

# CITY JOURNAL

FROM THE MAGAZINE

## How the Other Half Learns

Vocational education is the better option for a substantial portion of students who will never earn bachelor's degrees. It's time to rethink our priorities.

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Congressman Joe Kennedy wanted a dramatic backdrop. The Democratic Party had asked him to deliver its response to Donald Trump's first State of the Union address—an honor that for many past recipients proved an invitation to commit political seppuku. Speaking from an empty soundstage into America's living rooms is never easy; doing so immediately following the pomp and circumstance of a presidential address to a joint session of Congress is a recipe for disaster. So Kennedy decided to speak *from* somewhere. His choice: the auto shop at Diman Regional Vocational Technical High School, in Fall River, Massachusetts. The students in attendance would be those pursuing a course of technical training instead of a standard academic curriculum. Kennedy began his speech lauding how the students carried on the "rich legacy" of Fall River, "a proud American city, built by immigrants . . . that knows how to make great things."

And that was all that Kennedy had to say about that. Transgender bullying and gay marriage, #MeToo and Black Lives Matter—all got call-outs. The "Dreamers" got two. But vocational education—or, in its now-fashionable formulation, career and technical education (CTE)—got none. Nowhere among Kennedy's talking points was any reference to the plight of students who won't complete higher education, or to the need to expand and strengthen schools like the one in which he was standing. Kennedy mentioned only "good education you can afford," presumably a reference to subsidized college tuition. The auto shop provided a backdrop only; it wasn't on the policy agenda.

Kennedy's congressional colleagues apparently feel the same way. CTE and "career pathways" and "apprenticeships" enjoy bipartisan support, at least verbally; yet over the past 25 years, the primary federal funding stream for such initiatives has declined in value by 30 percent, to just over \$1 billion per year. Federal funding for college, meantime, has risen by 133 percent. Throw in state-level funding for higher ed, and the total passes \$150 billion annually. Massachusetts, which Kennedy represents, takes the in-word-but-not-deed enthusiasm for CTE to an extreme: it has built a high-quality system of technical schools (which actually outperforms the state's public schools on standardized tests), but the system promotes itself as essential to increasing the state's college-enrollment rate.

The virtues of a reliable pathway from high school to a stable job and a middle-class life remain appealing in theory, but always, it seems, for someone else's constituents and, ultimately, someone else's kids. What we're left with is a public education system that stands among the nation's most regressive institutions.

**T**hose other people's kids, it turns out, are most people's kids. For every 100 American students who begin the ninth grade, 18 will fail to graduate high school on time, 25 will earn a diploma but not enroll in college, and 29 will enroll in college but fail to complete a degree. Even among the 28 percent who graduate from college in a timely fashion, 12 will end up in jobs that don't require college degrees anyway. Only 16 out of the 100—call them the Fortunate Fifth (and it's more like a sixth)—will move smoothly through the high-school-to-college-to-career pipeline that we pretend should be everyone's goal.

And the picture is not improving. Despite a more than doubling of per-pupil spending in real terms since the 1970s, standardized test scores on the National Assessment of Educational Progress (NAEP) have remained flat. SAT scores have declined. In 2013, the national board responsible for the NAEP mapped test scores to a threshold for college preparedness. Fewer than two in five high school seniors cleared the bar in either reading or math. The reading scores allowed for historical comparison and showed a decline over two decades, both overall and within racial groups. At no point from 1992 to 2013 did even 20 percent of African-Americans or 25 percent of Hispanics achieve reading scores that would indicate college readiness.

Where progress appears to be happening, it is more often a consequence of lowered standards—and sometimes, outright fraud—than genuine improvement in outcomes. High school graduation rates have gotten better, at least marginally—from 79 percent in 1970 to 83 percent in 2014—but such results are hard to credit, absent improved test

scores. Pursuing higher graduation rates, many states have eliminated requirements, created “alternative” diplomas, or manipulated their data. California has shown the most impressive gains on paper, for example, but in 2018, a U.S. Department of Education audit of the Los Angeles Unified School District found that more than 10 percent of graduates were incorrectly classified and that the state “did not provide reasonable assurance that reported graduate rates were accurate and complete.” The year before, one public school in the nation’s capital was caught red-handed awarding diplomas to an entire class of students (and celebrating their subsequent admissions to college), even though most of the kids had missed months of school and almost none had passed the citywide exams.

