), and Business Leaders United provide a "[cheat sheet](#)" on how employers can get involved in strengthening career and technical education.

Leverage Groups to Convene Employers

In Minnesota, the Chamber of Commerce brings together the business community and local high schools through the [Bloomington Future Leaders](#) program that includes a speaker series and mentoring on career exploration.

The Roxboro Area Chamber of Commerce in North Carolina created an industrial relations committee that hosts monthly luncheons on current workforce trends connecting community college staff with local industry partners.

An initiative of the U.S. Chamber of Commerce, [Kentucky's Talent Pipeline](#) was launched by the Kentucky Chamber Workforce Center to empower employers to lead on workforce development by creating employer collaboratives across the state to support talent pipeline development for key sectors.



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Support work-based learning (WBL), including registered apprenticeship

Employers are vital to providing students with the high-quality learning experiences that occur in the workplace. Work-based learning can include career exploration activities like job shadowing and more immersive experiences such as internships and cooperative education. Registered apprenticeship is the premier earn-and-learn model. These opportunities are designed to broaden the career options available to students. When supporting WBL, consider how to:



Participate in different types of WBL including career expos, mock interviews, workplace tours, and job shadowing as well as the direct employment of students through internships, cooperative education, and youth apprenticeships to find areas where the employer can add value to their organization, build their capacity to support students, and expand partnerships over time.



Create a registered apprenticeship program, which is an industry-driven career pathway that provides employers with the opportunity to shape their future workforce and provide students with the keys to Unlocking Career Success, including high-quality work-based learning and an industry recognized credential.



Engage intermediary organizations to make it easier for employers to start and scale WBL opportunities and can help to build the capacity of employers to provide coordination between industry and educational institutions creating or expanding youth apprenticeship programs, and supporting student career navigation and coaching.

Tools for supporting WBL:

Support WBL and Youth Apprenticeships

The Department of Labor has resources to support employers in establishing Registered Apprenticeships. The President's Council on Science and Technology also issued a report on bioengineering and biomanufacturing that provides examples of models of modern apprenticeships in these fields.

In North Carolina, the Guilford Apprenticeship Program provides companies with the opportunity to train a new generation of skilled workers through a registered youth apprentice program that allows youth to start a rewarding career in high school.

EmployIndy and Ascend Indiana launched a Modern Apprenticeship Pilot (MAP) to support high school pathways to in-demand fields. MAP is a paid multi-year work-based learning experience with local employers where students emerge with a high school diploma, college credits, relevant credentials, and professional work experience.

In Georgia, Hertz Electrifies Atlanta is a public-private partnership to expand the adoption of electric vehicles (EV) in which Hertz is partnering with Atlanta College and Career Academy to provide students with EV education and training opportunities and providing summer job opportunities through the city's Summer Youth Employment Program.

In Louisiana, YouthForce NOLA partners with hundreds of employers to increase career awareness among educators and students, coordinate paid internships, and serves as the intermediary for students and employers.



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Tools for supporting WBL (continued):

Support Professional Mentors

Employers can engage through virtual platforms, to connect students to industry mentors and professionals in a wide range of career fields.

Employer groups can host events like the [Pittsburgh Technology Council](#) which organizes an annual STEM summit to showcase the diverse array of STEM-related careers for students, parents, and educators including company tours as a highlight.

In Texas, [UpSkill Houston](#) is an employer-led initiative that hosts conversations between employers and the education community. It also provides resources and [videos](#) to showcase jobs that provide a living wage and don't require a four-year college degree.

Support Problem-Based Learning

Employer-driven and problem-based learning helps embed career exploration in the classroom and in out-of-school programs.

In California, Qualcomm hosts a [QCamp for Girls in STEM](#), a two-week camp for middle school girls recruited from San Diego and Vista Unified School Districts held in Qualcomm's Thinkabit Lab, which is a hands-on makerspace. QCamp provides an opportunity for girls to strengthen STEM skills through hands-on engineering projects.

Nationally, the U.S. Chamber of Commerce [Employer Provided Innovation Challenges \(EPIC\)](#) is an initiative that seeks to scale high-quality, employer-led, problem-based learning. The Chamber Foundation tasks innovation clearinghouses (e.g., a local chamber) to design, disseminate, and credential authentic problem-based learning. These real-world challenges are made available to cross-functional, interdisciplinary teams of learners.

Partner with an Intermediary

[Oklahoma CareerTech](#) partners with Express Employment Professionals to remove legal barriers for employers to participate in WBL with students. In this partnership, Express Employment Professionals serve as the employer of record and assists in student onboarding and offboarding processes and covers the required workers' compensation insurance and liability so the employer can focus on student mentorship.

In Indiana, [Talent Bound](#) serves as a WBL intermediary to provide students in Marion County with authentic learning experiences that occur in the workplace, leveraging a network of engaged businesses.

In Ohio, the [NW Ohio Manufacturing Pilot](#) created a sophisticated marketing campaign and employs a full-time recruitment partner to assist student job seekers by matching them with training opportunities, support services, and job opportunities in manufacturing; the pilot is a collaborative effort between career and technical education, community colleges, and local businesses.

