# COUNCIL on FOREIGN RELATIONS





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## Remedial Education: Federal Education Policy

#### 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-kindergarten (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 more fierce.

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 first term, President Obama pledged that by 2020 the United States "will once again have the highest proportion of college graduates in the world." He has called for universal pre-K and free community

college. 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 education initiatives at the pre-K, kindergarten through twelfth grade (K–12), and postsecondary levels have all focused on developing and using smarter quality evaluation and accountability systems, which are intended to help the disadvantaged while trying to keep costs under control.

But more needs to be done. Expanding pre-K enrollment will cost more money. The main K–12 funding stream for low-income students, which has seen huge cuts from sequestration, should be ramped up and better targeted. Where federal education costs have gotten most out of control—student aid for postsecondary education—is also where there is the least accountability for results. And the biggest changes made to federal postsecondary policy—new debt forgiveness and tax breaks—have further tilted a playing field that already favored wealthier students, all at a steep cost to taxpayers.

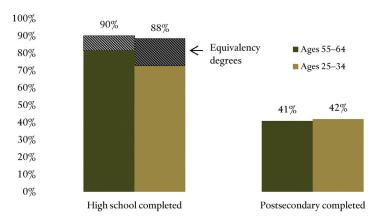
#### WHERE THE UNITED STATES STANDS

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 in postsecondary completion.<sup>3</sup> Among people aged twenty-five to thirty-four, Americans rank twelfth in both. Other countries are raising their high school and college attainment; 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.<sup>4</sup> 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). Workers with these credentials earn incomes similar to those of high school dropouts (see figure 1).<sup>5</sup>

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



 $FIGURE\ 1.\ U.S.\ HIGH\ SCHOOL\ AND\ POSTSECONDARY\ COMPLETION\ RATE,\\ BY\ AGE$ 

Source: OECD (2014); National Center for Education Statistics (2015).

States. In much of the rest of the developed world, universal pre-K is the standard. 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 66 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. The United States has an above-average postsecondary enrollment rate, but it also has the highest dropout rate in the developed world.

### 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, and in 2015, for the first time in decades, elementary math scores slipped. <sup>10</sup> On international tests in core subject areas, U.S. K–12 students consistently score on or slightly below average compared with their developed-world peers. But U.S. students score well in confidence surveys—a trait that has downsides, but also one 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, U.S. per-pupil spending on K–12 education is roughly on track with the rest of the OECD. <sup>11</sup> On postsecondary education, however, the United States spends lavishly: two-thirds more than the OECD average.

U.S. education money is spent differently as well. Compared with 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 in real terms since 1980. <sup>12</sup> Budget cuts have struck public colleges harder: state per-pupil spending has fallen by nearly one-third since 2000 and is now lower than it was in the 1980s. <sup>13</sup> 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.<sup>14</sup> Adjusted for inflation, average tuition and fees charged to students at public four-year colleges has increased 231 percent since 1984, with the steepest increase in the past five years.<sup>15</sup> 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.

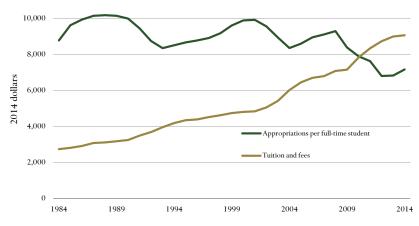


FIGURE 2. STATE APPROPRIATIONS PER FULL-TIME STUDENT VERSUS TUITION AND FEES AT FOUR-YEAR PUBLIC COLLEGES

Source: College Board (2015).

