COUNCIL on FOREIGN RELATIONS



Remedial Education

Federal Education Policy

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Remedial Education



Renewing America Scorecard:
Can the U.S. Education System Regain Its World Lead?

Weak Report Card

The U.S. education system used to lead the world.

Now it is getting poor marks.

SLIPPING IN THE RANKS

U.S. ranking, worldwide, educational attainment:





FAILING EARLY, FAILING LATE

United States versus the developed world:





Difficult Arithmetic

U.S. education spending is adequate, but the resources are not distributed equitably.

ECONOMICS: SATISFACTORY

U.S. ranking, worldwide, per-student education spending:



LONG DIVISION: NEEDS IMPROVEMENT

The real per-student spending gap between the least and most selective colleges keeps increasing.

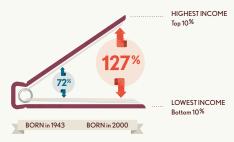


Grading on a Curve

Socioeconomic status has a bigger effect on achievement in the United States than in most of the developed world.

ENRICHMENT RECOMMENDED

The test score achievement gap between low- and high-income students keeps increasing.



ROOM FOR IMPROVEMENT

There is a strong correlation between parental income and student achievement in the United States.



Final Grade

A college education seems both necessary and unattainable to more and more Americans.

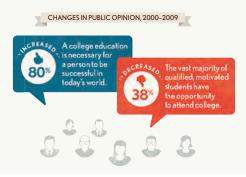
HELD BACK

The lack of a college degree financially hinders more than half of all 30- to 34-year-olds.



PASS / FAIL

More Americans see the value of a college education, but fewer think students can afford one.





Ideas and initiatives for rebuilding American economic strength from the Council on Foreign Relations



INTRODUCTION

The U.S. education system is not as internationally competitive as it used to be. The rest of the developed world is catching up, and some countries are surpassing the United States in high school and college completion, all while spending much less per student. The United States compares especially poorly with its low pre-K enrollment rate and its high college dropout rate. But the real scourge of the U.S. education system—and its greatest competitive weakness—is the deep and growing achievement gap between socioeconomic groups that begins early and lasts through a student's academic career.

Human capital is perhaps the single most important long-term driver of an economy. Smarter workers are more productive and innovative. It is an economist's rule that an increase of one year in a country's average schooling level corresponds to an increase of 3 to 4 percent in long-term economic growth. Most of the value added in the modern global economy is now knowledge based. Education, especially at the college level, will therefore likely become even more important for a nation's economy and an individual's income. And to the extent that labor markets now transcend national borders, the international competition for those high-value knowledge jobs will only grow fiercer.

The federal role in the U.S. education system, from pre-K through college, has historically been to help disadvantaged students. The tight grip of socioeconomic status has been increasingly hindering students' achievement, making the federal government's role more urgent than ever.

The Obama administration has set an ambitious education agenda. Early in his presidency, President Barack Obama pledged that by 2020 the United States "will once again have the highest proportion of college graduates in the world." His 2009 stimulus package tripled the Department of Education's spending in a single year, an increase larger than for any other federal agency. His K-12 education initiatives are refocusing reform efforts on the most disadvantaged and worst-performing schools, as well as in research areas that are most promising for generating broad-based quality improvements. He is continuing President George W. Bush's push for accountability while also trying to develop better ways to measure and evaluate education quality. In an era of intense partisanship, Republicans and Democrats have been in remarkable agreement on the substance of education policy.

The United States is in an era of austerity. Federal education funding will remain flat at best or, more likely, be cut along with other discretionary funding. States and local governments have been slashing education spending in the face of severe budget shortfalls. The challenge will be to expand higher-quality education for all Americans, rich and poor, in a time of tight budgets.

THE STATE OF U.S. EDUCATION

The United States is losing its international lead in educational attainment. Among people aged fifty-five to sixty-four in Organization for Economic Cooperation and Development (OECD) countries, Americans rank first in high school completion and third in postsecondary completion.³ Among people aged twenty-five to thirty-four, Americans rank tenth in high school completion and thirteenth in postsecondary completion. Other countries are lifting their high school and college attainment, while the United States is not.

Younger Americans are not making significant gains on their elders. Unique among developed nations, the generation entering the U.S. labor force is not more educated than the one exiting. ⁴ In one respect, the entering generation may be less educated. The current high school completion rate masks

a growing trend toward high school equivalency degrees (e.g., GEDs) whose graduates earn incomes similar to those of high school dropouts (see Figure 1).⁵

100% | 88% | Ages 55–64 | Ages 25–34 | Degrees | 41% | 42% | 42% | High School Completed | Postsecondary Completed

Figure 1. U.S. High School and Postsecondary Completion Rate, by Age

Source: OECD (2012) and National Center for Education Statistics (2011).

Compared internationally, the United States lags at the beginning of the educational track, in pre-K enrollment, and also at the end, in postsecondary on-time completion.

Although enrollment in pre-K programs has been expanding, nearly doubling in the past decade, it is far from universal in the United States, as it is in much of the rest of the developed world. Nearly all four-year-olds in the United Kingdom, France, Germany, and Japan are enrolled in preschool. Korea recently passed legislation mandating universal preschool. Yet only 69 percent of U.S. four-year-olds are enrolled in a preschool program.

The United States is relatively good at getting its high school graduates into postsecondary education, but not at getting them to graduate with a postsecondary degree. Enrollment is up. In 1980, only 50 percent of high school graduates went on to some postsecondary institution within two years. Now close to 70 percent do. But the likelihood that an enrolled college student will graduate on time is down. Nearly half of students who enroll have not graduated six years later—a worse on-time graduation rate than in 1980.8 The United States has an above-average postsecondary enrollment rate, but it also has the highest dropout rate in the developed world.9

Test Scores: Small Gains Domestically, but Mediocre When Compared Internationally

Measured by test scores, U.S. student achievement has been mediocre. National Assessment of Education Progress (NAEP) scores—the standard for measuring U.S. student achievement over time—are higher than ever. The gains, however, have been small and concentrated at the elementary level and mostly in math. On international tests, U.S. K-12 students consistently score at, or slightly below average compared to their developed-world peers. U.S. students do not test as well as other international students in core subject areas, but they score well in confidence surveys—a trait that has downsides, but also a trait that correlates strongly with entrepreneurship.

