**Chapter 12a. Primary and Secondary Education[[1]](#footnote-1)**

**Platform Book 2014 – 2023**

Introduction to the Platform Book

This book is an abbreviated introduction to the subject. It is the product of literature review on the subject over an extended period with articles selected representing varying views on a variety of related topics. These articles are extracted, condensed, and compiled into an organized presentation in what is known as the Source Book. This book is extensive and, for that reason, and in order to present the topic in a form more likely to be read and used as a platform for a public town hall and then for ongoing dialogue, summarized into this shorter format. This abbreviated summary is known as a Platform Book. Both books are available on the Center for Citizen Impact website.

For readers of the Platform Book wishing to pursue the material further, footnotes for all of the articles reflected in each section are listed by topic at the end of the chapter. These may be used to access particular articles in the Source Book or, going to a website for the original article.

Nine appendices are included in the Source Book, a list of which is attached at the end of this Platform Book.

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**Section I – Introduction**

**The Purpose of Education and Current Picture**

Effective education of young people is the basis for an informed and productive citizenry. Education is at the root of the country’s broader economic challenges, and improvements to the education system offer the solution. But, today, questions arise as to how effective we have become. Students have become more difficult to teach. Teaching has become less attractive as a career, with compensation and social status in relative decline. Education is at the root of the country’s broader economic challenges, and improvements to the education system offer the solution[[2]](#footnote-2).

Learning in our schools experienced a serious fall back during the 2020 -2022 pandemic and recovery rates remain behind the progress occurring prior to the pandemic. Even before the pandemic started, scores showed that only about a third of nine-year-olds in the U.S. were reading at or above grade level. The building blocks of reading include fluency, vocabulary and comprehension, phonics, and phonemic awareness, or the ability to understand and manipulate the individual sounds that make words. These skills were very difficult to teach virtually. Pandemic isolation only exacerbated the situation.

Further, virtual learning and masking in class had denied children a vital stage of development called “social referencing,” where kids observe and mimic the reactions of others in social situations. Kids need to be able to interact with other people successfully, to be able to share and to communicate with others. They can help by listening and modeling model conflict resolution – all not well supported online. If these were not troubling enough, 37% of high school students struggled with mental health issues during the pandemic, rates even more alarming for girls. Students struggling with mental health issues are twice as likely to drop out.

More than three years after the pandemic learning loss, poor student mental health, teacher shortages, and the rapid pace of technological change will shape the education sector for years to come and societal costs could amount to more than [$28 trillion](https://learningpolicyinstitute.org/product/state-teacher-shortages-vacancy-resource-tool?gclid=Cj0KCQjwy4KqBhD0ARIsAEbCt6j-OYA6toeXDHmDJQY6k8jPEmMP-rgjxFiLusV3_OB69n7B_6XNVGwaAvn1EALw_wcB) over the rest of this century.

Toward the end of the pandemic, one state made tremendous progress in helping students accelerate their learning so they could start this school year ready to hit the ground running through [Summer Learning Labs](https://www.indysummerlearninglabs.com/), a free summer learning and enrichment program focused on catching up on lost learning opportunities. In addition to providing high-quality curriculum and instruction from dedicated teachers and coaches, the program also sought to provide students with plenty of outlets for play and extracurricular exploration and included an effort to close achievement gaps for minority students. Those who attended the Summer Learning Labs saw a 20-percentage point increase in basic and proficient scores in English and language arts and a 27-percentage point increase in the same scores in math. High-quality summer learning programs should continue to come at no or low cost to families, with breakfast and lunch included, so that barriers are removed for low-income families.

Additionally, intensive tutoring is widely regarded as an effective but costly way to improve educational outcomes. The Center for American Progress has proposed creating an [Opportunity and Counseling Corps](https://www.americanprogress.org/issues/education-k-12/reports/2020/08/10/489168/opportunity-counseling-corps-helping-k-12-students-young-adults-recover-coronavirus-crisis/) to hire tens of thousands of recent high school graduates, college students, and other community members to help serve students in high-poverty schools through tutoring.

Some authors argue that American youth fail to develop basic knowledge and skills because of electronic devices and other bad influences, others that the big problem is the lack of much improvement in high school, which cannot counteract the hours teens pile up on screens in leisure time.

All too often, parents are not involved, and teachers are fudging test scores. And, finally, teachers and principals say the threat of being sued has changed the way they operate. Somehow, we must reduce the threat of lawsuits.

And, finally, the problem of the disruptive child is significant, both for the future of the child and on the adverse impact on the ability to teach the remaining children. Suspension or expulsion are temporary ways to remove a problem but do little or nothing to correct the behavior and help the student get on track toward a successful education and productive adulthood. In-house suspension sites in study hall-type classrooms, managed by “re-engagement specialists", have shown some success, both on behavior and on general academic success for all students.

**Section II – Preschool**

Extending school downward to include younger children has become the most expansive and deeply rooted strategy for improving achievement and reducing the achievement gap. The theory of change for public investment in preschool is that enrolling children in an educational program before they enter elementary school can help them develop the skills they need to succeed in kindergarten and can thus set children on a trajectory for school success.

Preschool programming can take many forms. Only programs that meet high quality standards have shown long-term effects. States have many policy levers to affect quality, including program licensing standards, teacher, and administrator credentialing standards along with ongoing resources to support effective teaching, child learning standards and assessments, program quality monitoring systems, and curriculum guidance.