### 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. <sup>16</sup> Among fifteen-year-olds, Asian Americans are the world's best readers and white Americans are third only to Finns and New Zealanders. <sup>17</sup> A higher share of U.S. students takes more demanding math and science courses now than in 1990. <sup>18</sup> The U.S. postsecondary system includes eight of the world's top ten universities. <sup>19</sup> The most selective colleges have seen their dropout rates fall to 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. <sup>20</sup>

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. <sup>21</sup> 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.<sup>22</sup> 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.<sup>23</sup> The influence of parental wealth on student achievement is stronger in the United States than anywhere else in the developed world.<sup>24</sup>

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. <sup>25</sup> Even though all income levels are increasingly more likely to graduate with a bachelor's degree, the rich have a growing lead. <sup>26</sup>

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.<sup>27</sup> In reality, however, this is a rare occurrence, given that wealth correlates so strongly with race. As a whole, blacks are less likely to go to highly selective colleges now than in the 1980s.<sup>28</sup> 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. The reverse is true in the United States. <sup>29</sup>

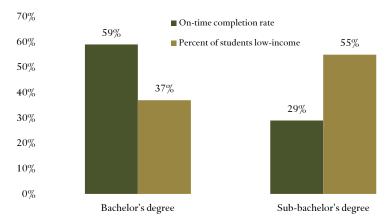
Unequal investments also exist at the college level. Since the 1960s, annual per-pupil spending at the most selective public and private colleges has increased at twice the rate as at the least selective colleges. In 1967, the difference in real annual per-pupil spending between the most and least selective colleges was \$13,500. In 2006, it was \$80,000. Money also 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. <sup>31</sup>

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. Ranked by the share of its population with bachelor's degrees, the United States is close to the top. Where the United States lags against its competitors is in the sub-bachelor's, or middle-skill, degree fields (e.g., certificates, vocational degrees, or associate's degrees). This is despite the fact that U.S. job growth is projected to be stronger for middle-skill degrees than for high- or low-skill degrees. The postsecondary dropout rate increases with every step down the postsecondary degree ladder. Whereas 59 percent of bachelor's students finish on time, only 29 percent of sub-bachelor's students do so. Every step down the degree ladder, the proportion of the student body that is low-income increases (see figure 3).

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.

FIGURE 3. ON-TIME COMPLETION RATE AND PERCENT OF LOW-INCOME STUDENTS BY POSTSECONDARY DEGREE



Source: NCES (2015); College Board (2012).

Americans are aware of these opposing trends. Over the 2000s, an increasing share of Americans believed a college degree was necessary for a person to be successful in today's world, and a decreasing share believed that qualified and motivated students had the opportunity to obtain a college degree. <sup>37</sup> In a 2014 survey, 96 percent said it was somewhat or very important to have a degree beyond high school, but only 21 percent thought getting one was affordable. <sup>38</sup>

The challenge for the U.S. education system is to weaken the link between income and achievement and push more low-income and disadvantaged minority students through high school and on to post-secondary 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 meanstested. Since 1980, the number of states offering such programs rose from eight to forty-one, and today one-third of the nation's four-year-olds are in enrolled in state programs.<sup>39</sup> Roughly one-quarter of four-year-olds are enrolled in no program.<sup>40</sup>

#### THE BENEFITS OF PRE-K

High-quality preschool programs raise achievement for all students.<sup>41</sup> 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.<sup>42</sup> A conservative estimate for the return on these model programs is three dollars in benefits for every dollar invested.<sup>43</sup>

#### 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 also 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.

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. Launched 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 catch-up 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 10 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. 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 there is too much variation in quality among Head Start programs. With an annual federal cost of roughly \$8 billion, it is also expensive. Although no other program is directly comparable, some state pre-K programs (e.g., Oklahoma's) have shown more substantial immediate cognitive gains for a wider population and a comparable price. Access could be better as well; nearly half of Head Start's targeted population is not being served by any pre-K program.

Child-care subsidies for low-income families. The main federal child-care subsidy for low-income families, the Child Care and Development Fund, 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.<sup>48</sup> But quality could soon improve because of

tightening federal regulations. Beginning in 2016, programs accepting subsidies will have to meet some licensing, health, and safety requirements, and states will have to spend more money on monitoring the programs' quality.

