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Issue Brief

Bridging Educational Gaps, Building Brighter Futures: Paid High School Work-Study Programs

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Introduction

Students who have dropped out of high school—and those at risk of doing so—are at greater risk of lifelong poverty, involvement with the criminal justice system, dependence on government welfare programs, and even premature death.[1] Over the past decade, 14%–18% of U.S. high school students have failed to graduate on time.[2] In the last few years, however, the problems at high schools have compounded, as pandemic-era school closures led to dramatic drops in math and reading proficiency, as well as a spike in chronic absenteeism.[3] In the 2021–22 school year, an alarming 56% of American high schools experienced "extreme" chronic absenteeism, defined as at least 30% of students out of school for 18 days (10%) or more of a school year.[4]

In the wake of the pandemic, there is thus a pressing need—as well as an opportunity—to find new, innovative approaches for recovering dropouts and retaining those at risk of dropping out.

Paid high school work-study programs are a promising way to help provide opportunities to our most vulnerable teenagers and young adults. Before graduating from high school, students enrolled in work-study programs are employed in paid jobs to gain valuable, marketable skills while often receiving their first wages and being kept safe. Work-study programs make high school relevant, thus helping to prevent dropouts and to reclaim those who have already left.

Work-study programs bridge academic learning and real-life application, allowing students to be trained in fields such as accounting, health care, legal services, architecture, and the skilled trades. This can expose students to a world outside their insular neighborhood, where they meet positive role models and mentors who can help them build the competence and confidence needed for success.

Perhaps most important, these opportunities can be offered to students regardless of whether they are college-bound. Work-study programs do not foreclose college but provide a now-absent option for students who are not college-bound.

In preventing more students from exiting the school system, these programs can make the U.S. more economically competitive and turn around the lives of thousands of students who would otherwise likely fall into lifelong dead ends. Offering paid work-study will make high school more exciting and practically useful, motivating students to stay in school, return to school, or just take it more seriously. School-district officials should work to establish these programs, starting with a select number of high schools and partners in the private sector and skilled trades.

U.S. High Schools Are Failing on Multiple Metrics

Designed almost a century ago to meet the needs of another age, America's high school system is obsolete. Today, only one-third of high school graduates are adequately prepared for college, work, and citizenship. Many high school courses do not equip students with the skills to compete in today's fast-changing employment landscape, regardless of how well they learn or how hard the teachers work. And in many poorly performing schools, these failures have led many to exit the school system.

The U.S. has one of the highest secondary school dropout rates in the industrialized world.[5] High school dropouts, as we have long known, face the bleakest prospects of all young people: only 41% nationally have jobs.[6] They are nearly four times more likely to be arrested than their counterparts who completed high school.[7] Worst of all, they die younger because of years of poor health care, unsafe living conditions, and violence.[8]

Prolonged school closures during the Covid-19 pandemic have only swelled the number of out-of-school and out-of-work young adults. According to a report from the University of Chicago, the number of young people aged 16–19 in Chicago who were neither in school nor working in 2021 was 92,511; among those aged 20–24, the number was 66,866.[9] Similar trends hold for many other large school districts in the U.S.

Recent scores from the Programme for International Student Assessment (PISA) demonstrate that students in China, our biggest geopolitical competitor, are outperforming American students in mathematics.[10] The U.S. also trails 17 of the 27 European Union countries—as well as the U.K. and Australia.[11] American students are more competitive in reading but still trailed eight countries/economies measured by the Organisation for Economic Co-operation and Development (OECD), including Singapore, China (Macao and Taipei), Ireland, Japan, Korea, Estonia, and Canada.[12]

The Promise of Career and Technical Education (CTE)

One promising tool in the educational reform basket is vocational education—which has come a long way from the wood-shop and home-economics courses of years past. As of the 2020–21 school year, some 8.3 million high school students in the U.S. were participating in what are now called career and technical education (CTE) pathways, up from 7.5 million the previous year, according to the U.S. Department of Education.[13] With programming that includes plumbing, electrical, health care, landscape design, and culinary arts, among many others, CTE is part of a

growing national approach to boosting high school graduation rates and preparing students for well-paying jobs. Many districts have partnered with industry to align their course offerings with labor-market needs.