Expenditures: Adequate Total Spending, With Flat or Declining Public Spending More Recently

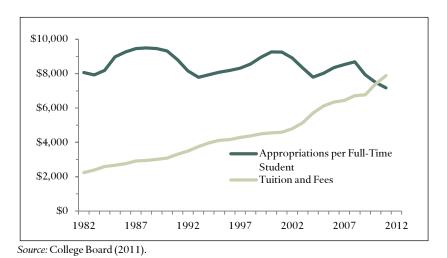
The United States spends plenty of money on its education system, which includes public and private expenditures. Given its relative wealth, per-pupil spending on K-12 education is roughly on track with the rest of the OECD. ¹⁰ On postsecondary education, however, the United States spends lavishly: one-third more than the OECD average.

U.S. education money is spent differently as well. Compared to other developed countries, it spends less on direct instructional expenses and more on school buildings and grounds, extracurricular activities, and student career and counseling services.

Like most service industries, the U.S. education system has historically suffered from low productivity. One symptom of this is cost growth without matched improvement in quality. Until the recent recession, public K-12 per-pupil spending had been on a steady increase, having nearly doubled since 1980.¹¹ Budget cuts have struck public colleges harder: state per-pupil spending has fallen by a quarter in the past decade and is now lower than it was in the 1980s.¹² More of the cost burden is being shifted to individual students in the form of sharply rising tuition (see Figure 2).

U.S. students pay the highest tuition in the world. ¹³ Adjusted for inflation, average tuition and fees charged to students at public four-year colleges has increased 357 percent since 1982, with the steepest increase in the past five years. ¹⁴ The increase in student debt has been just as steep. Total student debt now constitutes more than \$1 trillion, recently surpassing total U.S. credit card debt. It is a debt burden the equally college-educated cohort aged fifty-five to sixty-four never faced.

Figure 2. State Spending per Full-Time Student versus Tuition and Fees at Four-Year Public Colleges



The Biggest Problem in the U.S. Education System: Inequality in Spending and Outcomes

This is the U.S. education story told only with national averages. Parse the averages, and a new, compelling story emerges that gets to the heart of the real crisis of U.S. education: stratification in spending and achievement by race and especially income.

There are areas of excellence in U.S. education. If ranked internationally as nations, Massachusetts and Minnesota would be among the top six performers in fourth-grade math and science. ¹⁵ Among

fifteen-year-olds, Asian Americans are the world's best readers and white Americans are third only to Finns and New Zealanders. ¹⁶ A higher share of U.S. students takes more demanding math and science courses than in 1990. ¹⁷ The U.S. postsecondary system has produced six of the world's top ten universities. ¹⁸ The most selective colleges have seen their dropout rates reach record lows. U.S. dominance in Nobel Prize winners is unrivaled. In a Harvard Business School alumni survey, high-quality universities were rated the country's chief competitive advantage. ¹⁹

The problem is that such excellence is not extended to huge swaths of U.S. society. Everyone—black, white, rich, and poor—is testing better and gaining greater access to college than the previous generation.²⁰ But rich students are making bigger gains than everyone else. The achievement gap on standardized tests between high- and low-income students is 75 percent wider today than when baby boomers were in school.²¹ Strikingly, these gaps exist when children first begin elementary school, are locked in place all the way through high school, and are carried over to the postsecondary level.²² The influence of parental wealth on student achievement is stronger in the United States than anywhere else in the developed world.²³

In the fierce competition to attend high-quality colleges, wealthy Americans have an advantage during the admissions process. They are becoming more concentrated in the best schools. Students from families in the highest income quintile are eight times more likely to enroll in a highly selective college than students in the bottom quintile, a gap that has widened over time.²⁴

Race is not the barrier to academic success that it used to be. Indeed, wealthy black students with strong academic backgrounds are actually *more* likely to go to an elite college than equally wealthy and qualified white students.²⁵ But in reality, this is a rare occurrence, since wealth correlates so strongly with race. As a whole, blacks are less likely to go to highly selective colleges now than in the 1980s.²⁶ Low-income students, and therefore also disadvantaged minorities, are more and more concentrated in community colleges and lower-tier schools.

Unequal investments are part of the reason for unequal outcomes. This inequality begins in one's childhood: wealthy and better-educated parents invest more time and money in their children's early development—more even than in past generations, since the research has grown more definitive about the importance of pre-K cognitive enrichment.

Unequal investment continues at the K-12 level. The United States has wide funding disparities in large part because most revenues to pay for K-12 public schools are raised by local property taxes. For the majority of OECD countries, more resources are invested per pupil in lower-income districts than in higher-income districts. It is the reverse in the United States.²⁷

Unequal investments also exist at the college level. Since the 1960s, annual per-pupil spending at the most selective public and private colleges has increased at twice the rate as in the least selective colleges. ²⁸ In 1967, the difference in real annual per-pupil spending between the most and least selective colleges was \$13,500. In 2006, it was \$80,000. Money makes a difference for postsecondary quality and student outcomes. For equally qualified students, the most selective colleges have higher on-time completion rates and their graduates earn more and are more likely to progress toward an advanced degree. ²⁹

Community colleges account for most of the nation's decline in postsecondary on-time completion rates. According to one estimate, inadequate resources are to blame for up to two-thirds of that decline.³⁰ Ranked by the share of its population with bachelor's degrees, the United States is second only to the Netherlands. Where the United States lags its competitors is in the sub-bachelor's, or middle-skill, degree fields (e.g., certificates, vocational degrees, or associate's degrees); there it ranks

sixteenth.³¹ This is despite the fact that near-term U.S. job growth is projected to be stronger for middle-skill degrees than for high- or low-skill degrees.³² The postsecondary dropout rate increases with every step down on the postsecondary degree ladder. Whereas 58 percent of bachelor's students finish on time, only 28 percent of sub-bachelor's students do so.³³ Every step down the degree ladder, the proportion of the student body that is low-income increases (see Figure 3).³⁴

Figure 3. On-Time Completion Rate and Low-Income Enrollment, by Postsecondary Degree

Source: NCES (2012) and College Board (2012).

Completing college is more crucial than ever for landing a well-paying job. Going back to the 1970s, all net job growth has been in jobs that require at least a postsecondary degree. Postsecondary graduates, whether they hold a vocational certificate or a bachelor's degree, earn more on average and are also less likely to be unemployed than college dropouts and high school graduates.