Policies related to preschool should not be considered in isolation. If teachers in the upper grades do not build on what children learned in preschool, the benefits will fade. States can help sustain benefits by making sure that learning standards, program standards, curriculum, assessments, and teacher credentialing are aligned across preschool and the early grades.

* **PRIVATE PRESCHOOL –** Families that enroll their children in private preschool have, on average, higher incomes than families that enroll their children in public programs. Although academic-focused private preschools exist, most focus primarily on social development and socialization — giving children an opportunity to learn how to get along in a setting with peers — as well as general cognitive development, including communication and problem-solving skills.
* **PUBLIC PRESCHOOL –** Because some families cannot afford private programs, public funds are needed to make preschool accessible to all children. Low-income children benefit from being in programs with more economically advantaged peers. State and locally funded programs have followed the federal government’s first expansive public preschool, Head Start whose clear and ambitious goal: to reverse the cycle of poverty, reflecting beliefs about the academic and life skills required to escape poverty. Despite opposition, the program has survived and in fact grown with bipartisan support.

**State and Local Preschool –** State-funded and locally funded preschool goals focus primarily on kindergarten readiness. Few offer the health and social supports for children and families that Head Start offers. Because preschool among middle-class four-year-olds was becoming the norm children in families that could not afford tuition-based preschool were at a disadvantage. There were significant concerns about the inadequacy of public education and frustration from failed reform initiatives at the K–12 level. Most of the publicly funded state preschool programs have targeted children from low-income families in a mixed-delivery system, which can include public schools, Head Start, private preschools, and family childcare homes.

**Universal Preschool –** Since the early 1990s, interest in universal programs available to all four-year-olds has increased, encouraged in part by research finding preschool benefits for nonpoor as well as economically disadvantaged children. Children from low-income families make greater gains in programs with more affluent peers than in segregated programs. De facto segregation will continue, but children from low-income families are not officially segregated where universal preschool is available.

**ISSUES AND CONTROVERSIES**

* **Community versus school-based programs –** Advocates of placing preschool in public schools argue that it is the most efficient, contributes to alignment in curricula and teaching between preschool and the early elementary grades. Alignment with kindergarten is difficult when children come from different preschool contexts, and the public school they enter has no authority over the standards, expectations, curricula, and other policies at the preschool level. Another argument for public schools is that they have an infrastructure, including back-office support.

But critics expect school-based programs to “push down” from higher grades an emphasis on academics that is developmentally inappropriate for young children. They also worry that K–12 schools are less likely to communicate with and involve parents, a central principle of Head Start and many non-school-based programs. And there is evidence that public school–based programs often have higher child-to-teacher ratios than recommended for young children.

There are some practical reasons for mixed-delivery systems, but ensuring quality is more challenging than in a more centralized system and requires considerable attention to equity in quality, including pay equity for comparably educated teachers.

* **Defining and Measuring Quality –** There are three primary levers for ensuring quality: (1) state preschool program licensing standards, including teacher-to-child ratios and teacher credentialing requirements; (2) monitoring of programs that have been licensed; and (3) resources for improvement, such as teacher professional development.

Two categories of quality are included in most state preschool program licensing standards and monitoring systems. The first involves “structural” indices that can be relatively easily regulated and measured, such as teaching credentials, teacher-to-child ratios and group size, and safety aspects of the physical environment. The second involves “process” variables e.g., the learning environment and the interactions between teachers and children and among children.

There is fair agreement on what constitutes quality regarding teachers’ general interactions with children. Research evidence indicates the value of (1) an overall classroom climate or tone that is emotionally warm, accepting, and supportive; (2) positive, proactive, and consistent classroom management practices that include more affirmation and warmth and fewer disapproving and behavioral controls; (3) educators’ positive, non-conflictual relationships with individual children; and (4) explicit modeling, teaching, and scaffolding of social-emotional skills.

There is emerging agreement as well that effective teachers need to engage in bias-free and culturally responsive teaching.

* **What Should Preschoolers Learn? -** Most educators believe that preschool should attend to multiple domains of development— that is, the whole child. Proponents argue that even learning basic academic skills requires self-confidence and self-regulation skills, such as paying attention, as well as the social skills required to avoid wasting learning time engaged in conflict with peers or the teacher.

On the other hand, the accountability movement, instantiated in No Child Left Behind, created pressure for preschools to emphasize academic skills. School districts became focused on raising scores on standardized achievement tests, and many believed that starting early would help them achieve that goal. Current evidence that young children are able to develop foundational literacy and math skills supports advocates’ attention to academic skills, as does evidence that early literacy and math skills when children enter kindergarten are highly predictive of reading and math achievement in school.

**CHALLENGES TO QUALITY –** The most significant obstacle to quality is cost, and the critical variable is the teacher. But both come with costs. Teacher pay affects quality indirectly through its effect on the economic stress teachers experience, their classroom behavior, and ultimately, turnover.