Child-care tax credits for all families. Federal child-care tax credits are available to all families. The principal tax credit is the Child and Dependent Care Tax Credit. But credits can be claimed only 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 Internal Revenue Service (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.<sup>49</sup>

#### OBAMA'S PRE-K AGENDA: FOCUSING ON QUALITY

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 Head Start access. Real, baseline pre-K funding, including tax credits, has essentially remained unchanged, with a modest onetime boost from the stimulus. Compared with other discretionary spending priorities under sequestration, pre-K has fared reasonably well.

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 were required to hold bachelor's degrees. The lowest-performing Head Start programs have been forced to "recompete" for funding, using a 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. <sup>50</sup> 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. The program was especially

good at pushing more states to adopt the Quality Rating and Improvement System, 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—could do much for low- and middle-income children, whose parents cannot hope to afford private programs. Given that the nation's pre-K system is still in its infancy, at least compared with the K–12 and postsecondary systems, there is much less regulation and information for consumers about what kind of care they are buying.

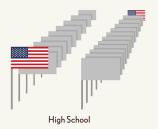
Ultimately, the end goal for federal—as well as state and local—policy should be universal pre-K, with checks in place to ensure some level of standards across the country. Most developed countries either have or are on their way to having universal pre-K. For the United States, it might make the most sense to fold pre-K, including Head Start, into the existing K–12 public school system, as kindergarten was in the 1970s.

The politics have never looked brighter for universal pre-K. Democratic and Republican state governors are embracing it in principle. In his 2013 State of the Union address, President Obama called for high-quality pre-K for all four-year-olds, and his budget proposals call for a funding boost for Head Start. But thus far, little has changed to expand access to pre-K, perhaps because universal pre-K would cost more. And for all the supportive rhetoric coming from state politicians, states are backtracking on their pre-K spending; per-pupil expenditures have been declining since 2002. 51

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.



#### **Weak Report Card**



Ages 25-34

Ages 55-64

College

Ages 55-64

U.S. ranking, worldwide, educational attainment

The United States used to lead the world in educational attainment, but has fallen behind.



Preschool enrollment rate

66% 83%







College dropout rate

47% 32%







United States versus the developed world

Compared to the rest of the developed world, the United States has a low preschool enrollment rate and a high college dropout rate.

#### THE K-12 SYSTEM

Unlike 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 (89 percent) of school-age students are enrolled in public schools, with the rest mostly in private schools.  $^{52}$ 

#### FEDERAL ROLE IN K–12: TITLE I AND IDEA FUNDING TO SUPPORT DISADVANTAGED STUDENTS

The federal government is legally forbidden from forcing schools to adopt specific curricula, standards, or tests. Such matters are constitutionally delegated to states and local school districts.

Historically, the federal government's role in K–I2 education has been to expand access and funding support for disadvantaged children. That role began in earnest in the I960s with legislation and court cases mandating that public schools serve all races, and then in the I970s that they serve all special-needs 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 12 percent of national K–I2 funding, most of it through Title I and IDEA grants. <sup>53</sup>

#### 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 long-standing 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. The broadly shared sense was 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 political parties were 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. No states were on track to meet their proficiency goals. 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. <sup>54</sup> In instances where a school did make remarkable progress, far too often cheating and score manipulation were later uncovered.

After years of gridlock, Congress finally replaced NLCB in late 2015 with the Every Student Succeeds Act (ESSA). It softens the hard edges of NCLB. States will still have to test and monitor their students and also have some kind of accountability system—but each state will be free to decide what that accountability system looks like, with no federally imposed automatic penalty triggers.

### OBAMA-ERA NO CHILD LEFT BEHIND: WAIVERS FOR CONFORMING TO THE OBAMA AGENDA

Before the passage of ESSA, President Obama 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 adopted Obama's policy guidelines in their waivers, which most did. Under the waivers, some Bush-era hallmarks remained, including accountability through standardized testing and charter schools as a corrective-action option. But in a change of course, teachers, rather than schools, were held accountable for student test scores, and reform efforts shifted to focus on only the worst-performing schools.