Modern CTE pathways are a reconceptualization of vocational education. Rather than simply offering easier classes in a new setting, these programs, at their best, tighten the link between education and the workforce. The goal is not simply to place students in jobs with industry partners but to make the most of students' abilities and provide them with important skills. Some students may earn an associate's degree—but even those who don't, and choose not to go immediately to college, are still better prepared for adulthood than the traditional student.

But CTE offerings are still quite limited because of funding priorities, geography, the availability of partners, and often the school's geographic location. Few states have more than 20% of their students participating in any sort of CTE. And few programs offer paid work-study, which provides powerful incentives, especially for students from lower-income families.

Where these programs are absent, contemporary public high schools are often filled instead with nonessential courses and electives, with much of the senior year being wasted.[14]

The Benefits of Work-Study

Work-study programs can partner with private employers to offer opportunities for students to gain on-the-job training, practical knowledge, and soft skills in fields ranging from law, architecture, accounting, and medical positions to manufacturing and skilled trades like plumbing, electrical, and construction management. No other type of program offers students the same combination of work experience, a safe environment, and the opportunity to earn an income.

The annual cost of CTE averages $1,000 per student above other per-pupil expenses, but school districts and municipalities do not necessarily have to increase spending to introduce paid work-study programming.[15] School districts that get more students—particularly low-income students—to stay in school or return to school will also receive more state and federal aid.[16] In a 2011 systematic review of the literature on dropout-prevention programs, the authors found that no single prevention or intervention strategy was substantially better than any others, indicating that work-study can supplement existing dropout-prevention programs or primary prevention programs.[17] The authors warn, however, that a sustained focus on implementation quality is critical to obtain positive results.[18]

In the Los Angeles area, two programs that operate through public charter schools, Options for Youth and Opportunities for Learning, specialize in recovering and graduating high school dropouts through independent study. One study of these programs found that for every dollar invested, the societal benefits—increased tax collections, coupled with lower costs of welfare, health care, and crime—outweighed costs by a ratio of 2.7–3.4.[19]

Some students who began at the charter schools completed their high school educations at traditional public schools.[20] This highlights the way in which charter schools and alternative school models can benefit the traditional public school system when it comes to implementing work-study. Expanded CTE and paid work-study programs could be offered in newly approved charter schools, which would reduce implementation stresses on the traditional public school system—but some students who are prevented from dropping out through these programs will return to traditional public schools.

In short, cities and school districts across the country will likely find that the benefits of well-implemented high school work-study programs will far outweigh their costs.

Existing Models of High School Work-Study

Work-study programs have already proved to be implementable across diverse school types and geographies. Three models in particular can provide lessons about how these programs could be expanded: P-TECH, CTE Innovation Zones, and Cristo Rey High Schools.

P-TECH

P-TECH is an innovative public school CTE program that blends high school, community college, and workplace skills into a single curriculum for students in grades 9–14.

The model integrates high school and college coursework. This enables students to begin college courses as soon as they demonstrate readiness, regardless of their nominal grade level. Though the program formally ends upon completion of the associate degree, that is just one of several postsecondary options made available through the program.[21] Administrators are not incentivized to keep students in the program until they obtain the associate degree; instead, students are given space to learn valuable skills and pursue career opportunities with a high school diploma.[22]

The hallmark of the P-TECH model is its career focus and the provision of work-based education. The curriculum was designed with the input from corporate partners like IBM, who codeveloped the program. Students also have an opportunity to develop skills and competencies that are needed in the marketplace and thus have a better chance of translating directly to an occupation. Mentorships and workplace opportunities further supplement the curriculum to provide positive role models and career advice.