**IMPACT –** Studies long into adulthood show many long-term benefits of preschool, including higher high school graduation rates, higher earnings, and lower arrest rates. A Brookings Institution study concluded:

* Greater improvement in learning at the end of the pre-K year for economically disadvantaged children and dual-language learners than for more advantaged and English-proficient children.
* Pre-K programs are not all equally effective. One factor supporting early learning is a well-implemented, evidence-based curriculum. Coaching for teachers as well as efforts to promote orderly but active classrooms may also be helpful.
* Children’s early learning trajectories depend on the quality of their learning experiences not only before and during their pre-K year but also following it.
* Children attending a diverse array of state and school district pre-K programs are more ready for school at the end of their pre-K year than children who do not attend pre-K. Improvements in academic areas such as literacy and numeracy are most common; the smaller number of studies of social-emotional and self-regulatory development generally show more modest improvements in those areas.
* Convincing evidence on the longer-term impacts of scaled-up pre-K programs on academic outcomes and school progress is sparse but often shows that improvements in learning induced prior to kindergarten are detectable during elementary school. But studies also reveal null or negative longer-term impacts for some programs.

**Section III – Primary Education (Grades 1-8)**

1. **Schools**
2. **General**

The discussion of varying approaches to primary education is fraught. A 2022 statement characterized the education system under incredible strain, characterized by:

* **The steepest drop in school enrollment since 1943**
* A “catastrophic teacher shortage”
* Funding cuts to public education resulting in programs receiving $7 billion less than they had a decade previously.

It proposed a historic $40 billion investment to strengthen children’s mental health care, invest in low-income, rural and urban communities, increase special education funding, teacher training, integrated supports, and provide free school meals.

Culture wars are roiling our schools, with pitched battles at board meetings over Diversity, Equity, and Inclusion programs, sex ed curricula, and even the books stocked in the library. Given that schools prepare students for the real world and will inevitably reflect cultural values and wade into controversial topics, they have always been, and will always be, magnets for disputation. But the current level of divisiveness is making it hard to implement even common-sense strategies in our schools.

Consider Social and Emotional Learning (SEL). Academic learning requires schools not just to attend to *what* content students learn, but *how* they learn it and whether they have the social and emotional skills—as well as the health, nutrition, and personal well-being—that enable them to focus, stay motivated, and work well with others.

For example, teaching elementary students to read means helping them understand their strengths and areas of growth, developing strategies for coping with frustrations and seeking help, and building an understanding of different perspectives and new ideas. These are all social and emotional skills.

### We should take parents’ worries seriously and make clear that SEL (social-emotional learning) goes hand in hand with character, self-discipline, and good citizenship. It’s not an attempt to foist any particular ideology on students and their families. Then we can get back to priority number-one—addressing students academically, while also supporting them socially and emotionally.

In a September 2022 public statement, Deborah Weinstein, Executive Director of the Coalition on Human Needs, said that students had suffered enough and that it was time to invest in their future. She supported a proposed historic $40 billion investment in education that would strengthen children’s mental health care, invest in low-income, rural and urban communities, increase special education funding, teacher training, integrated supports, and provide free school meals.

Two respected educators note that political discussion today has become problematic and, sadly, has even reached K-12 education, a policy area that not so long ago still managed to bring the two parties together. The culture wars are roiling our schools, with pitched battles at board meetings over Diversity, Equity, and Inclusion programs, sex ed curricula, and even the books stocked in the library.

Disagreement isn’t a problem in and of itself. As we teach students in civics classes, our democratic institutions are there to resolve differences of opinion peacefully and constructively. And given that schools prepare students for the real world and will inevitably reflect cultural values and wade into controversial topics, they have always been, and will always be, magnets for disputation.

What’s concerning, though, is that the current level of divisiveness—often fueled by national media narratives, single-minded politicians, and cynical campaign strategists—is making it hard for educators to roll up their sleeves and do the work at hand. Simply put, the culture wars are making it hard to implement even common-sense strategies in our schools.

Consider the example of Social and Emotional Learning (SEL). The term is relatively new, but the concept is not. The expectation that students learn to practice self-regulation, navigate social situations, and empathize with others has been around since the beginning of education. Academic learning requires schools not just to attend to *what* content students learn, but *how* they learn it and whether they have the social and emotional skills—as well as the health, nutrition, and personal well-being—that enable them to focus, stay motivated, and work well with others.

For example, teaching elementary students to read means helping them understand their strengths and areas of growth, developing strategies for coping with frustrations and seeking help, and building an understanding of different perspectives and new ideas. These are all social and emotional skills.

### And parents get it. We should take parents’ worries seriously and make clear that SEL (social-emotional learning) goes hand in hand with character, self-discipline, and good citizenship. It’s not, in most places at least, an attempt to foist any particular ideology on students and their families.  And then we can get back to priority number-one—addressing students academically, while also supporting them socially and emotionally.

1. **School Management**

# To consider education today, and advance true progress, one must deal with the increasingly confrontational nature of school oversight, beginning at the board level. Despite current visible initiatives, there has been a strong movement advancing parental engagement in education for several decades. In today’s confrontational world, two differing proposals have been offered dealing with the role of parents in children’s education.

# 1) One focused on public transparency around education content (e.g., curriculum, library books, and teachers’ materials such as manuals and videos they may use in the classroom) and resources (e.g., school budgets and special programs like gifted and talented) and on parents’ rights to participate—from meeting their students’ teachers (at least two times per year) to having their voices heard at school board meetings and in planned parent engagement activities.