Americans are aware of these opposing trends. Over the past ten years, an increasing share of Americans believes a college degree is necessary for a person to be successful in today's world, while a decreasing share believes that qualified and motivated students have the opportunity to obtain a college degree.³⁵

The challenge for the U.S. education system is to reverse the growing link between income and achievement and push more low-income and disadvantaged minority students through high school and on to postsecondary completion—all while keeping already high education costs and postsecondary tuition under control.

THE PRE-K SYSTEM

Enrollment in pre-K education in the United States is low by international standards but climbing quickly. The biggest change has been in the growth of state-run pre-K programs, most of which are means-tested. Since 1980, the number of states offering such programs rose from eight to thirty-nine.³⁶ Roughly one-quarter of the nation's four-year-olds are enrolled in no program, half are in free or subsidized public programs, and the remainder are in private programs.

The Benefits of Pre-K

High-quality preschool programs raise achievement for all students.³⁷ The effect is largest on the most disadvantaged. In model preschool programs using intensive instruction techniques, at-risk students were less likely to repeat a grade and more likely to graduate high school, go on to postsecondary education, and, later in life, commit fewer crimes, earn higher wages, and have more stable living arrangements.³⁸ A conservative estimate for the return on these model programs is three dollars in benefits for every dollar invested.³⁹

Federal Role in Pre-K

The federal government's role in pre-K varies. It directly pays for and regulates a preschool program for low-income children called Head Start. It gives subsidies to states and low-income parents to help pay for child care and also gives families of all incomes a tax credit for child care expenses. These funding streams make up the bulk of the \$20 billion the federal government spends annually on early childhood education.⁴⁰

Head Start for Low-Income Children

The federal government's largest and best-known early childhood program, Head Start, is targeted at low-income children. Started in 1965 as part of President Lyndon B. Johnson's Great Society reforms, Head Start was the first public pre-K program in the country. Initially, it was a summer catchup program run by local agencies to prepare four-year-olds at or below the poverty line for kindergarten. Over time, Head Start expanded dramatically—incorporating three-year-olds, adding full-year and full-day programs, easing income eligibility requirements, and offering more wraparound health and social services. Head Start now serves close to one million children, or 11 percent of all four-year-olds.

Assessments of Head Start have been mixed. A 2010 federal study found that immediate cognitive or IQ gains were small and had faded by the end of first grade. It may be too early to come to definitive conclusions. The first randomized Head Start trial survey only began in 2002, so it is too soon to capture longer-term achievement, social, and behavioral effects that have been linked to Head Start in other analyses. But there is a consensus that too much variation in quality exists among Head Start programs. With an annual federal cost of \$7.9 billion, it is also expensive. Though no other programs are directly comparable, some state pre-K programs (e.g., Oklahoma's) have shown more substantial immediate cognitive gains for a wider population and for a comparable price. Access could be better as well; nearly half of its targeted population is not being served by any pre-K program.

Child Care Subsidies for Low-Income Families

There are federal child care subsidies for low-income families. The main one, the Child Care and Development Fund (CCDF), is funded at \$5 billion a year and gives block grants to states that can then be spent on child care centers and programs for low-income families or turned into vouchers for those families to seek out child care programs.

The problem is that the kind of child care low-income parents buy with their subsidies is generally of questionable quality, often more akin to babysitting in a safe environment than a cognitively enriching experience. On average, children gain more from Head Start and other public pre-K programs. ⁴⁵ There are provisions in place requiring that states allot some portion of the subsidies toward

quality control, but the federal guidelines are vague, and today 20 percent of child care centers that receive federal subsidies are not licensed and fly under the radar of regulation.

Child Care Tax Credits for All Families

Federal child care tax credits, totaling \$2.2 billion a year, are available to all families. The principal tax credit is the Child and Dependent Care Tax Credit (CDCTC). It covers 35 percent of child care costs up to a certain cap for families earning \$15,000, sliding down to 20 percent for families earning \$43,000 or more.

Credits can only be claimed if an individual owes taxes, and poor Americans generally do not. Only if a tax benefit is refundable—meaning it can be paid out to a recipient with or without a tax payment to the IRS—do the poor reap any gain. The child care tax credit is nonrefundable, so more than 60 percent of child care tax credits go to the richest 40 percent of families.⁴⁶

Obama's Pre-K Agenda: Focusing on Quality Instead of Funding or Access

Under the Obama administration, federal reforms are trying to leverage more quality out of the country's pre-K system without increasing baseline funding or expanding access. Real, baseline pre-K funding, including tax credits, has essentially remained unchanged at \$20 billion, with a modest onetime boost from the stimulus of about \$5 billion.

Reforms are in the works to improve Head Start. Studies are not conclusive about what makes pre-K programs effective, but teacher quality is believed to be essential. Model programs generally use well-trained and well-compensated staff in intensive educational instruction with small student-teacher ratios. By 2014, half of all Head Start teachers must hold bachelor's degrees. The lowest-performing Head Start programs are also being forced to "recompete" for funding, using an additional new teacher evaluation based on in-class observations.

The stimulus package created a new competitive grant program for states called the Race to the Top Early Learning Challenge. Proposals were judged based on whether they would expand access to high-quality pre-K programs for low-income children, integrate public and private programs into a cohesive system, and build robust program evaluation systems for better quality control. Fourteen winning states split \$633 million in two rounds of competition. The program has been especially good at pushing more states to adopt the Quality Rating and Improvement System (QRIS), which evaluates and publishes assessments of child care centers for parents. Many states have also been developing their own evaluation systems to make themselves more competitive in the grant-application process.

Assessing Federal Pre-K Policies

Focusing attention and resources on pre-K quality—and systems for monitoring that quality—does much for low- and middle-income children, whose parents cannot hope to afford private programs. Since the nation's pre-K system is still in its infancy, at least compared to the K-12 and postsecondary systems, there is much less regulation and information for consumers about what kind of care they are buying.

Ultimately, the end goal for federal—as well as state and local—policy should be universal pre-K, with checks in place to ensure some level of standards across the country. Most developed countries either have or are on their way to universal pre-K. For the United States, it would make the most

sense to fold pre-K, including Head Start, into the existing K-12 public school system, like kindergarten was in the 1970s. In his 2013 State of the Union Address, President Obama called for high-quality pre-K for all four year-olds. But thus far, the Obama administration has done little to expand access to pre-K, perhaps because universal pre-K would cost more. Instead, states are backtracking on their pre-K spending; per-pupil expenditures have been declining since 2002.⁴⁷ According to one study, quality control is suffering, with fewer states now conducting regular site visits to monitor programs.⁴⁸

In the short term, the focus should be on getting low-income children into the best possible child care and pre-K programs, whether that means expanding Head Start or helping parents spend their federal child care subsidies on better programs. Low-income children have the most to gain from pre-K. It is where, if programs are well designed for cognitive enrichment, the education buck garners the biggest bang, and it is indispensable for narrowing the chasm in academic achievement that currently exists from day one of kindergarten and follows students for a lifetime.