The first P-TECH school was implemented in Brooklyn in 2011, in a collaborative effort between IBM, the New York City Department of Education, and the City University of New York. The school allowed students to obtain a high school diploma and a no-cost associate degree in six years. Graduates are also given priority entry-level job placements at IBM.

The nonprofit education research organization MDRC released its evaluation of New York City's P-TECH program in October 2023. This research found the following facts about students participating in P-TECH:[23]

- 38% were more likely than the comparison group to have had an internship during four years of high school;
- 46% had dual-enrolled in at least one college-level course, which was 26 percentage points higher than the comparison group;
- 5% were more likely to have completed an associate degree seven years after entering high school, an effect more pronounced for male students.

Although cost per pupil for students in P-TECH was 17% higher than for other high schools in the community, the study concluded that "P-TECH 9–14 schools can generally be operated with resources that are not significantly different than other high schools in the community."[24]

Today, more than 240 P-TECH high schools are in operation, working with nearly 200 community colleges and more than 600 industry partners. By seamlessly integrating high school, college, and career training in a single program, the P-TECH model enables students to remain gainfully occupied in school and work during years when they might otherwise drop out of the educational system. It also serves as an effective vehicle for forging links between high schools, community colleges, and specific employers.

On January 17, 2024, Bloomberg Philanthropies announced that it would award $250 million to 10 select cities to fund P-TECH-type partnerships between school districts, colleges, and universities.[25] The gift will be used to build new health-career pathways via a combination of high school and college classes and work-based learning. Boston Public Schools was awarded $37.8 million in grants to fund such a program.[26] This promises to boost local economic competitiveness and provide students access to good-paying careers.[27]

CTE Innovation Zones

A report from the Progressive Policy Institute's (PPI) Reinventing America's Schools project's recently spotlighted another innovative educational model that developed in southern Texas. The Rural Schools Innovation Zone (RSIZ) began as a regional partnership between three rural independent school districts (ISDs): Freer, Premont, and Brooks County. Each district has only a single high school and therefore lacked the scale to offer students a variety of career pathways to local, good-paying jobs.[28]

To address that limitation, the three districts partnered to offer CTE programs and facilities to high school students across district lines. Any student from any of the participating districts can enroll in any of the CTE academies at no charge. The model has proved so successful—and, importantly, sustainable—that two additional districts, Agua Dulce ISD and Benavides ISD, have since joined the original three.

The goal of RSIZ is to provide every student with opportunities to obtain a well-compensated and meaningful career. Additionally, local industry partners have the opportunity to procure human capital tailored to the needs of their businesses. As a result, the neighborhoods in which RSIZ operates have a better chance of retaining this human capital, rather than losing it to larger, denser, opportunity-rich areas.[29]

Operationally, performance contracts are negotiated with each of the five school districts, but RSIZ is governed as an independent nonprofit organization with its own board.[30] This allows each district to focus on meeting state academic standards, while RSIZ prioritizes industry partnerships and student outcomes across the three districts.

Because there are five CTE academies within RSIZ, students have more program choices, which allows more students to earn college credit and even an associate degree while still in high school, and thus to graduate ready for college or a career.

In keeping with their pragmatic focus on career readiness, the academies also provide industry-based certifications (IBCs) and Level 1 and 2 certificates.[31]

As noted in the PPI report, RSIZ contracted with CareerCraft, a for-profit software company that helps schools provide college and career readiness and work-based learning programs, in order to survey students about their interests and prospective career goals as well as local employers on their current and projected workforce needs. As a result, the RSIZ CTE academies offer programming that is aligned with student interests and labor-market demand.[32]

RSIZ also provides transportation on Wi-Fi enabled buses, so that students can do homework or participate in online learning while en route to and from their home campuses.