# 2) The other focused on the importance of inclusive public education for democracy, citing the importance of providing well-rounded education that includes not just arts and humanities but attention to children’s mental health and well-being through sufficient school counselors as well as the importance of teaching American history that includes both the difficult and encouraging elements and calls for school to be welcoming and supportive to all families and students including those with disabilities and belonging to the LGBTQI+ communities.

*While differently focused, a combative approach to wage political and cultural wars on school grounds is decidedly unhelpful to the type of family-school collaboration that robust evidence shows makes education better and helps our children (Emphasis added)*.

1. **School Maintenance**

On average, American schools are more than 40 years old, at or near the end of their serviceable life without significant upgrades. The annual gap between what it would cost to keep public schools in good condition and what is available to them has been estimated to be [$85 billion](https://static1.squarespace.com/static/5a5ccab5bff20008734885eb/t/618aab5d79d53d3ef439097c/1636477824193/SOOS-IWBI2021-2_21CSF+print_final.pdf). A recent [study](https://www.gao.gov/assets/gao-20-494.pdf) by the Government Accountability Office found that 4 in 10 districts have outdated heating, ventilation and air conditioning systems in at least half of their schools.

About eight years ago a consulting firm hired by Prince George’s County, Md. (PGCPS), The County Council, and county executives to assess deferred maintenance estimated the cost of needed upfitting at a daunting: $8.5 billion just to get them up to standard. Following recommendations from the consultant, the working group settled on a [public-private partnership](https://www.governing.com/archive/gov-public-private-popular.html) (P3) payment mechanism strategy bundling construction of six new school buildings into a single P3 school effort offering an alternative to issuing school bonds.

A Maryland [21st Century School Facilities Act](https://mgaleg.maryland.gov/2018RS/Chapters_noln/CH_14_hb1783t.pdf) allowed the county board to contract with private entities for design-construct-maintain-finance for five middle schools and one K-8 facility. The contract for the schools is on a fixed-price basis and a fixed schedule and risks associated with schedule and cost is the partnership’s, not the county’s. Additionally, Honeywell is required to provide any capital improvements necessary to keep buildings in good working order over the 30-year term of the Phase 1 contract and ensure the buildings meet specified standards when they are turned over to PGCPS after it has made its last payment.

PGCPS estimates that it saved nearly $400 million in construction costs. The district is obligated to ensure that the six schools meet prescribed availability standards for uptime. Provided the standards are met, the district pays.

Phase 1 was expected to create more than 4,000 jobs during design and construction. PGCECP was required to allocate at least 30 percent of the contract dollars to local and minority-owned businesses. It managed to achieve 35 percent.

Each member of PGCECP was required to provide internship opportunities, including to PGCPS career and technical education students. Gilbane Building also implemented a mentoring program for smaller contractors to ensure they gained experience that would serve them beyond their involvement in the Phase 1 project.

Cost savings weren’t at the expense of features that might be expected in a “21st century school.” The new schools meet [LEED (Leadership in Energy and Environmental Design), silver](https://www.usgbc.org/leed) green building standards, and solar arrays are coming to school roofs. Up to date attributes of new schools include: a video production studio, a [STEAM](https://onlinedegrees.sandiego.edu/steam-education-in-schools/) lab, interactive boards in every classroom, voice projection to reach students that have listening impairments open concept media centers and pullout spaces throughout the schools that allow for different types of teaching modalities, and reading nooks and outdoor learning spaces. Energy-monitoring dashboards allow students to see real-time data on electricity, water and natural gas consumption. Tubular skylights and other daylighting features spread daylight deep into classrooms. Walls and windows are designed to reduce ambient noise. Wireless connectivity extends throughout the schools and to outdoor learning spaces.

1. **Education Finance**

Education funding in the United States relies primarily on state and local resources, with just a tiny share of total revenues allotted by the federal government. Most analyses of the primary school finance metrics—equity, adequacy, effort, and sufficiency—raise serious questions about whether the existing system is living up to the ideal of providing a sound education equitably to all children at all times.

**Our current system for funding public schools shortchanges students, particularly low-income students.** Districts in high-poverty areas, which serve larger shares of students of color, get less funding per student than districts in low-poverty areas, which predominantly serve white students, highlighting the system’s inequity. School districts in general—but especially those in high-poverty areas—are not spending enough to achieve national average test scores, which is an established benchmark for assessing adequacy.

Efforts states make to invest in education vary significantly. And the system is ill-prepared to adapt to unexpected emergencies. **Those problems are magnified during and after recessions** and have both short- and long-term repercussions that are costly for the students as well as for the country. **Increased federal spending on education after recessions helps mitigate funding shortfalls and inequities and could help boost economic recovery.**

The majority of states continue to spend less on education in U.S. K-12 classrooms than they did 10 years ago. Concern is rising regarding the resulting under-compensation of public-school teachers, dilapidated textbooks, and crumbling schools. These cuts affect school inputs, from teacher salaries to student resources and also have significant impacts on critical outcomes such as student achievement. It is time for states to increase funding for K-12 public schools. In addition, [the federal government](http://app.mx3.americanprogressaction.org/e/er?s=785&lid=202621&elqTrackId=7dd9623dcfd044ba85cb49a13c5ff153&elq=0c803578f7844d709f76ac412a9cdc56&elqaid=38662&elqat=1) should reject efforts to cut funding and instead expand existing funding streams. If education is truly to be an engine of opportunity and economic mobility, both states and the federal government must invest far more in the communities that need resources most, but with associated high expectations and accountability.