## Vocational alternatives would prepare students for productive participation in the workforce.

A parallel trend is emerging at the college level, where massive investment in remediation for underprepared students has failed to stanch the flood of dropouts. The federal government’s most thorough analysis followed a cohort of students enrolling at both two- and four-year colleges in 2003, and found that six years later, in 2009, only about half had earned any credential. Less than 60 percent of four-year enrollees had finished a bachelor’s degree; only 26 percent of two-year enrollees had completed an associate’s degree or higher. In the years since, results have barely budged—completion rates are up less than 3 percentage points at two-year schools and less than 2 percentage points at four-year schools.

Yet enrollment in remedial courses is down. The data showing that students diverted into remediation achieve especially poor outcomes seem to confirm that those students are ill-suited for a college curriculum—but some experts have instead drawn the conclusion that requiring students to take remedial courses is the problem. The California State University system once tagged 80 percent of incoming students for remediation, but in 2017, it announced plans to eliminate its remedial courses. James T. Minor, a “senior strategist for academic success in the chancellor’s office,” justified the move by lamenting that relegation to remedial classes “sunk a lot of ships.” Such relegation, you see, “invites students to question whether or not they belong in college.”

Time will tell whether the shift away from remediation indeed boosts the fortunes of students who seem to need the help, leads to a watering down of standards to accommodate the less prepared students, or abandons those students to even higher dropout rates. The first of those possibilities does not seem the most likely.

Taken together, these trends culminate in a stunningly poor outcome, highlighted by Harvard professor David Deming in 2017: “Although college attendance rates have risen steadily in the United States for the past two decades, bachelor’s degree attainment has not improved at all.” In fact, the share of 25-year-olds with a bachelor’s in 2015 was lower than in 1995, and roughly unchanged from 1975. Including in this measure young people who postpone college, or drop out and then return, improves the numbers slightly, but the reality remains sobering: most 25- to 29-year-olds in America don’t even hold a community-college degree.

**S**till, what’s the harm in trying? Surely, all students should have the option of pursuing their education to the fullest, even if many fall short of some ideal outcome. But for that choice to be genuine—for the system to be one that helps each student transition successfully from school to work to self-sufficiency—other choices must exist, too. Today, they don’t.

Broadly speaking, alternatives would be vocational in nature. They would prepare students for productive participation in the workforce by focusing less on academics and more on concrete skills and real-world experience. Such models are prevalent almost everywhere in the developed world, but not in the United States. In its landmark 2010 report, “Learning for Jobs,” the Organisation for Economic Co-operation and Development (OECD) displays a chart showing that 40 percent to 70 percent of high school students in most European countries pursue a vocational course of study in high school. A footnote explains that the United States was excluded from the chart because of the “rather different approach to vocational education and training in U.S. high schools.”

Some proponents of vocational education note that American high schools offer a cornucopia of vocational or CTE opportunities. “Nearly all public high school students (95 percent of ninth-grade students in 2009) attended a school that offered CTE instruction,” trumpets the U.S. Department of Education in its National Assessment of CTE. “In 2009, 85 percent of public high school graduates had completed one or more occupational CTE courses, 76 percent had earned at least one full credit in occupational