In class, students learn practical skills and earn industry certificates in areas such as welding, electrical, elementary education, biomedical science, engineering, and a variety of medical skills.[33] Based on CareerCraft's assessment, RSIZ decided to replace a Certified Nursing Assistant program—which was near-dormant and, in any case, was not a pathway to high-wage jobs—that had been offered at one of the three district schools. Instead, the academy now offers four new medical certificate pathways: EKG technician, phlebotomy technician, medical assistant, and patient care technician.[34] Students enrolled in the academy specialize in each of the four pathways one at a time, improving the odds that they will complete at least one certification before they graduate, even if their families move away from the area before they finish all four high school years at the academy.[35] This is important because many RSIZ students are from low-income families, which are more likely to be forced to move because of unforeseen circumstances.

RSIZ also consolidated two districts' welding programs, transforming one into an advanced course that offers dual credits, with an eye to addressing the local economy's shortage of welders in the oil fields and on oil rigs.[36] The American Welding Society, an organization supporting the welding industry and its workers, predicted that the country's workforce would need 400,000 additional welders by 2024.[37]

RSIZ also made it possible for students to participate in a Junior Reserve Officer Training Corps (JROTC) program—something that each of the districts on its own was too small to offer individually. But the demand had always been there, given the area's strong military culture and the large number of veterans in the districts. As a combined entity, RSIZ was large enough to meet the federal government's requirements for a JROTC program, and it supported the community's requests for a JROTC program at one of the three district high schools.[38] As a result, RSIZ cadets can now earn college scholarships that had long been closed to them.

The partnership required the three original school districts to obtain board approval before joining the partnership, which required extensive negotiation. State per-pupil funding had to be allocated fairly among the academies, based on the time the students spent in them. Bell schedules and even football practice times likewise had to be coordinated so that students could still participate despite the time spent learning a trade away from their home campuses.

The team from PPI's Reinventing America's Schools project spent considerable time at all the RSIZ academies while researching its report. PPI's Tressa Pankovits observed that students, teachers, and district officials enthusiastically displayed high satisfaction with the program. In spring 2023, the Texas legislature passed a "Rural Pathway Excellence Partnership" bill to encourage the model's replication. The R-PEP legislation, as it is known, created allotment and outcomes bonuses under Texas's Foundation School Program. The Texas Education Agency recently published its qualifying rules. Districts across the state have already applied for the state funding support to create their own CTE partnerships.

Cristo Rey High Schools

The Cristo Rey Jesuit High School model, founded in 1966 on the near Lower West Side of Chicago, has proved to be an effective example of the universal work-study programs in a population of poor, minority children. There are now 37 schools nationwide operating on the Cristo Rey model, serving the growing population of overage dropouts and students who have been expelled or released from incarceration.

Cristo Rey schools are unabashedly Roman Catholic. They teach Catholic values and religious beliefs. But it is their secular activity that is unusual and significant. Cristo Rey schools focus on serving students from low-income families in urban areas who could not otherwise afford a private school education. By combining a high-quality work-study program with rigorous academics, sports, and normal high school extracurricular activities, Cristo Rey students get an exceptionally well-rounded secondary education.

The work-study program is an integral part of the life and rhythm of each Cristo Rey school. Every student participates. The school arranges each student's work-study assignments with a wide variety of private-sector corporate and professional partners to ensure a good fit for both the student and the employer.

Each week, students spend four days in school and one day in a work-study position suited to their interests. Four students share each full-time position.[39] According to Cristo Rey's president, Elizabeth Goettl, students "are employed in fields of accounting, communications, engineering, human resources, legal, medical, and tax services and perform a wide range of responsibilities on the job, such as data entry, Spanish–English translation services, IT support, and computer-based tasks."[40] Some students stay with the same employer for all four years of high school, while others switch employers, depending on student interests and business needs.