These are not the only issues hampering public-school funding. A good case can be made that the real culprit underlying the tightening of school budgets is expanded Medicaid coverage and ballooning unfunded pension obligations.

**We need an overhaul of the school finance system.**To establish a robust, stable, and consistent school funding plan that supports all children, investments need to be proportional to the size of the problems and to the societal and economic importance of the sector. A larger role for the federal government would help establish a robust, stable, and consistent school funding plan that channels sufficient additional resources to less affluent students in good times and bad. Furthermore, spending on public education should be retooled as an economic stabilizer, with increases automatically kicking in during recessions. Such a program would greatly mitigate cuts to public education as budgets are depleted, and also spur aggregate demand to give the economy a needed boost.

A *different approach to funding local schools:*

The pandemic [erased more than two decades of progress](https://www.nytimes.com/2022/09/01/us/national-test-scores-math-reading-pandemic.html?campaign_id=60&emc=edit_na_20220901&instance_id=0&nl=breaking-news&ref=headline&regi_id=67731175&segment_id=102921&user_id=c128c0116406d8c4d20d6f10f29604fe) in reading and math for 9-year-old students. School funding, already thin, was badly stretched by the demands of the Covid-19 pandemic, including distant learning, distributing instructional material and, in some cases, food, achievement assessment and even internet equipment and wi-fi access points. The effect was most profound for students from low-income communities—exacerbating the pre-pandemic achievement gap between those students and their higher-income peers.  As a result,

Too often, low-income, black and Latino students have ended up in schools with crumbling walls, old textbooks and unqualified teachers Additional costs will be associated coming out of this situation. Given the increased costs for schools and the enormous hit taken by both state and local governments, the federal government – despite its own fiscal problems – will have to consider how it may step in to help schools weather this crisis.

School funding, 92% of which comes from local and state funds, has significance especially for schools in less affluent neighborhoods. The fact that local funding is heavily related to property tax income contributes directly to inequity as real estate in these disadvantaged districts produce significantly less revenue. The lingering effects on children and learning are unfortunately still very much with us. ​​​Federal relief funding is helping, and large cities and counties have committed over $9 billion for K-12 education and related purposes, including after-school programs and programs for students’ emotional and mental health needs.  But I[n nearly half of all states, affluent districts still receive more funding for their schools and students than poorer districts](http://app.mx3.americanprogressaction.org/e/er?s=785&lid=203021&elqTrackId=0d5274d60f2e4124a24115f22164fea1&elq=696ec81954c54e6fa8be2f1b54c6d3c9&elqaid=39007&elqat=1). And money alone isn’t enough. Now is the time for local leaders to not only invest *more* in families and communities, but to invest *differently*. A model focused on leveraging and coordinating the resources and voices of the entire community to support a rigorous educational experience for all children could be one of the best ways for mayors and other local officials to confront both types of challenges.

The system should:

* Focus on both funding levels and equal access to resources shown to be fundamental to a quality education.
* Ensure equal access to quality core educational services as the driving goal of an equitable education financing system.
* Provide significant additional resources for low-income students. Weighted student funding should help to attract highly qualified teachers, improve curriculum, and fund additional programs such as early childhood education in high-poverty districts.
* Be accompanied by outcomes-based accountability schemes that ensure students are prepared for college or career upon graduation.
* Return investments in public education to pre-Great Recession levels, and maintain or increase the federal investment in programs that support students with the greatest needs.

On average, [increasing per-pupil spending by $1000 increases test scores, graduation rates, and college-going rates](https://connect.brookings.edu/e2t/tc/VWXtpm3LK_p2W70clpC6KvvCBW3fCDQw4nML65N3_3-Hf3p-F5V1-WJV7CgPLSN1BjXLDRhnXNW5BRmmb5Mw3XwW2vsbtm8yGRHcVVTbv85MmQRlW56_lJQ12brw-W63Kb9Y6bfvS5W7CsWJY491-92W10pld65Qj452W6PJ46G8cQHLhW3J8Jhr45PxRZW794Xhs6WwRc2W35fCpB2LVdV5W7rrXGl2BybXGM7GVG7g1t_fN1j3TgN76z-5W58R4Y31hSDYWN7fmQYmss8HtW2ZP8Jx5w8wNrW94gmTJ4x-xhJW91N_v86KJTsG3jQ61), with the greatest effects for low-income students. The Century Foundation estimates that the United States is underfunding our public schools by nearly $150 billion annually.

Money *can* make a difference in education, but it has to be spent at the right time and on the right students, i.e., it goes to educate the students who need extra help the most. National data show that careful investments — in initiatives such as high-quality preschools and small class size in elementary school — can pay off. Targeting children from low-income families can change the trajectory of their lives.