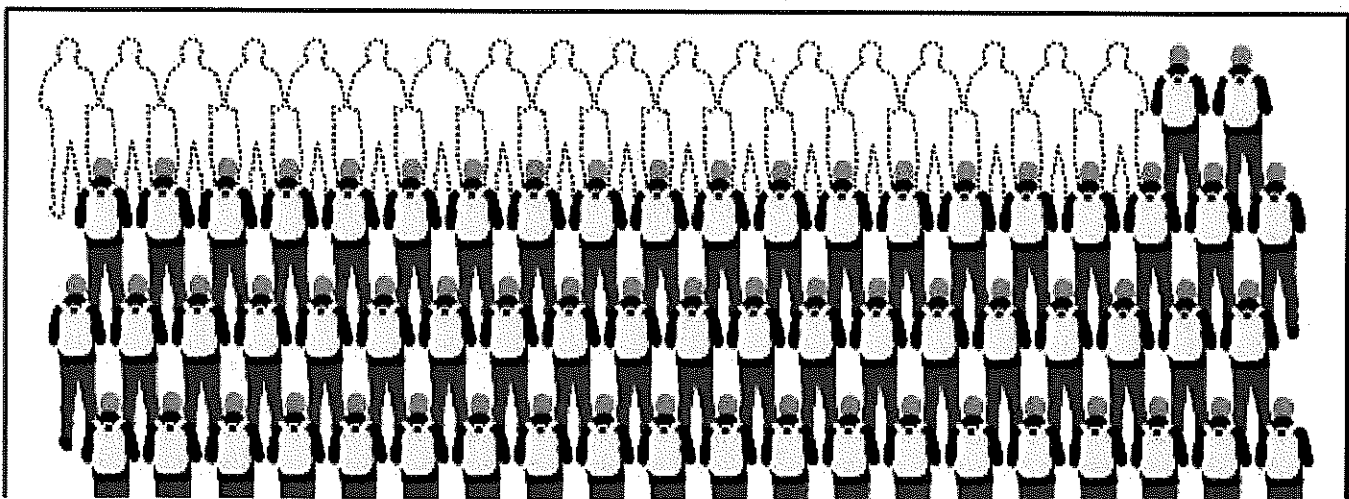
CTE, and 19 percent were CTE concentrators who had earned at least three credits in the same CTE field.”

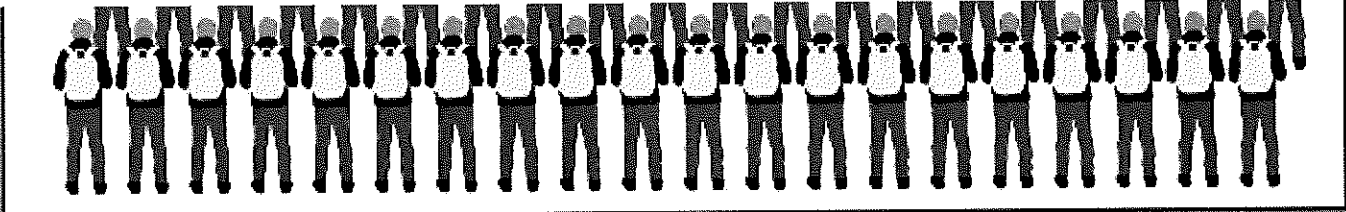
The problem: CTE *courses* don’t guarantee that a credible non-college pathway exists. A CTE “concentrator,” for instance, is any student earning three credits in a CTE field—hardly the basis for a genuine vocation. Most CTE concentrators enroll in postsecondary education after finishing high school, and only 10 percent pursue the same field in which their CTE credits were concentrated; in total, that pathway accommodates fewer than 2 percent of students. At most, 6 percent of high school graduates go from CTE concentration to the workforce, and they earn little more than similarly situated non-concentrators; whatever preparation they gain appears to have minimal value in the labor market.

Following the money leads to the same conclusion. From 1985 to 2014, federal funding for both K–12 and postsecondary education more than doubled in real terms. Support for CTE declined. States spend \$70 billion annually on their university systems and offer another \$10 billion in grants to cover remaining tuition obligations that otherwise fall to students. The federal government chips in \$28 billion in Pell grants, plus \$26 billion in tax breaks and \$19 billion in loan subsidies. None of those funds or programs is available to students if they choose a vocational track. Congress’s 2017 appropriation for CTE was \$1.2 billion. A lower share of students earned CTE credits or became CTE concentrators in 2009 than in 1990.