### THE OBAMA EDUCATION AGENDA: BETTER-CALIBRATED ACCOUNTABILITY AND INNOVATING FOR QUALITY

The Obama administration continued the Bush administration's broad commitment to accountability as a way to ensure some basic level of quality while controlling costs. The administration has been 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 were 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).<sup>55</sup>

#### RACE TO THE TOP AND INVESTING IN INNOVATION

The RTTT program was created by the stimulus bill and funded three rounds of competition. Nearly every state applied. Eighteen won and split more than \$4 billion in awarded grants. States had a better chance of winning money if their applications promised to innovate in the four pillars. With so many states in fiscal distress, the prospect of winning relatively small amounts of money led to sweeping changes in state

education policies, even in states that did not win grants. Most states enacted reforms to make themselves more competitive for RTTT, from removing caps on the number of charter schools to instituting new teacher evaluation systems.

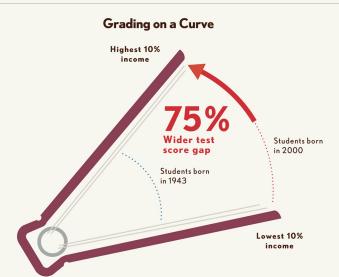
The stimulus bill also created a much smaller competitive grant program, i3, for research-based innovations that closed achievement gaps. It offered three different-sized grants—large awards for scaling up proven, effective innovations, and smaller grants for testing new ideas. Unlike the state-based RTTT program, the i3 competition required a private funding match and was open to nonprofits that partner with schools.

Innovation pillar: improving teacher evaluation and quality. Outside the home, teacher quality makes the biggest difference in a child's education. Just as in any profession, there should 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 I percent of their teachers as "unsatisfactory." 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. Student 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. But using student test scores to grade teachers is not without controversy, and teachers unions are pushing back.

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.





The test score achievement gap between low- and high-income students has increased.

Enrolled in College						Completed on Time													
29% Lowest income						<b>9%</b> Lowest income													
10 2	20 30		50				-	100		10	20	30			-	70			100
80	80% Highest income								<b>54%</b> Highest income										
10 2	20 30	40	50	60	70	80	90	100		10	20	30	40	50	60	70	80	90	100

 $30\,to\,34\,year\,olds$ 

And parental income is strongly correlated with student achievement.

It is unclear, however, whether more academically talented adults necessarily make better teachers. In the United States, teachers with better academic credentials (e.g., higher SAT scores or holding an advanced degree) on average do not have an edge in raising student test scores. See Credentials clearly matter more for teaching complex, advanced high school courses. But 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 option is to leverage the talents of current teachers to their fullest potential. Financially rewarding effective teachers, or payfor-performance schemes, is an idea favored by the Obama administration. The Bush administration created the 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. <sup>60</sup>

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 on some eighty different teacher programs. Most of the money 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.

Several new federal teacher training programs have been launched. Teacher Quality Partnership competitive grants, created in 2008, 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. 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 publicly funded but independently managed. They have more flexibility to innovate with management, staffing, curriculum, and teaching techniques. Although their number has exploded in recent years, charter schools

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.<sup>62</sup>

On average, charter schools do not outperform public schools nationally.<sup>63</sup> 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.<sup>64</sup> 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.<sup>65</sup>

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.<sup>66</sup>

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 Common Core standards, which are more rigorous than most existing state standards, are designed to prepare students for college, and some states began using them in the 2013–2014 school year. The federal government is doing its part, providing money to the consortia designing the Common Core assessments and favoring state grant applications that promise to adopt them. Initially, the standards were widely popular, and forty-five states and the District of Columbia signed on to use them, though several states have since taken steps to delay implementation or have withdrawn to write their own standards.

The Common Core should bring big efficiency gains. States will no longer waste resources reinventing the curriculum wheel, and scaling up education reforms and innovations will be easier. Such standards, however, 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.<sup>67</sup>

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.