THE K-12 SYSTEM

Unlike in pre-K and postsecondary education, public K-12 education is free and available to all students, with taxpayers footing the entire bill. Enrollment in K-12 is mandatory and therefore generally universal. The vast majority (90 percent) of K-12 students are enrolled in public schools.⁴⁹

Federal Role in K-12: Title I and IDEA Funding to Support Disadvantaged Students

The federal government is legally forbidden to force schools to adopt a specific curriculum, standards, or tests. Such matters are constitutionally relegated to states and local school districts.

Historically, the federal government's role in K-12 education has been to expand access and funding support for disadvantaged children. That role began in earnest in the 1960s with legislation and court cases mandating public schools serve all races, and then in the 1970s that they serve all specialneeds children. Federal funding streams were created to help local school districts fulfill these duties—Title I for low-income students and Individuals with Disabilities Education Act (IDEA) grants for special-needs students. These funds are distributed to school districts based on the number of disadvantaged students they serve. The reach and scale of both funding streams have expanded over time. The terms of eligibility for Title I grants have also been gradually ratcheted down so that nearly all school districts receive some amount. The federal government now shoulders about 10 percent of national K-12 funding, most of it through Title I and IDEA grants.⁵⁰

Bush-Era No Child Left Behind: Pushing for Accountability

It was not until the 2001 No Child Left Behind (NCLB) Act that the federal government used Title I to shape the direction of education policy beyond expanding access for all. With NCLB, Title I money became contingent on student achievement. NCLB continued the longstanding federal role of helping the disadvantaged, but it came with unprecedented funding penalties—the loss of Title I money—if schools failed to eliminate achievement gaps among the disadvantaged. NCLB also cast the accountability net wider to include all students, regardless of income or disability status.

It was a tidal shift in federal education policy, passing with overwhelming bipartisan support in Congress. There was a broadly shared sense that increased K-12 education costs had not significantly improved achievement. Accountability for results, it was believed, would force schools into action and raise achievement.

According to the new law, all students had to be "proficient" in reading and math within twelve years. States defined their own proficiency levels and designed accompanying standardized tests that were administered annually for grades three through eight. School scores were reported by subgroup (e.g., race, income, disability status) and measured against an Annual Yearly Progress (AYP) metric, which indicated whether a school was on schedule for making the 100 percent proficiency target by 2014. For each successive year a school failed to make AYP, it faced increasingly severe consequences. After four years, corrective action would be taken against the school, which could mean dismissal of staff, closure, or reconstitution as a charter school.

A decade later, both parties are equally disappointed with NCLB. The accountability system was poorly constructed and hardly affected achievement. The absolute definition of failure (i.e., making or not making AYP) lumped together schools that had made some progress on test scores with schools that had made no progress at all. An entire school would fail if any subgroup missed the mark. The proficiency goals and timeframe were unrealistic, and even some of the nation's highest-achieving schools in wealthy districts were failing to make AYP. Not a single state is on track to meet its 2014 goal. A National Academy of Sciences report concluded that NCLB's test-based accountability may have led to tiny gains in achievement, but nothing transformative, as the law's architects had hoped.⁵¹ In instances where a school did make remarkable progress, far too often cheating and score manipulation were later uncovered.

Obama-Era No Child Left Behind: Waivers for Conforming to the Obama Agenda

With states nervously eyeing the 2014 deadline, a gridlocked Congress has been unable to rescind or reform the NCLB Act. President Obama has allowed states to set new proficiency goals and apply for waivers from the strictest provisions of NCLB, including meeting AYP requirements—but only if states also adopt Obama policy guidelines in their waivers, which most have. Under the waivers, some Bush-era hallmarks remain, including accountability through standardized testing and charter schools as a corrective action option. But in a change of course, teachers rather than schools will be held accountable for student test scores, and reform efforts are shifting to focus on only the worst-performing schools. So far, thirty-seven states and the District of Columbia have been granted waivers.

The Obama Education Agenda: Better-Calibrated Accountability and Innovating for Quality

The Obama administration has continued the Bush administration's broad commitment to accountability as a way to ensure some basic level of quality while controlling costs. The administration is creating a more workable K-12 education accountability system, which better measures education quality and more efficiently focuses resources on the worst-performing schools while also nurturing promising innovations that improve education quality. These efforts are centered on four pillars: improving teacher evaluation and effectiveness; expanding high-quality charter schools; encouraging

states to adopt common, college-ready standards; and developing data systems to track student performance.

This agenda was largely set by the 2009 stimulus package and its two signature competitive grant programs, Race to the Top (RTTT) and Investing in Innovation (i3).⁵²

Race to the Top (RTTT) and Investing in Innovation (i3)

The RTTT competitive grant program was created by the stimulus bill and given one-time funding of \$4.35 billion, with smaller subsequent annual appropriations. States have a better chance of winning money if their applications promise to innovate in the four pillars. In the first two rounds of RTTT competitions, eleven states and the District of Columbia were awarded grants. With so many states in fiscal distress, the prospect of winning relatively small amounts of money has led to sweeping changes in state education policies, even in states that did not win grants. Over thirty states have enacted reforms to make themselves more competitive for RTTT, from removing caps on the number of charter schools to instituting new teacher evaluation systems.

The stimulus bill also created a much smaller competitive grant program, i3, for research-based innovations that close achievement gaps. It offers three different-sized grants—large awards up to \$25 million for scaling up proven, effective innovations, and smaller \$3 million to \$15 million grants for testing new ideas. Unlike the state-based RTTT program, the i3 competition requires a private funding match and is open to nonprofits who partner with schools.

Innovation Pillar: Improving Teacher Evaluation and Quality

Outside of the home, teacher quality makes the biggest difference in a child's education. Just as in any profession, there must be a way of separating who is doing a good job from who is not.