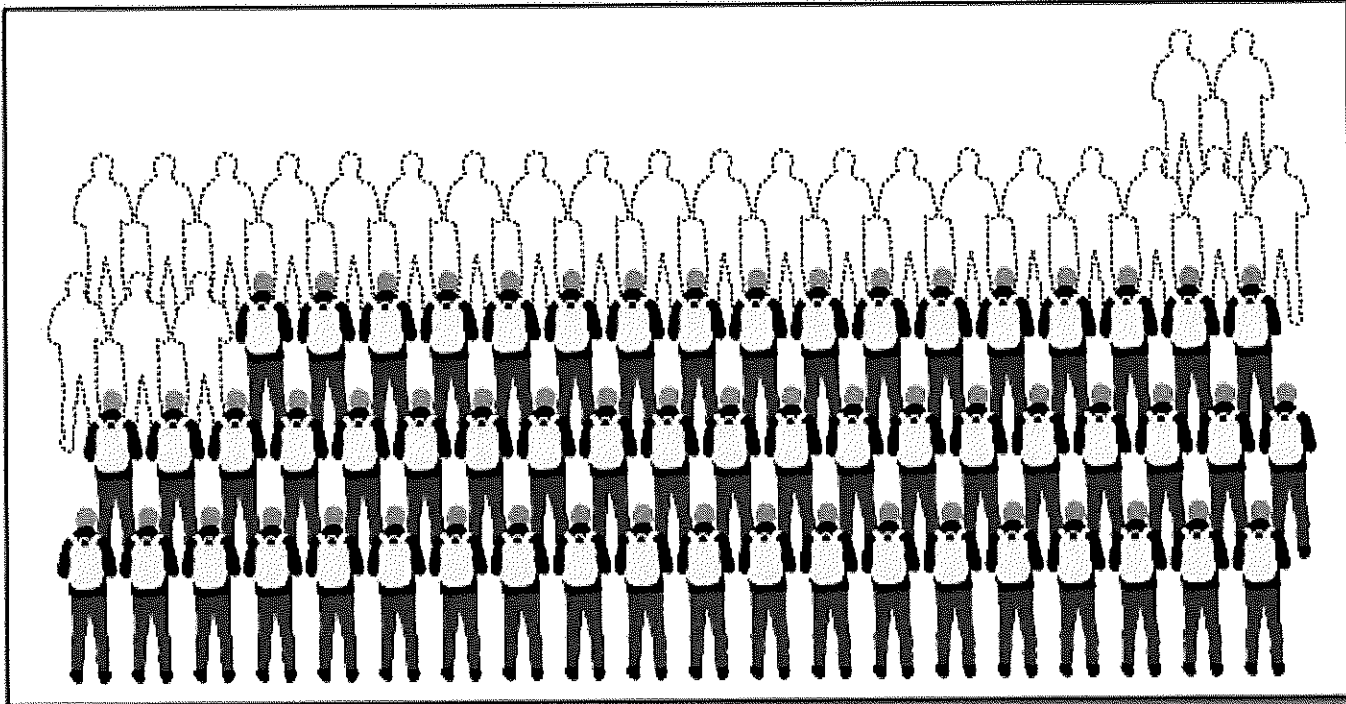
## Of 100 Students Who Enter the Ninth Grade. . .

