Imagine if the United States government taxed the nation’s one-percenters so that their post-tax share of the nation’s income remained at 10 percent, roughly where it was in 1979. If the excess money were distributed equally among the rest of the population, in 2012 every family below that very top tier would have gotten a $7,105 check.

This is hardly trivial money. But it pales compared to the gap between the wages of a family of two college graduates and a family of high school graduates. Between 1979 and 2012, that gap grew by some $30,000, after inflation.

This clever calculation by Lawrence Katz, a labor economist from Harvard, amounts to a powerful counterargument to anybody who doubts the importance of education in the battle against the nation’s entrenched inequality.

But in the American education system, inequality is winning, gumming up the mobility that broad-based prosperity requires. On Tuesday, the Organization for Economic Cooperation and Development released its annual collection of education statistics from around the industrialized world showing that the United States trails nearly all other industrialized nations when it comes to educational equality.

Barely 30 percent of American adults have achieved a higher level of education than their parents did. Only Austria, Germany and the Czech Republic do worse. In Finland more than 50 percent of adults are more educated than their parents.

And matters are getting worse, not better. Among 25- to 34-year olds, only 20 percent of men and 27 percent of women, both out of school, have achieved a higher level of education than their parents.

It’s even bleaker at the bottom: Only one in 20 Americans aged 25 to 34 whose parents didn’t finish high school has a college degree. The average across 20
rich countries in the O.E.C.D. analysis is almost one in four.

This particularly hurts the poor. Two economists, Martha J. Bailey and Susan M. Dynarski from the University of Michigan, document a growing income gap between the graduation rate of teenagers from the mid-1970s and those from the mid-1990s. The graduation rate of youths in the poorest fourth of the distribution increased to 9 percent from 5 percent; among the richest fourth it rose to 54 percent from 36 percent.

In a study comparing teenagers in the early 1980s and the early 2000s, Philippe Belley from Kansas State University and Lance Lochner from the University of Western Ontario noted a sharp increase in the impact of family income on college attendance. For all but the most able students, by the early 2000s the college attendance rate for children from the richest fourth of American families was 15 to 30 percentage points higher than that of the poorest fourth.

This pattern of stagnant mobility and rising inequality of education adds up to a dumbfounding paradox. American workers with a college degree are paid 74 percent more than those with only a high school degree, on average, nearly the biggest premium in the O.E.C.D.

Given the payoff, the fact that many of those who would benefit most are not investing in a college education suggests an epic failure. And the growing cadre of countries that outperform the United States suggests failure is hardly inevitable.

The greatest paradox is that the United States knows how to provide broad-based education to all. More than a century ago a consensus emerged that Americans needed at least a high school education to meet the growing demand for skilled workers. And the nation provided.

Between 1900 and 1950, the high school enrollment of Americans aged 14 to 17 increased to 75 percent, from about 11 percent.

To European nations happy educating their elites, that was not only unheard-of, it was downright stupid. By the mid-1950s, the full-time enrollment rate of American 15- to 19-year-olds in secondary school was more than double that of any European country.

The momentum carried into college. In 1944, when Britain’s government was signing the Education Act, guaranteeing British children a public education up to secondary school, most Americans already had that. In 1944 President Roosevelt was signing the G.I. Bill, which paid the tuition for any veterans attending college.

“Historically, education in the United State was the great equalizer,” conceded Andreas Schleicher, an education expert at the O.E.C.D. who heads its Program for
Something slipped over the last generation, however. In the 1970s, graduation rates from four-year colleges slowed sharply and even went into reverse for men.

And the world caught up. For those Americans between 55 to 64, 42 percent have a college degree, a rate surpassed only by Canada and Israel in the O.E.C.D. But among people aged 25 to 34, the United States is in 11th place, with a college graduation rate only slightly greater, at 44 percent.

“We were the first out of the gate with high school, with coed education, with early access to college,” noted Professor Katz. “Something went wrong.”

Today, the demand for more highly educated workers remains intense. Globalization and fast-paced technical change have wiped out many of the manufacturing jobs with which a worker with only a high school degree could support a middle-class life.

What explains America’s educational stagnation? One cause is certainly the high cost of college, which — unlike high school costs — families must bear largely on their own and is higher than in any other advanced nation.

“In the U.S., more so than in other countries, you as a family are making a larger and riskier investment in your own future,” said David Deming, a professor at Harvard. “College pays off on average but it has a ton of risk. Lower-income families can’t buffer that shock.”

Another factor is the inability of the educational system — whether because of poverty and segregation or to unfit and underpaid teachers — to prepare underprivileged Americans for college.

Even the big high school push of the 20th century, decentralized as it was, left many out. Blacks and Hispanics lagged the educational attainment of whites. “We had a great system but we left pockets behind,” Mr. Katz said. “These have become more important.”

But there is another critical factor that is more intangible, and that is a loss of faith in what might be called a national project.

In the mid-1960s, government in the United States took about 25 percent of the economy in taxes, roughly the same as in the rest of the O.E.C.D. Today, the share in the rest of the O.E.C.D. has grown by 10 percentage points. In the United States it remains about the same.

As the demand for pensions and health care from an aging population grew, limited budgets did not have the space to engage in a broad effort to fund higher education for all. The ethnic gap between shrinking populations of aging whites
and growing populations of younger minorities with school-age children further weakened education’s political base.

In their book “The Race Between Education and Technology” (Belknap Press, 2010), Mr. Katz and Claudia Goldin of Harvard suggest that in the early 20th-century, states with more elderly residents had higher graduation rates because they had more stable communities in which the old could understand the benefits of educating the young.

These days the elderly no longer live in that once-stable community where they grew up. As James Poterba from the Massachusetts Institute of Technology has noted, places with bigger elderly populations now spend less on public education. This is especially true when the elderly and the youths are of different races.

Growing inequality of income could become the last nail in public education’s coffin. It contributes to the residential segregation that cordons off rich school districts from the poor and reduces support for public education among the wealthy Americans who can opt out.

Mr. Schleicher told me that, while places like Japan, Singapore and Canada have learned how to educate socially disadvantaged children, in the United States social background plays an outsize role in the educational outcomes.

“It’s harder and harder for education systems to counterbalance those tendencies,” Mr. Schleicher told me. “But a lot depends on policy. There is a lot we can do.”

Decimating public education is not to anyone’s advantage, though. If all America manages to do is provide sterling education for the elite, those Robin Hood arrangements of $7,105 per family will start looking like the better deal to everyone else.

**Correction: September 10, 2014**

An earlier version of this column misstated the authors of research on the growing income gap in the graduation rate of teenagers. They are Martha J. Bailey and Susan M. Dynarski from the University of Michigan, not Richard Murnane from Harvard and Greg Duncan from the University of California, Irvine.

**Correction: September 12, 2014**

The Economic Scene column on Thursday, about the correlation between higher levels of education and greater income, misidentified the party in power when
Britain signed its Education Act in 1944. It was a unity government led by Winston Churchill, not a Labour Party government.

A version of this article appears in print on September 11, 2014, on page B1 of the New York edition with the headline: Equation Is Simple: Education = Income.