Headway is being made in designing better teacher performance metrics. Subjective assessments by principals used to be the most common way to evaluate teachers, but principals generally are easy graders; one study found that principals rated only 1 percent of their teachers as "unsatisfactory."⁵³ Value-added evaluations, which measure student test score gains over the course of a year, have been shown to be a good marker for teacher effectiveness.⁵⁴ Such systems, however, are not perfect and are seldom used as the sole factor for high-stakes job decisions. In practice, value-added evaluations are usually combined with assessments by colleagues and principals, allowing for a well-rounded evaluation and helping catch statistical errors or outliers. Encouraged by federal programs and money, more states are experimenting with and adopting value-added evaluations. Using student test scores to grade teachers is not without controversy, but in a testament to the method's growing popularity, more teachers' unions and young teachers are agreeing to write the provision into their job contracts.⁵⁵

Less headway is being made in figuring out how to improve teacher quality, an undertaking more complex than simply recruiting new teachers with better academic credentials or offering higher salaries. In high-achieving countries, such as Finland, Singapore, and South Korea, teachers come from the top of their high school graduating classes, teaching schools have a high bar for acceptance, and teachers' salaries are competitive with those of lawyers and scientists. It is generally the opposite in the United States. President Obama has proposed revamping the teaching profession with a \$5 billion program called RESPECT, which would allow states and districts to tinker with teacher tenure, compensation, and career opportunities, all to attract more talent. Another proposal, for a \$1 billion

STEM Master Teacher Corps, would recruit math and science experts into teaching, rewarding \$20,000 to those who go on to become high-performing teachers.

It is unclear if these proposals, if enacted, would have any impact on teacher quality. In the United States, teachers with better academic credentials (e.g., higher SAT scores or holding a bachelor's degree) on average do not have an edge in raising student test scores. ⁵⁶ Even if boosting teacher salaries to be competitive with high-paying occupations worked in attracting talent, this is hardly a scalable solution for today's generation of students. States and local municipalities are struggling to pay teachers at their current salaries.

A more realistic near-term option is to leverage the talents of current teachers to their fullest potential. Financially rewarding effective teachers, or pay-for-performance schemes, is an idea favored by the Obama administration. The Bush administration created a competitive-grant Teacher Incentive Fund (TIF) to support pay-for-performance innovations, which Congress has rejuvenated with more money. Such schemes, however, have historically had disappointing results.⁵⁷

Teacher training may be a good way to improve the existing teacher corps. Yet little is known about what makes teachers effective and how to impart effective methods to them. The federal government does spend a substantial amount of money, roughly \$3 billion, on some eighty different teacher programs. Most of the money, \$2.5 billion, goes to the formula-based Improving Teacher Quality State Grants program (known as Title II) for low-income schools. The program has changed little since the 1960s, and states and local districts spend most of their Title II funds on class-size reduction or anything that falls under the broad rubric of "professional development activities."

There are several new federal teacher training programs. Teacher Quality Partnership competitive grants, created in 2008 and funded at about \$50 million per year, support innovation in research-based teacher training models and teacher residency programs in which successful, experienced teachers coach novice ones. Top-performing countries tend to use similar peer-to-peer and hands-on training.⁵⁸ In 2011, the Department of Education rolled out the Our Future, Our Teachers program to help states and localities evaluate the performance of their teacher training programs.

Innovation Pillar: High-Quality Charter Schools

Charter schools are publically funded but independently managed. They have more flexibility to innovate with management, staffing, curriculum, and teaching techniques. Though the number of charter schools has exploded in recent years, they are still relatively rare outside cities. Just 4 percent of U.S. K-12 students are enrolled in one, compared to nearly half in Washington, DC, and two-thirds in New Orleans.⁵⁹

On average, charter schools do not outperform public schools nationally.⁶⁰ But certain charter models, such as Knowledge is Power Program (KIPP) schools, with their "no excuses" discipline and longer school days and academic year, have significantly improved test scores for at-risk students in struggling urban school districts.⁶¹ Charter school regulations, which vary from state to state, also appear to make a difference. For example, Massachusetts is known for stringent charter oversight, with authorities quickly stepping in when charters veer off course. Charter schools in Massachusetts tend to be higher quality.⁶²

One risk with charter schools is that they take only the most motivated students, leaving the most vulnerable behind and making the local public schools even worse. Charter schools, then, might exacerbate inequality. But high-quality charter schools still have a better track record of improving achievement for at-risk youth than the other major education choice option, vouchers, which allow students to use public money to attend private schools.⁶³

Innovation Pillar: Common College-Ready Standards

States, with federal support, are leading an effort to develop and use common national standards for English and math—the first time in U.S. history that learning expectations could be the same across the country. These so-called Common Core Standards, which are more rigorous than most existing state standards, are designed to prepare students for college and are expected to be ready for the 2013–2014 school year. The federal government is doing its part, providing \$360 million of stimulus money to the consortia designing the Common Core assessments and favoring grant applications that promise to adopt them. Initially, the standards were widely popular, with forty-five states and Washington, DC, signing on to use them, though several states have since taken steps to delay implementation.

The Common Core will bring big efficiency gains. States will no longer waste resources reinventing the curriculum wheel, and scaling up education reforms and innovations will be easier.

However, such standards are unlikely to lift achievement on their own. High- and low-achieving countries alike use national standards, and the rigor of state standards has historically had little impact on student achievement.⁶⁴ But common standards could form a better basis on which to compare education quality across the country.

Innovation Pillar: Data Systems

Data systems at the state and local levels are essential for measuring and improving education quality. Data-informed classrooms lead to better teaching. Longitudinal data systems that track the same students over their entire academic careers give educators a sense of where most tend to fall behind. Data can also help evaluate teachers, charter schools, and other innovative pedagogical or organizational methods more reliably. Linked up with the Common Core Standards, data systems can show how different parts of the country are performing on a common scale over time, down to neighborhood and subgroup detail.

Assessing Federal K-12 Initiatives

Under the Obama administration, federal policy has been retooled to chip away at the achievement gap between low- and high-income students. Low-income schools would be the main beneficiary of policies the administration has advocated, including charter schools and teacher effectiveness, since low-income districts have difficulty attracting and retaining teacher talent. Other changes still need to be made, notably in modernizing Title II, the biggest federal teacher training program and funding stream.