**18** fail to graduate from high school on time





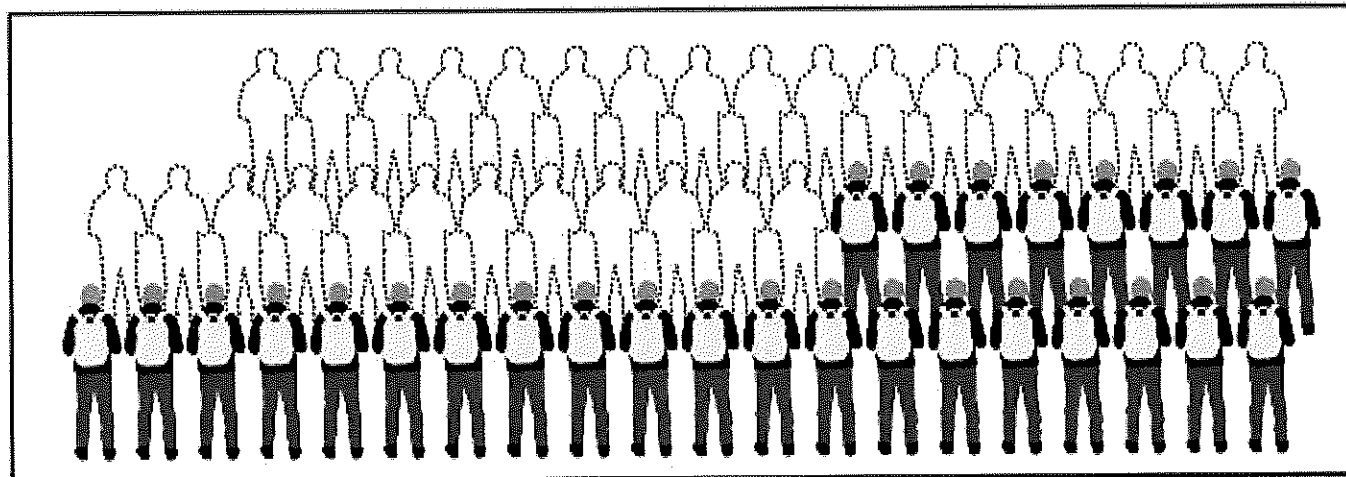
*of the remaining 82...  
**25** don't enroll in college after graduation*



*of the remaining 57... **29** don't graduate college*

**15** enroll in **2-year colleges** but don't graduate

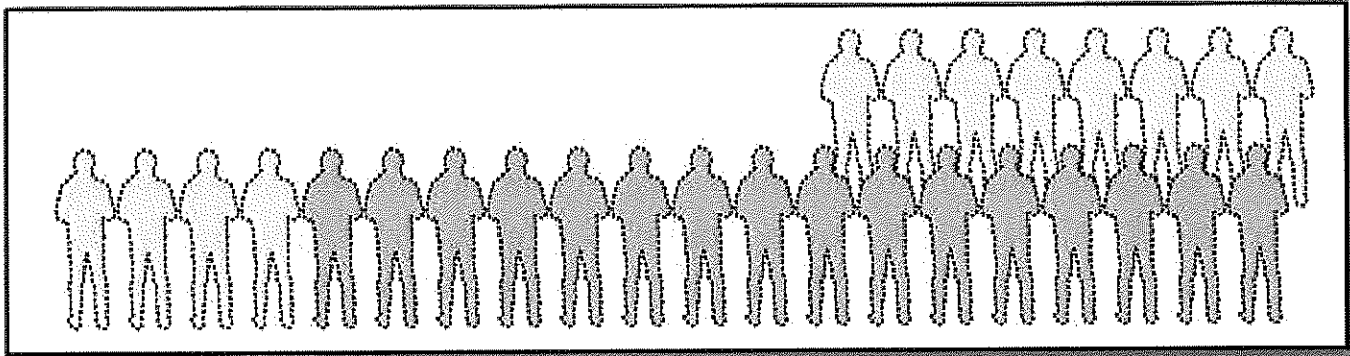
**14** enroll in **4-year colleges** but don't graduate



of the **28** college graduates. . .

**12** fail to get a job requiring a college degree

**16** get a job requiring a college degree



SOURCE: U.S. Department of Education & Federal Reserve Bank of New York

Against this backdrop, college is less choice than ultimatum. Orienting the American educational system toward college ensures that the majority who would achieve greater success on an alternative pathway are poorly served—indeed, they’re obstructed from reaching it. The approach also entails an enormous waste of public resources and student time, unleashing a vicious cycle in which, since everyone is encouraged to try college, all resources are focused on college-going—and so, of course, everyone tries college. Enrolling in a program that you’re unprepared for and unlikely to complete actually makes sense if society will throw gobs of money at you for doing it, and if the alternative is, well, nothing. This is doubly true if your high school emphasized only college preparation, so you’ve already sunk years of time into pursuing this path.