Facilitate Career Exploration

There are many career exploration opportunities that do not require extensive staff time, planning, or resources on the part of the employer and are beneficial to local educational agencies and schools. These opportunities can include participating in a career day event at a local high school, joining a skills competition hosted by a [career and technical student organization](#) (CTSO), sponsoring a CTSO team to attend a regional, state, or national leadership event, judging a CTSO event, or by providing industry expertise to teachers or to support classroom instruction. Employers can also donate equipment to schools, especially in career fields that require expensive machinery or employers can work directly with schools as instructional aids or part-time educators.



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Strengthen alignment between school and work

Employer partnerships are central to high-quality career and technical education (CTE) programs which span P-12, postsecondary education, and the workforce. Employer involvement in shaping career-connected learning is best when it informs curriculum and student attainment of high-value industry credentials, alignment of programs across P-12 and community and technical colleges, and facilitates youth employment. When aligning school to work, consider how to:



Support student access and success by engaging with local educational agencies to ensure that all students have access to high-quality CTE and the support they need to be successful, which can include supporting the instructional needs of students, identification and attainment of high-value industry credentials, and expanding work-based learning placements.



Sponsor extended learning opportunities which includes career and technical student organizations (CTSOs) and other programs to support student diversity, equity, inclusion, and accessibility as well as to create opportunities for youth to develop leadership and employability skills, and apply those skills in regional, state, and national experiences.



Catalyze interest and relationships to connect industry and schools by creating opportunities for youth and their families to interact with business and industry professionals to inform student's education and career plans as well as work with educators and school counselors through externships or other models that provide educators with familiarity of different workplaces.

Tools for strengthening alignment:

Sponsor Co-curricular and Student Competitions

Career and Technical Student Organizations (CTSO) comprise 11 non-profit organizations, aligned to 16 national career clusters, and are authorized via Congress in the Perkins V Act. CTSOs help students, particularly non-traditional students, to understand and develop skills and interests in career pathway programs. More information about CTSOs can be found here: <https://www.ctsos.org/>

FIRST is a robotics community that prepares youth through a suite of inclusive, team-based robotics programs, with support from over 200 Fortune 500 companies—in which LEGO sponsors a FIRST LEGO league to provide younger student participants with real-world problem-solving experiences through a guided robotics program to increase student STEM learning and skill development.

In Virginia, Manassas City Public Schools hosts robotics teams at every level of its school system thanks to donors like Micron and Lockheed Martin—some team alumni have gone on to work at Lockheed Martin directly after high school and now serve as mentors to their former robotics teams.



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Tools for strengthening alignment (continued):

Work with Local Educational Agencies

Employers can work with local education agencies to shape curriculum, define in-demand skills, identify credentials of value, and provide wrap-around supports (i.e. child-care or transportation) to enable youth to participate in CTE and Work based learning opportunities.

In California, [The Wonderful Company](#) helps to shape agricultural-tech education at schools through [Wonderful Agriculture Career Prep](#) where high school students earn an Associate of Science degree and prepare for high-tech agriculture jobs. This free early college career pathway program provides three pathways across seven partnering high schools with college professors teaching classes at each high school. Students earn 40-60 units of free college credit and graduates join the Wonderful Company's highly skilled agriculture workforce with a guaranteed, high-paying job and support to continue their education in a 4-year college.

In Connecticut, the [Advanced Manufacturing Alliance](#), a regional sector partnership representing 35+ manufacturing companies, supports the [Eastern CT Youth Manufacturing Pipeline](#) curriculum, providing opportunities for students of all ages to learn and advance into careers in manufacturing.

Leverage State-of-the-Art Technology

Nationally, the philanthropic arm of the Society of Manufacturing Engineers (SME) prepares the next generation of talent through [SME PRIME](#), which partners private industry with academia to build custom manufacturing and engineering programs in high schools across the country. PRIME schools are in nearly 100 communities, and each high school is supported and informed by local manufacturers. SME Prime provides equipment, professional development, and STEM-focused extracurricular support.

Often in partnership with SME Prime, [Stratasys 3D education](#), a leader in industrial 3D printing and additive manufacturing solutions provides free materials, technical guides, on-demand webinars, and lesson ideas to provide students with classroom-based 3D printing experience. In addition, Stratasys offers an industry-endorsed certification program.

Sponsor Educator Externships

Employers can help local school staff better understand the needs of business and industry and to keep pace with technological and workplace changes through direct partnerships and professional learning experiences. Externships are a unique professional learning opportunity for educators and school counselors to engage in a workplace that is not a school and to learn directly from industry about employment opportunities and skill requirements for youth.

The Colorado Bioscience Institute partners with local educational agencies across the state to provide an annual summer externship known as the [Research Experience for Teacher program](#), which provides teachers with first-hand experiences in the workplace, information on the latest research, and a better understanding of technological development in STEM industries.

The U.S. Engineering's Educator Externship enables educators to delve into practical work experiences, connecting theory with classroom practices, and return to the classroom with knowledge that educators can use to support students' education and career goals.

The [Maryland Chamber of Commerce](#) offers a four-week teacher externship program to connect educators with local businesses, providing educators with hands on experiences and empowering them to educate students with essential career skills.



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