More could also be done with Title I money, the main federal funding stream for helping low-income students. Little has been done to make the baseline Title I program better funded, targeted, or effectively spent. Most new baseline K-12 federal funding has been concentrated in comparatively small competitive grant programs, which altogether amount to less than \$2 billion a year. Title I is gargantuan in comparison, funded at \$14.5 billion a year. If federal money is to make any dent in unequal spending in education, it will be from Title I. The stimulus package temporarily doubled Title I and IDEA funding in 2009, but otherwise real baseline funding has remained flat during the Obama presidency. Existing Title I regulations could also be streamlined to get rid of loopholes that in many cases make local funding inequalities worse. Moreover, little is known about how Title I money is spent in individual schools, which is where Title I money directly impacts low-income students.

To control national K-12 costs and quality more broadly, the federal government is gradually putting in place a framework for a workable accountability system: trusted and accurate teacher evaluations, common standards for comparison, and data systems holding everything in place. It would help the country come to a better understanding about what value looks like in K-12 education, which is all the more important when there are fewer resources to go around.

THE POSTSECONDARY SYSTEM

Most U.S. postsecondary education also takes place in public institutions, where roughly three-quarters of all undergraduate students are enrolled. 66 Two-year community colleges serve more students (40 percent of undergraduates) than four-year public colleges (36 percent). State and local tax revenues cover the majority of these public institutions' costs, but all still charge tuition. After tremendous growth since 2000, today 8 percent of postsecondary students are enrolled in for-profit institutions. The remaining 15 percent are in private, not-for-profit colleges.

The Federal Role in Postsecondary Education: Helping Students Pay for College

The federal government helps students and families cover college costs through longstanding programs such as means-tested grants and subsidized student loans and, more recently, through tax breaks. Nearly all federal postsecondary aid is given to students and their families to purchase services from providers. This contrasts with federal pre-K and K-12 funding support, which is given to education service providers or to states to distribute.

Close to half of all full-time undergraduate students receive federal loans or grants, which on average cover about 40 percent of college costs.⁶⁷ All students and their families can claim tax benefits. The federal cost of postsecondary student aid and tax expenditures, estimated at roughly \$72 billion a year, towers over that of pre-K (\$20 billion) and K-12 (\$38 billion) federal costs.⁶⁸ Yet the federal government exerts virtually no control over how students spend their federal financial aid beyond requiring that it be used at accredited institutions.

Pell Grants for Low-Income Students

The Pell grant program for low-income students evolved in the same era—the mid-1960s—as the other big low-income education programs, Head Start for pre-K and Title I for K-12. With total funding of \$38 billion in 2012, Pell grants are by far the largest federal student grant program and the single largest component of the Department of Education's budget.⁶⁹ Students qualify if their family income is under \$50,000. Award size varies based on income and tuition costs, but the cap is \$5,550 for 2012–2013. About nine million students received Pell grants in 2012.⁷⁰

Student Loans for All Students

Also since the 1960s, the federal government has provided loans at below-market interest rates to all undergraduate and graduate students who may have insufficient collateral, credit, or employment history to qualify for private loans. Stafford loans constitute the vast majority of all federal loans and have a fixed interest rate of 6.8 percent, roughly half of a comparable private loan. Means-tested "subsidized" Stafford loans come with a lower fixed interest rate of 3.4 percent and more flexible repayment terms. Roughly 35 percent of all undergraduate students receive federal loans. Outstanding federal student loans total about \$750 billion, with about \$100 billion of new federal loans

taken out every year.⁷³ The cost of the federal student loan program fluctuates year to year depending on fluctuations in market interest rates, but the program usually breaks even or earns a profit.

Postsecondary Tax Benefits for All Families

The federal tax code also gives students and their families big tax breaks, which mostly operate on sliding income scales. There is a tuition and fees deduction that reduces taxable income, with a maximum claim of \$4,000. Student loan interest is tax deductible. Parents can open a college savings account that appreciates tax-free. The main higher education tax credit program, the American Opportunity Tax Credit (AOTC), was created with the 2009 stimulus to replace a less-generous program and allows families earning up to \$180,000 a credit of up to \$10,000 over the first four years of college. It is also refundable at up to \$1,000 a year for the lowest-income filers. In 2012, postsecondary tax benefits cost the federal government \$34.2 billion.

President Obama's Postsecondary Agenda: More Student Aid, With Movement Toward More Accountability and New Support for Community Colleges

Over President Obama's first term, federal student aid increased, and the expansion in generosity has benefited higher-income students the most. Costs have risen a great deal; total federal baseline spending on post-secondary education, including appropriations and tax expenditures, have more than doubled since he first entered office. This is the reverse for pre-K and K-12, for which spending has remained unchanged.

At the same time, the Obama administration is spearheading the first serious attempt at making the postsecondary providers who are most dependent on federal aid, and who are most likely to serve low-income students, more accountable for education quality and value. In so doing, the federal government has for the first time defined "good value," measuring the cost of a program against how well a program's graduates fare in the labor market. In addition, President Obama has championed community colleges, promoting partnerships with private-sector employers.

More Federal Student Aid, Especially for Higher-Income Students

Since 2008, the number of Pell grant recipients has increased by one-third, driven mostly by a weak-ened economy. More students qualified because their incomes fell, and more students were pushed out of the labor market and into college. The maximum grant amount was raised from \$4,731 in 2008 to \$5,550 in 2010. The costs of the program have therefore risen sharply, with annual baseline funding roughly \$20 billion higher today than it was in 2008.

In response to skyrocketing costs, Pell availability has been cut. Early on in the Obama administration, Congress loosened income eligibility and introduced a summer Pell grant program introduced. Since 2010, as a cost-saving measure, both have been rolled back and a new cap on lifetime eligibility has been put in place, disproportionately affecting nontraditional students. Even with the recent award increase, Pell grants cover a smaller share of a student's college expenses than they did at the program's inception in the 1970s.