Even without an alternative pathway that supports the non-college-bound, the economic data belie the notion that pursuing college is always, or even usually, worthwhile. Most people compare the earnings of the median high school and college graduates, find an enormous difference, and attribute to college the power to produce such a boost. But those two salaries are best understood not as two possible outcomes for one person but as outcomes for two very different people, with different academic trajectories and earning potentials. If placed among the population of high school graduates, the median college earner would presumably be far above average in academic performance and earning potential. Conversely, among college graduates, the median high school earner would likely land near the distribution’s bottom.

Compare, instead, the earnings distributions for high school–only graduates with above-median earnings for their group and college graduates below their cohort’s median earnings. Presumably, the marginal student who may or may not belong in college is an above-average performer among the high school–only cohort and a below-average one among the college grads. So those ranges roughly approximate the earnings distributions that he is headed toward, depending on how far his education progresses. According to the U.S. Bureau of Labor Statistics, the median full-time salary for high school graduates in May 2016 was \$34,000 per year; for college graduates, it was \$58,000. But for the below-average college graduates—those in the 10th to 50th percentile—the wage range was \$28,000 to \$58,000. For the above-average high school graduates—the 50th to 90th percentile—it was \$34,000 to \$70,000. And that’s without a strong pathway to prepare those graduates for the workforce.

## **Economic data belie the notion that pursuing college is always, or even usually, worthwhile.**

Those well-paying jobs for high school graduates include the quintessential plumber and welder—average earnings among more than 1 million plumbers and electricians and 1 million industrial-machinery mechanics and production supervisors exceed \$50,000—but they go far beyond those fields, spanning the economy. In the health-care sector, half a million clinical laboratory and radiologic technicians have comparable prospects. Among hundreds of thousands of first-line supervisors for housekeeping and landscaping workers, average earnings are between \$40,000 and \$50,000. The same goes for 700,000 practical and vocational nurses.

Even in the technology sector, as the Brookings Institution has shown, fields assumed to require bachelor’s degrees often do not. Less educated workers occupy two-fifths of nearly 1 million jobs in what researchers call “mid-tech”: computer systems analysts, computer network-support specialists, and computer network architects. Less educated workers may earn relatively lower pay within those fields, but annual earnings even at the 10th percentile of the respective wage distributions are \$54,000, \$37,000, and \$58,000.



**W**hat makes the education system's misallocation of resources not only wrongheaded but also galling is its fundamental regressivity. Funds flow freely to those on a path toward high lifetime earnings but remain inaccessible to those more likely to struggle. Firms hiring college graduates can tap a labor pool that has gone through four extra years of costly preparation at someone else's expense. Firms seeking to hire high school graduates, by contrast, find a potential workforce with little relevant training but get excoriated for offering those graduates low wages and not funding intensive training themselves.

Supposedly, the extensive public subsidies offered for college enrollment promote the social goods of economic opportunity and an educated population. But that's not quite right, because that argument treats as equal all time spent by all people on a college campus. College attendance by students equipped to succeed in college has social value, true, but attendance by those who'll probably fail frequently has social cost. And who better than the individual and his family to know into which camp he falls?

Yes, college is expensive. But as the Manhattan Institute's Max Eden has shown, the return on investment remains high for successful completers. The higher earnings achieved by college graduates easily exceed the burdens of most loan payments, and for the median borrower, the monthly payment is only 3 percent to 4 percent of income, as it has been for decades. For prospective students likely to succeed in college, a choice to attend will make sense without a subsidy, which succeeds primarily in transferring resources to future "winners" in the modern economy. For students unlikely to succeed in college, the subsidy's effect, especially when coupled with the weak support for an alternative, is to distort their incentives and lead far too many to enroll. Students who shouldn't go to college get insulated from the immediate cost of their decision to enroll—thereby making those poor decisions, which produce considerable social costs, more likely. These aren't good uses of funds.