1. **The education environment**

**Parents and Home**

The origins of success in education are many, but none more important than the families from which students come. While nonprofit programs fostering reading skills are available across the country, involving parents with little personal education directly in the education of their children can offer benefits to both the children and the parents. [Engaged parents and a stable family](https://www.researchgate.net/publication/241747146_Effects_of_Parental_Involvement_and_Family_Structure_on_the_Academic_Achievement_of_Adolescents) are far more important than schools and teachers to a child’s academic achievement. But, welfare reform of the 1990s that substantially and permanently retracted cash assistance to poor mothers in the U.S. [reduced the amount of time parents spent with their children](https://connect.brookings.edu/e2t/tc/VWsQqj4DLYGFW188-mY83b8sBW1k1H6J4jRQM-N26s5_Q3p-F5V1-WJV7CgCBDVm9mwj2tG_bWW19XVmx35qQFNW5FS3X_777dpyN8RtsCKsjPBMW6LLQ496pqqPTW75h8w-92DLMGW11nwgK7MdBgLW7qWs385xrTDWW1ft0vW4XPxB2W6vQN_73KS30_MWyVYXFCbYlW1mxXh04Dq-s_W5z42bJ3Gv5pyW3DhQvJ3N8k44W2BZB976_2Hc_W7Ky9Wq6qS_czW7q_lLj1Dn6fxW4Rn7gn3lwM6tTDHTC4nyqZxW2Fv85w668kRk3pZ11) and had adverse effects on the quality of their relationship. Public policy must enable parents and community leaders to serve their schools, districts, and community more efficiently and effectively. Parents are the most important teachers of values to their children. Children benefit when they see their parents engaged in their education.

Some of the blame for the absence of a supportive home environment may be laid at the frequent lack of a two-parent home, not necessarily totally driven by socio-economic factors, though they are contributory. Some feel that government handouts to single-parent families are a part of the problem. Their concern is that random kids by random fathers frequently occur because, they allege, the kids are only the conduit to the checks. While this is certainly not true for all families (some of whom reject this trend), it may be widespread enough to contribute importantly to the awful statistical literacy failure.

Also, early childhood maltreatment is associated with significantly lower academic outcomes and consistently linked to a broad variety of negative life circumstances including poverty, juvenile delinquency, adult crime, low academic achievement, substance abuse, mental disorders and poor health. State officials should design and implement systems to allow for easier and timelier sharing of data on child maltreatment and/or foster care placement between the education system and the child welfare system to identify students at risk of academic difficulties and provide support for these children. Schools or districts with especially high rates of child maltreatment should collaborate with social service agencies to implement programs specifically aimed at addressing this problem.

Parents and families must put down their weapons and show up to the discussion with schools ready to engage constructively. But in turn, educators need to step up to do their part in fostering relational trust. B[etter collaboration](https://www.brookings.edu/essay/collaborating-to-transform-and-improve-education-systems-a-playbook-for-family-school-engagement/) between parents and community members on the one hand and teachers and schools on the other could affect students’ learning and development. Evidence of the importance of relational trust was confirmed in a rigorous [10-year study](https://www.ascd.org/el/articles/trust-in-schools-a-core-resource-for-school-reform) across hundreds of schools that parent-school relationships characterized by respect, personal regard, integrity, and competence were one of the key drivers of improving academic outcomes and student well-being.

There is a need for deep dialogue between schools and families, a key component of building relational trust. Developing relational trust is decidedly a two-way street. Education decisionmakers, school leaders, and teachers need to work closely with parents and community members despite coming from different worlds and discussing different topics among themselves and rarely engaging with each other. But one of today’s biggest threats to improved family-school collaboration is the growing [antagonism](https://www.nytimes.com/2021/08/18/us/schools-covid-critical-race-theory-masks-gender.html) parents are using to engage with educators and schools. This crushes relational trust and undermines the very goal activist parents want—more collaboration.

The way to navigate complex differences in a pluralistic society is by deep dialogue between communities and schools, something relational trust makes possible. Actors at all levels have a role to play, including parents and families, educators, teacher training institutions and the education departments that oversee them. State and districts can also put in place explicit initiatives to foster relational trust.

For support, the free-to-use Brookings [Strategy Finder](https://www.brookings.edu/essay/collaborating-to-transform-and-improve-education-systems-a-playbook-for-family-school-engagement-strategy-finder/) curates the most promising family-school engagement strategies from around the U.S. and the globe. There are also promising practices in sister jurisdictions, such as Connecticut and also Colorado, which have developed a [holistic framework](https://www.cde.state.co.us/familyengagement/p12fscpframeworkusersguide) for assessing and evaluating how districts and schools are doing in fostering family-school partnerships.

The stress of an over-protective and excessively pushy parent is associated with more emotional and behavioral problems among children and adolescents and could ultimately do more harm than good, introducing children to anxiety rather than sheltering them from it. The message is: be supportive, open doors, teach good habits, values and realistic goals and then be happy with and for the child.

On the other hand, parents can also be a useful resource. In addition to being choosers of the school for their children or helpers in the work of school improvement and educational betterment, an important role might be to make parents “co-strategists” with greater “voice” (e.g., on parental advisory committees) —and heeding it on issues from “differentiating instruction” so advanced kids aren’t bored and struggling kids aren’t left behind, getting youngsters more exercise and healthier school meals, etc. Charters have shown the way with parents on their boards.