It's a win-win for both the school and the student because students' compensation is paid directly to the school, which offsets the cost of students' tuition. Students' "salaries" account for about half of each Cristo Rey school's revenue; the balance comes from private donations. On average, families contribute only about $100 per month toward their child's education. Before the pandemic, Cristo Rey students earned $80 million toward the cost of their education, thanks to the partnership with 3,500 corporate partners.[41]

Cristo Rey student outcomes far exceed those of their demographic peers. About a third of students are enrolled in a four-year college program, and the completion rate for bachelor degrees is roughly three times higher than demographic peers. Longer in-school hours compensate for the fifth day of work, so students obtain the academic skills needed for college readiness. But Cristo Rey students who opt not to pursue a bachelor's degree are nonetheless able to gain skills, earn compensation, and obtain long-term opportunities in the private sector.[42]

Implementing Work-Study Across the United States

As these three case studies demonstrate, high school work-study programs can be integrated into rural, suburban, and urban school districts alike. To start, elected officials and school administrators should select high schools with higher than average dropout rates for work-study

participation. These officials can then begin designing a work-study curriculum that involves all the students in those high schools and provides the same level of academic instruction to satisfy state educational mandates.

At the same time, government officials should reach out to industry and private-sector union leaders to establish paid work-study partnerships. Success and long-term sustainability depend on the ability of other government agencies, government contractors, participating businesses, and private trade unions to effectively design and manage their respective internships and to enroll students in existing programs, if available.

As work-study advances over time, large-city mayors can take the lead in providing professional opportunities by directing some city agencies, such as those that provide local economic development assistance,[43] to offer work-study and apprentice-type programs. The mayor of Chicago, for example, controls agencies that spend $28 billion annually, including through public contracts. This gives the city the capacity to offer potentially thousands of diverse work-study opportunities. The city can also incentivize city contractors and other private employers to develop and offer work-study opportunities.

Participating employers, regardless of size, would be expected to provide, at minimum: (1) familiarity with the respective occupations; (2) occupational training and counseling; and (3) a paid work-study internship. The most important goal of any program is to offer more students a direct pathway to real employment, but such programs should also aim to introduce an increasing number of students to the real work world while keeping them safe, surround them with role models and mentors, and provide many of them with their first paid jobs. This will incentivize them to remain in school and prepare them for the real world. Administrators should match work-study partnerships with students' interests and career aspirations, in order to keep them engaged in their paid positions. Work-study would become a permanent part of the school schedule and staffing model, allowing the program to scale in the future.

While school districts should screen students, coordinate transportation, and subsidize the costs of work-study programs, they can do so while remaining budget-neutral by distributing existing resources. Charitable grants, as well as those provided by the federal government, may also overcome any short-term funding needs to ensure budget neutrality. Some of the partnerships that follow the P-TECH model (which includes college-aged students), for example, may be eligible for available federal work-study funding.[44] Others might secure private grants from participating industries or those offered by groups like Bloomberg Philanthropies.

For the most part, however, the long-term sustainability of these programs will require careful reprogramming of existing school-district education resources over time. Work-study partners should be treated like education contractors and budgeted for accordingly. For example, reprioritizing 3% of the Chicago Public Schools' annual operating budget of $8.5 billion[45] could create thousands of sustainable work-study jobs.

Given the relatively modest funding needs for these programs and the opportunity to repurpose existing funding for electives, work-study pilots can be implemented within a year (as with RSIZ). Partnership with private industry means that the government need not pay student salaries, further reducing the program's demands on public budgets.

Success of these programs will also depend on the willingness of leaders of teachers' unions to agree to allow work-study offerings to be operated, supervised, and managed by people other than unionized teachers. Other issues will likely be the need to reduce nonessential courses and potentially eliminate some teaching positions. This can be accomplished over time, through attrition.

Conclusion

Changing the trajectory of many youths' futures would save lives, public resources, and currently lost opportunities for the American economy. Paid high school work-study can yield long-term savings by reducing government dependency, while also providing substantial economic benefits to the community. Work-study will make high school relevant, reclaim those who have left, prepare them for the workforce, provide most with their first wages, and keep them safe. It is a life changer and a critical life preserver for this country's most vulnerable teenagers and young adults. And it is time that policymakers introduced this innovative approach as part of a forward-looking vision to ensure that every student can realize his or her talent in a meaningful, rewarding career.

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