#### 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, given that 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 during the Obama administration has been concentrated in comparatively small competitive grant programs, which altogether amounts to less than \$2 billion a year. Title I is gargantuan by comparison, funded at \$14 billion a year. If federal money is to make any dent in unequal spending in education, it will be from Title I. Yet baseline funding has not been boosted. The stimulus package temporarily doubled Title I and IDEA spending in 2009, but sequestration and budget caps decreased each program's annual baseline funding by nearly 7 percent between 2011 and 2015. <sup>68</sup> Existing Title I regulations could also be streamlined to get rid of loopholes that in many cases make local funding inequalities worse. <sup>69</sup> Moreover, little is known about how Title I money is spent in individual schools, which is where the money has a direct impact on low-income students.

Although states have been given more power and flexibility under recent legislation, the federal government has been pushing for workable accountability systems: trusted and accurate teacher evaluations, common standards for comparison, and data systems holding everything in place. This 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 fewer resources are available 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. 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 16 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 long-standing 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. All students and their families can claim tax benefits.

The federal cost of postsecondary student aid and tax expenditures has risen dramatically over the last decade and is roughly twice what the federal government spends on K–12 education. <sup>72</sup> 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.



#### Difficult Arithmetic





College

K through 12

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

The United States spends more money than most countries on its education system.



1967



2006

Real per-student spending gap between the least and most selective colleges

But the gap in spending between the least and most selective colleges has increased.

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 \$31 billion in 2015, Pell Grants are by far the largest federal student grant program and the single largest component of the Department of Education's budget. The Students qualify if their family income is under \$60,000. Award size varies based on income and tuition costs, but the maximum is \$5,775 for 2015–2016. About eight million students received Pell Grants in 2015.

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 an interest rate roughly half of a comparable private loan, and are variable, or pegged to market interest rates.<sup>74</sup> Means-tested subsidized Stafford loans come with a lower interest rate and more flexible repayment terms. Roughly 40 percent of all undergraduate students take out federal loans. <sup>75</sup> In 2015, outstanding federal student loans (both undergraduate and graduate) totaled about \$1.1 trillion, with about \$100 billion of new federal loans taken out every year. <sup>76</sup> Although graduate students constitute less than 20 percent of all postsecondary enrollment, they shoulder 40 percent of all federal student loan debt.<sup>77</sup> The cost of the federal student loan program fluctuates year to year depending on changes 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. 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 extended benefits to upper middle—income families. In 2015, postsecondary tax benefits cost the federal government \$32 billion.<sup>78</sup>

#### PRESIDENT OBAMA'S POSTSECONDARY AGENDA

Over President Obama's first term, federal student aid increased, and the expansion has benefited higher-income students the most. Costs have risen a great deal; total federal baseline spending on postsecondary education, including appropriations and tax expenditures, has more than doubled since he first entered office. This is the reverse for pre-K, which has remained mostly flat, and for K–12, which saw big cuts from sequestration.

At the same time, the Obama administration is spearheading the first serious attempt at making the postsecondary schools that are most dependent on federal aid, and that 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.

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 weakened 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 has been raised. The costs of the program have therefore risen sharply, with annual baseline funding nearly twice the amount it was a decade ago. <sup>79</sup>

In response to skyrocketing costs, Pell availability has been cut. Early on in the Obama administration, Congress loosened income eligibility and introduced a summer and full-year Pell Grant program. Since 2010, as a cost-saving measure, the expansions were 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 in the 1970s.

Where student aid policy has become more generous—such as debt repayment and forgiveness—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 the maximum provided to low-income students through Pell Grants (\$23,100) to obtain a college degree in four years. Enrollment in the Income-Based Repayment Plan has risen fast, doubling between 2013 and 2015, so that 25 percent of those eligible are now participating. The current annual cost to taxpayers is huge, about \$11 billion a year. The costs will be many times greater if all graduate students enroll.

Postsecondary tax breaks have also 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. Now they total more than \$34 billion.