There are a variety of explanations for poor performance. One is investment. Twenty-nine states were spending less on education than before the Great Recession of 2018. And there are other factors, e.g., obtaining a driver’s license and opening the world, and children being raised by grandparents. As families, primarily in the lower income groups, have both parents working the question can be raised whether grandparents or other caretakers are as likely to provide tight control of activities and assurance of home study.

**The neighborhood/community**

The impact of neighborhoods, exposure and mentoring on achievement and on career path, has been well documented. Growing up in an impoverished area can [hurt a child’s chances](https://www.theatlantic.com/business/archive/2016/12/equality-of-opportunity/510227/) of achieving many of the pieces of the American Dream. Living in certain neighborhoods makes it less likely that a child will attend college, that they’ll earn more than their parents did, and that they’ll postpone having children until they marry. If children have exposure to more types of people, the people they think of as their peer group changes, and they might be more likely to pursue a career that is dominated by people who don’t look like them. That will help them succeed individually, and it could have a positive effect on the economy as a whole.

**The relationship between schools and neighborhoods runs in both directions.**

Research consistently [shows](https://pubs.aeaweb.org/doi/pdfplus/10.1257/pol.20190257) that a neighborhood’s overall well-being and localized school performance go hand in hand. Children raised in disinvested communities where residents’ overall well-being is poor—measured by factors such as high rates of [poverty](https://link.springer.com/article/10.1007/s10901-015-9460-7), joblessness, [physical disorder](https://publichealth.msu.edu/news-items/research/241-school-s-neighborhood-environment-affects-academic-outcomes), and [violence](https://academic.oup.com/sf/article-abstract/95/1/133/2427687?redirectedFrom=fulltext&login=false)—generally have lower levels of academic achievement, [including lower high school graduation rates](https://www.journals.uchicago.edu/doi/abs/10.1086/684137).

Schools with low achievement levels can, in turn, impact the overall well-being of their neighborhoods. School performance affects families’ decisions about whether or not to live in a particular neighborhood and school district quality is an important factor when buying a home. Strong demand for communities with high-performing schools raises home values and generates wealth and investment in certain areas. But the reverse can also be true in areas where school quality is—or is perceived to be—low.

Given low rates of [neighborhood mobility](https://www.vox.com/2016/6/6/11852640/cartoon-poor-neighborhoods) in the U.S. among low-income residents (particularly [low-income Black residents](https://www.vox.com/2016/6/6/11852640/cartoon-poor-neighborhoods)), those individuals are then more likely to be [concentrated](https://eig.org/neighborhood-poverty-project/) in [underinvested communities](https://eig.org/distressed-communities/) that often have their own [underperforming schools](https://www.childtrends.org/publications/5-ways-neighborhoods-of-concentrated-disadvantage-harm-children).

Local leaders should champion ‘community schools’ to improve student, family, and neighborhood well-being through a different approach to K-12 education that fosters a *positive*feedback loop between schools and neighborhoods. A community schools strategy “transforms a school into a place where educators, local community members, families, and students work together to strengthen conditions for student learning and healthy development. Together, as partners, they organize in- and out-of-school resources, supports, and opportunities so that young people thrive.” S[six](https://learningpolicyinstitute.org/product/community-schools-equitable-improvement-brief) key practices make for highly effective community schools:

1. **E**​​​​**powering student and family engagement in school decisions**.
2. **Collaborative leadership, shared power, and voice** among parents, students, teachers, principals, and community partners.
3. **Expanded and enriched learning opportunities** through after-school, weekend, and summer programs.
4. **Integrated systems of supports** such as health care, nutrition support, and housing assistance for families.
5. **Rigorous, community-connected classroom instruction**that emphasizes real-world learning and reflects lived experiences.
6. **A culture of belonging, safety, and care**that inspires trust and a sense of community.

It is the synergy among them that makes the community schools approach effective. Such interdependence requires local leaders to undertake new ways of structuring and staffing schools and school systems to sustain effective governance, partnerships, and resources. Beyond the educational benefits, investing in such an approach can also contribute to the creation of more [prosperous, vibrant, and inclusive neighborhoods](https://www.brookings.edu/research/transformative-placemaking-a-framework-to-create-connected-vibrant-and-inclusive-communities/#:~:text=Transformative%20placemaking%20recognizes%20that%20physical,in%20today's%20rapidly%20shifting%20economy.) in several key ways:

***Advancing economic prosperity****.* In addition to strong, high-quality learning environments, some community schools offer adult learning, training, and skills development opportunities both during and after school hours. Others provide convenient access to community health and wellness services​ to ​make it easier for adult residents to successfully find and sustain quality employment. The most effective community schools actively engage [local organizations and businesses](https://www.nccs.org/wp-content/uploads/2021/10/NCCS_BuildingCommunitySchools.pdf), involving them as valuable partners.

***Enhancing the physical environment.*** Community schools provide a familiar, convenient physical venue for expanded educational activities, community services, and recreational opportunities when school is not in session. A robust community schools model would provide wider access to classroom, auditorium, gymnasium, and outdoor space for both structured and unstructured community use, supported by funding for physical improvements, upkeep, supervision, and quality programming.

***Increasing social capital.*** The community schools approach requires strong family and community engagement for “fostering relationships of trust and respect, building the capacity of all stakeholders and the school, creating empowered decision-making processes, and leveraging local resources and expertise to address educational inequities.” The model aims to build trust between families and schools with the goal of improving student outcomes.