For most students taking out federal loans, repayment terms have not become more generous. Congress recently extended through 2013 the 3.4 percent interest rate on means-tested Stafford loans for another year; they had been temporarily lowered in 2007. The move will affect only lower-income students who take out loans for that year, and borrowers will save only about \$9 per month

in repayments.⁷⁴ Cuts that were made to the loan program more or less affect students of all income levels.⁷⁵

Where debt repayment terms have become significantly more lenient, the benefits will overwhelmingly go to higher-income students. For students enrolled in the Income-Based Repayment Plan, Congress lowered the monthly cap on student loan payments from 15 to 10 percent of discretionary income and reduced the amount of time after which loans could be forgiven from twenty-five to twenty years. Borrowers with the largest debts—who tend to be graduate or professional students and who also tend to have higher incomes and more earning potential—will reap nearly all the benefits, and those benefits are enormous. A person earning \$70,000 a year with an advanced degree could have \$100,000 of federal debt forgiven under this alteration. This federal subsidy is four times larger than that provided to low-income students through Pell grants (\$22,200) to obtain a college degree in four years. The future costs of these changes to the Income-Based Repayment Plan are uncertain, since students are beginning to enroll in the plan now and the take-up rate is still low. But the change also opens the door to potentially huge costs down the road if all graduate students enroll. More fundamentally, it is extremely regressive and puts the wrong incentives in place, in particular encouraging massive graduate school debt and tuition hikes.

Postsecondary tax breaks have gone up—again, mostly benefiting the better-off. The biggest change in federal postsecondary policy in the past two decades has been the growth in tax incentives. As recently as the early 1990s, these incentives (e.g., credits and deductions) totaled just a few billion dollars, adjusted for inflation.⁷⁷ Now they total \$34.2 billion.

The 2009 stimulus bill's American Opportunity Tax Credit (AOTC) accounted for most of the recent increase. The AOTC is a version of its precursor, the Clinton-era Hope credit, sweetened by an increase in the annual credit maximum and the number of years it can be claimed, inclusion of nontuition expenses in the coverage, and broadened eligibility to include families earning between \$120,000 and \$180,000. Part of the credit was also made refundable for low-income Americans who have no tax liability. Nevertheless, wealthier families earning more than \$120,000—who received nothing under the previous credit—captured most of the gains from AOTC.⁷⁸

Ramping up federal student aid and debt forgiveness gives colleges every incentive to continue raising tuition. These increases result in greater demands for student aid. Although federal student aid could be more efficiently targeted toward needier students, cutting back on all forms of aid seems an unfair bargain for students, who are more dependent than ever on federal aid. Twenty years ago, close to 20 percent of college students took out federal student loans. ⁷⁹ Now close to 40 percent do. State financial aid has fallen off, making students more reliant on federal dollars. ⁸⁰ This is even truer for low-income students, since the aid that states offer is increasingly merit-based instead of needbased. ⁸¹

The federal government cannot afford to continue subsidizing spiraling tuition costs for low-income students. If the maximum Pell grant covered the same percentage of college expenses today that it did in the late 1970s, the program's annual bill would be twice as high, or at least \$80 billion. 82 Yet the Pell grant program is struggling simply to meet its current obligations, surviving year to year on emergency stopgap measures. The program already faces a \$7 billion budget shortfall in 2014.

The shift in responsibility for higher education costs from state to federal taxpayers has not been an equal bargain either. Because state governments set tuition levels for their own public higher education institutions, federal taxpayers are paying more—with almost no control over how the money is spent.

The best long-term solution is to rein in tuition costs and ensure federal dollars are better spent on the needs of the economy. This could happen soon, with the Obama administration leading the first serious push for accountability for some level of quality in postsecondary education.

Initial Push for Accountability: Transparency and the Gainful Employment Rule

Transparency has been the federal government's main tuition cost—control strategy. Going back to 1965, colleges have had to report basic institution-wide figures—tuition, expenditures, graduation rates, and student aid—to the federal government in order to receive accreditation. Now there are efforts to make these reported figures more transparent and accessible to students. All accredited institutions were required by 2011 to display a "net price" calculator for prospective students, showing the cost of attendance minus any grant or scholarship aid. The hope is that students, empowered with this information, will be more careful consumers of postsecondary education, keeping tuition costs down and services more aligned with the economy's needs.

But critics argue that these transparency initiatives are not enough. The most relevant information for empowering student consumers is still missing from federal reporting requirements and the mandatory net price calculator: whether students land jobs postgraduation that pay enough to cover their debt payments.⁸³ The Department of Education has developed an easy-to-read cost "scorecard" and a "shopping sheet," which include postgraduation debt repayment information that colleges can choose to give prospective students. But the scorecard and shopping sheet are voluntary, and it therefore remains to be seen how effective they will be. Moreover, with so much federal taxpayer money at stake, critics insist, the federal government should be pressuring colleges to offer better value for their services, or to better prepare students for jobs.

In a big shift, with a proposed rule change to how institutions receive federal accreditation, the U.S. government could begin holding postsecondary institutions more accountable. Applicable post-secondary institutions would have to publicly disclose more details about graduates' job placement rates and median student debt load—and do so not just by institution but by specific program. For the first time, the federal government would impose consequences on institutions that charged students more than the labor market indicates a program or degree is worth; programs would have to satisfy a "gainful employment" rule, which measures graduates' debt burdens and their ability to pay off that debt. If programs failed to meet the rule for three out of four consecutive years, they would lose their accreditation and students would then be barred from using federal aid to pay tuition.

Under current plans, the new disclosure requirement and gainful employment rule would only apply to career colleges and vocational programs, for which it makes the most sense to closely align education services with the needs of the job market. The wage advantage of the degrees they grant depends much more on getting a job specific to the degree. The demand for these positions also fluctuates more than for bachelor degree—level jobs.

For-profit institutions would be hit the hardest by the rule, which favors certificate and vocational programs. With many receiving more than 80 percent of their revenue from federal student aid, for-profits also rely more heavily on public funds than other postsecondary education institutions. He serve more low-income and minority students who tend to be less college-ready, but simple arithmetic suggests they could be offering better value to their students and taxpayers. For-profit colleges account for one-twelfth of the nation's postsecondary enrollment and a quarter of federal student aid, but nearly half of student loan defaults.

There has been huge resistance from postsecondary institutions against the gainful employment rule. For-profit colleges are challenging it in court, putting the scheme on hold. Yet supporters of the

gainful employment rule argue that it is, if anything, not harsh enough. Only 5 percent of applicable institutions failed to meet the criteria in 2012.85 A much smaller percentage would fail three out of four years.

The only other Obama administration proposals to push back against rising higher education costs would be voluntary. President Obama pitched a \$10 billion fund to reward schools for lowering their tuition, but that idea has gone nowhere in Congress, and neither has his proposal for a Race to the Top competitive-grant program for postsecondary institutions funded at \$1 billion. 86 For now, hopes for cost control will have to rest on transparency and the shoulders of student consumers.