The 2009 stimulus bill's American Opportunity Tax Credit 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. <sup>83</sup> And there is little evidence that tax breaks make any difference in a student's decision to go to college. <sup>84</sup>

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, half as many college students took out federal student loans. State financial aid has fallen off, making students more reliant on federal dollars. This is even truer for low-income students, given that the aid that states offer is increasingly merit-based instead of need-based.

The federal government cannot afford, however, 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 more than twice as high, or close to \$80 billion. 88 Yet the Pell Grant program has historically struggled to meet its obligations, surviving year to year on emergency stopgap measures. A rare surplus in recent years means the program will be funded through 2017, but in 2018 new funding solutions will have to be found.

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.

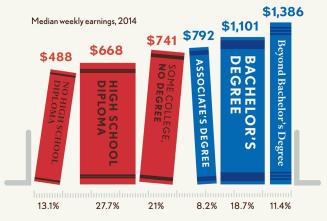
The best long-term solution is to rein in tuition costs and ensure federal dollars are better spent educating students in line with the needs of the economy. The Obama administration has been trying to push in this direction, leading the first serious effort to increase accountability in postsecondary education.

Initial push for accountability: transparency and the gainful employment rule. Transparency has been the federal government's main tuition costcontrol 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 to receive accreditation. Now efforts are under way 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. President Obama had pledged to rank colleges based in part on whether students do well in the labor market, or instead borrow heavily to land low-paying jobs. But after fierce resistance from colleges, the administration backtracked on the rankings and instead rolled out a website in 2015 as a tool for students to judge institutions on their own. 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. Because so much federal taxpayer money at stake, critics insist, the

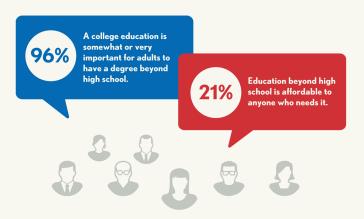






Percentage of all adults over 25

More education leads to higher incomes.



The vast majority of Americans see the value of a college education, but a minority think students can afford one.

federal government should be pressuring colleges to offer better value for their services or to better prepare students for jobs.

In a big shift, the U.S. government is set to begin holding a small number of postsecondary institutions more accountable through the gainful employment rule put into place in 2015. For the first time, the federal government will impose consequences on institutions that charged students more than the labor market indicates a program or degree is worth, or where the debt burdens are higher than graduates' 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.

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 since they favor 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. <sup>89</sup> They serve more low-income and minority students who tend to be less ready for college, but simple arithmetic suggests they could be offering better value to their students and taxpayers. Forprofit 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.

The 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. <sup>90</sup> 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. Six states now include student labor market outcomes in their funding formulas, and several formulas also reward completion rather than enrollment.

Some advocates for cheaper postsecondary education hope that online education will shake up the higher education market and deflate the tuition bubble. Institutions like the University of Phoenix have been offering discount online courses and degrees for about a decade, although with no appreciable effect on college tuition. 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 institutions including Harvard University, the Massachusetts Institute of Technology (MIT), and the University of California, Berkeley, entered the MOOC market.

But MOOCs are unlikely to do much to improve higher education outcomes. The students who need the most help also tend to have the least motivation. Remote or online learning in community colleges without a teacher checking in has been ineffective. <sup>91</sup> And 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. <sup>92</sup> 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, even calling for nationwide free community college education. Obama's positive spin on community colleges from the bully pulpit may be one reason why public opinion now gives community colleges high marks in value for cost. 93 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.

But 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. <sup>94</sup>

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 facilitating 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. 95

#### 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 assistance to low-income students 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.

However, no concrete changes have been made to reward students or institutions for on-time 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.

As policymakers strengthen accountability, they should guard against the danger that it 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 should 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 playing 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. <sup>96</sup> This is much less the case with tax incentives, which are poorly targeted at low-income students, given that they tend to have no or little tax liability. <sup>97</sup> 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. <sup>98</sup>

#### **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 for federal education policy. Linking funding to quality is more important than ever, 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 wealthy. 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.

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