**T**he education system's designers and funders should instead pursue a different goal: to balance the relative attractiveness of college and non-college pathways so that students who'll probably succeed in college choose to attend, while those unlikely to succeed pursue more promising alternatives. Vocational programs will be for everyone's kids, not just someone else's, once these programs become a smart economic choice.

The typical student from a low- to middle-income household, attempting to pursue college, can expect that society will spend roughly \$15,000 on his education for each

year of high school. If he then goes to a four-year public university, his state might fund \$6,000 per year of education costs, and a Pell grant might cover another \$5,000. If the student graduates on time, in other words, he will do so thanks to more than \$100,000 of taxpayer investment.

What if the student would prefer—and benefit more from—pursuing a vocation? Today, if he's lucky, he might get a standard ninth- and tenth-grade education, as much as \$10,000 of extra investment across 11th and 12th grade—and then nothing. In other words, the college-bound student receives 50 percent more public investment, along with higher long-term earnings.

A real vocational option would merge high-quality CTE in 11th and 12th grades with the start of subsidized employment and further training, offered in partnership between the state and an employer. For the same amount that taxpayers are prepared to spend on his behalf in pursuit of a bachelor's degree, the student could attend two years of traditional high school, spend a third year in a more technical classroom, and then work three years in a job for which the employer would receive an annual public subsidy of \$5,000. For the first two of those working years, the student might spend half his time on the job and the other half in more focused training, which would also get public support. All this would still cost less than the college track, so he could reach age 20 with job experience, an industry-recognized credential, and an additional \$25,000 from the government in a savings account, perhaps for further training in the years ahead—in addition to what his employer might pay him.

## **A student pursuing a vocation deserves at least the same level of public support as one pursuing college.**

This vocational pathway might not be more attractive than a bachelor's degree—for those who'll earn a bachelor's, that is. For most of the students who won't earn such a degree, though, this would be a far superior option.

**R**ebalancing opportunity in the real world means moving vast sums from the college track to the vocational alternative. Education funding should begin with the principle

that a student pursuing a vocation deserves at least the same level of public support as one pursuing college.

The Trump administration has proposed a crucial first step in this direction: letting students use federal Pell grants not only for traditional postsecondary degrees but also for short-term technical training. But federal support for vocational training should not target only postsecondary programs; in many cases, the critical years requiring increased investment come earlier, in the 11th and 12th grades in a traditional high school. The impermeable barrier between “secondary” and “postsecondary” is itself an artifact of the traditional college pathway and poses an obstacle to building a strong alternative.

Student-specific tuition grants aren’t necessarily the most appropriate form of support in this context. In many instances, local districts or cooperating regions building toward large-scale programs will need years of steady funding on behalf of hundreds or thousands of students. Where employers play an active role, funding might go toward subsidized employment rather than anything resembling traditional tuition.

Both state- and federal-level funding should be redirected toward those goals. For states, the shift would be away from subsidies for community colleges and public university systems, leaving even in-state students to pay close to the full cost of their higher education. A state’s CTE infrastructure, receiving the new funding, could then begin to resemble in quality what its expansive postsecondary campuses already offer. At the federal level, tax breaks and grants that reduce tuition costs should be eliminated, so that resources can be likewise reallocated toward expanding the non-college road.

Some intervention in the student-loan market remains justifiable—because that market operates far from perfectly on its own and because with less tuition support, more students will need more such loans. Subsidizing that financing cost does put a thumb on the scale in favor of taking the risk of college, but when done in the context of loans that students must repay—and when structured, ideally, so that tuition-collecting institutions have skin in the game, too—the effect of such reforms is less distortionary. Expecting students to finance their college educations, while helping to make available such financing, strikes a reasonable balance.

All these reforms should occur slowly. A hundred billion dollars of spending should not be shifted overnight. But moving two-thirds of current postsecondary spending toward a non-college pathway over a decade would give those who will lose funding time to

adapt, and those gaining it time to prepare for deploying it effectively. If, ten years hence, even 20 percent of students could choose an attractive non-college path, then the education system's Fortunate Fifth would become a Fortunate Two-Fifths—greater progress than the past 40 years of college-for-all has achieved.

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