State governments are taking the lead in applying accountability pressures to their vocational and community colleges. Indiana, Ohio, and Tennessee have changed their funding formulas to reward completion rather than enrollment. Florida has linked up community college student transcript data with wage data so prospective students can cross-check which programs offer the best value. Virginia intends to do the same.

Some advocates for cheaper postsecondary education hope that online education will deflate the tuition bubble. Institutions like the University of Phoenix have been offering discount online courses and degrees for about a decade, with no appreciable effect on college tuition. But recent developments could shake things up. In 2011, private companies like Udacity and Coursera began offering a new type of online learning program: the Massive Open Online Course (MOOC). The courses are often taught in research-based, fresh, and innovative styles—and they are open to anyone and charge no fee. In 2013, elite brands including Harvard, the Massachusetts Institute of Technology, and the University of California at Berkeley entered the MOOC market.

There is, however, a serious downside to too much online education. Available evidence suggests it could make the college dropout crisis worse. Only one in ten students enrolled in the typical Udacity course completes it. Other studies found that community college students were less likely to graduate if they enrolled in online courses.⁸⁷ Moreover, ensuring the integrity of MOOC test systems is a significant hurdle.

Community Colleges: High on Rhetoric, Low on Funding, but With More Support for Private Partnerships The Obama administration has placed community colleges higher on the federal agenda than any of his predecessors did. Community colleges serve the most postsecondary students and have absorbed a disproportionate share of the historic college enrollment increase among black, Hispanic, and low-income students. They also have high dropout rates. If the United States becomes a world leader in college degrees by 2020, it will be in large part because more students are finishing community college and similar vocational programs.

Federal appropriations for community colleges have been modest. President Obama proposed \$5 billion for community colleges in his Jumpstart Our Business Startups (JOBS) Act, \$12 billion for the American Graduation Initiative and, most recently, \$8 billion for the Community College to Career Fund. None passed in Congress. The 2009 stimulus package initially pledged \$12 billion for community colleges. Only \$2 billion was eventually appropriated for a new competitive grant program.⁸⁸

The U.S. government is trying to make community colleges more effective without appropriating much money. Federal initiatives are encouraging community colleges to collaborate more directly with private-sector employers, a model that has been proven to place students in jobs after graduation. The new competitive grant program requires community colleges to partner with at least one employer as well as use evidence-based methods to carefully measure and track the success of participants. In a separate program, the Skills for America's Future initiative, the federal government is fa-

cilitating industry-funded partnerships with community colleges. United Technology Corp, Accenture, and the Gap, among others, are directly funding programs for community college students whom they have committed to employ.⁸⁹

Assessing Federal Postsecondary Initiatives

The Obama-era federal government has improved the situation for low-income postsecondary students in several ways—raising the Pell grant maximum and securing more Pell funding, making the AOTC tax credit refundable, developing accountability measures for vocational and technical programs, and shifting national attention to community colleges and other institutions that grant middle-skill degrees.

For too long, helping disadvantaged students meant giving a small portion more access to selective and well-funded colleges. Broader positive impact can only be achieved by making the institutions most likely to serve low-income students—community colleges—better funded, more affordable, and more effective. The Obama administration deserves credit for recasting community colleges as the primary agents for addressing lower-income underachievement.

There have not, however, been any concrete changes to reward students or institutions for ontime degree completion or to lower dropout rates that disproportionately afflict low-income students and the less selective institutions they attend. Without such changes, President Obama's pledge to make the United States the world leader in postsecondary attainment by 2020 is unlikely to be fulfilled. Lack of funding and resource support for community colleges is part of the problem, but so is federal student aid, which is distributed based on enrollment instead of completion.

Neither have there been any concrete changes that impose real accountability on institutions that serve low-income students. The gainful employment rule is still just a proposal tied up in the courts. It should be implemented and eventually given sharper teeth. It should also be mandatory for colleges to display postgraduation earnings and debt repayment rates for prospective students.

At the same time, policymakers should guard against the danger that more accountability could lead to restricted access for disadvantaged students. With more pressure to keep costs down and completion rates and job placements up, schools might start to limit the number of students they admit who cannot afford full tuition or need more academic remediation. Postsecondary accountability measures must reward access in addition to completion and affordability.

The concrete changes that have been made to federal postsecondary policy—new debt forgiveness and tax breaks—have tilted a game field that was already in favor of wealthier students even more so, all at a cost to taxpayers. Evidence suggests that well-designed, need-based aid does induce more students to go to college and reduces the likelihood they will drop out. 90 This is much less the case with tax incentives, which are poorly targeted at the low-income since they tend to have no or little tax liability. 91 A more cost-effective way to expand college access and completion would be to undo the regressive changes made to the student debt repayment plan and tuition tax credits, funnel the savings into the fiscally distressed Pell grant program, and expand Pell generosity and eligibility. 92

FUTURE PROSPECTS

Congressional Republicans and Democrats have been in remarkable agreement on the substance of education policy. The biggest differences are that Republicans tend to favor more market-oriented

approaches, such as vouchers and accountability through transparency and would rather leave more decision-making to states.

More than ideology, fiscal austerity will likely be the principal roadblock to which federal education policy must yield. Pending House appropriations legislation would zero-out some of President Obama's signature education programs, including RTTT and i3, but it would also leave funding levels unchanged for Head Start, Title I, and IDEA and Pell grants—the original federal funding streams for disadvantaged students. Longer-term funding is uncertain. Under sequestration rules, education programs will see an across-the-board funding cut of 5 percent. Under the Paul Ryan budget, which is popular among many congressional Republicans, education funding could be slashed by as much as 20 percent. At best, federal education funding will remain unchanged; more likely, it will be cut. The question is whether flat or decreased funding can continue to protect and expand educational opportunities and attainment for the disadvantaged.

Linking funding to quality is more important than ever in times of austerity, both to improve efficiency and to protect students from any negative blow from budget cuts. President Obama's push for more cost and quality accountability, especially for education providers who cater to low-income children and students, will likely continue.

But much more can be done for poor students who are falling behind the rich. More low-income children should have access to high-quality public preschool programs to narrow achievement gaps early on. Title I funding for low-income K-12 schools should be better targeted and designed. Regressive changes to postsecondary student aid should be reversed, support for community colleges ramped up, and aid formulas redone to reward degree completion. President Obama has four more years to get the country on track to lead the world in educational attainment once again.

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