***Fostering civic involvement.*** Finally, the community schools approach to family engagement helps cultivate leadership and relationships that, in turn, can facilitate greater civic involvement such as advocacy efforts to advance broader community goals (e.g., infrastructure, housing), or organizing and leadership skills to respond more effectively to community challenges or unwanted interventions. Investment in community schools can have—a “win-win” that should galvanize school and city leaders to support and scale the model.

**The vital role of mayors and local officials in supporting community schools**

While federal and state policies are critical, community schools can’t succeed at scale without committed *local* leadership—not only within school systems, but also from local officials more broadly.

1. Mayors, city managers, and councilmembers must be champions of family-centered community-building. One approach is through dedicated agencies or [“cabinets”](https://forumfyi.org/work/ccn/) that bring cross-sector systems together around shared accountability for children and families’ success.
2. Local leaders must support community school efforts by directing the involvement of other agency leaders (e.g., parks and recreation, public health, planning, public works, workforce) into this work. It is incumbent upon mayors and city managers to ensure that agency leaders and staff have an explicit responsibility to work together to support the model
3. Finally, city officials need to ensure that community schools efforts are substantially and sustainably resourced. This means encouraging the local philanthropic and nonprofit community to [directly fund](https://www.communityschools.org/wp-content/uploads/sites/2/2022/01/Financing-Community-Schools-2010.pdf)grassroots and other organizations that work with community schools, while ensuring that city agencies’ annual budgets include community schools. Support for community schools creates significant economic benefits in the form of higher earnings for students who graduate from high school, as well as from the fiscal savings that accrue from reduced use of publicly financed social services when those students reach adulthood.

Championing the creation of community schools can help meet the dual ambitions of advancing [school performance](https://files.eric.ed.gov/fulltext/ED606765.pdf) and [neighborhood well-being](https://www.alternet.org/2022/08/community-schools-revitalize-their-neighborhoods/)—and ultimately create more prosperous, equitable, and resilient cities and regions for everyone.

**Race/Ethnicity/Economics**

A significant factor of concern in public education is its unevenness, particularly the differences noted between that available in more affluent districts and that which occurs in lower income, often largely black, districts.

Many African Americans, Latinos, and Native Americans see their children as disadvantaged reflecting the consequences of residential segregation and income inequality by race.

A detrimental factor may be educational gerrymandering. As student populations expand, new schools are built and attendance lines are redrawn. This process can either foster school diversity or exacerbate racial isolation. School officials responsible for rezoning often fail to embrace growing diversity, choosing instead to solidify extreme patterns of racial isolation within high school attendance areas.

Some today argue that selective admission schools are contributing to racial inequity by enrolling a lower percent of minority students than exist in the surrounding community, despite the fact that these schools’ test-based admissions processes are open to all, fairly managed and can identify large numbers of truly qualified whites and Asians. Critics argue that admissions testing should be eliminated and the top students from *each* area school should be admitted to these selective schools without regard to whether they are comparably prepared for the challenges these high-powered schools offer.

Aiming for opportunity for all with equity at the center, the Center for American Progress,  [highlights 5 ways that federal policymakers can take action and set a new agenda for K-12 education:](http://app.mx3.americanprogressaction.org/e/er?s=785&lid=204354&elqTrackId=3e8ac99945c44017b0bf86a9d69a45f2&elq=0c180ff30a434ab1871d7b9f30482eae&elqaid=40488&elqat=1)

1. Applying an explicit race equity lens to policy development
2. Preparing all students for college and the future workforce
3. Modernizing and elevating the teaching profession
4. Dramatically increasing investments in public schools and improving the equity of existing investments
5. Bringing a balanced approach to charter school policy

However, rather than dumbing down the admission process, wouldn’t a better course be to assure *all* the public schools are offering a top-notch education that produces motivated eighth graders who, regardless of race, make good grades and have the requisite skills and knowledge to make the most of what elite schools have to offer? It can be concluded that the issue is *not* with the limitations placed by demands for evidence of academic readiness and potential, but with the abject failure of public schools having large percentages of minority students to prepare them adequately for higher academic challenge and accomplishment. *That* is where minorities are being treated inequitably.

1. **Basic Learning**

**Structure**

Schools can facilitate quality by focusing on things that matter, including providing good books, space for children to play, and teachers who have both real credentials and caring ways of relating to kids and a welcoming and inclusive environment where teachers, administrators, students and families cultivate trust in one another. Perhaps most of all, it should include time to think, to create and to share. Students need time to learn, and their teachers do too.

A creative approach to finding available time is to hold exploration meetings during which school leaders and teachers with particular expertise. In schools where teachers get together to share their experience, knowledge, and skill with their colleagues and explore important questions and help coordinate and improve instruction across the school, student achievement is higher and teacher retention is better.

In another creative example, school administration and parents partnered to chaperone different grade-level groups of students on field trips over the course of several days. They were able to provide not only a novel learning experience for students, but also time for teachers to get together to co-design and align meaningful performance assessments with curriculum units. Professionals need time together, to do work together.

At a minimum, schools need to find regular and realistic ways for teachers to find time to collaborate to solve certain problems together that they can’t solve separately. If teachers have genuine and ongoing learning opportunities, they can improve opportunities for student learning.

Increasing the nutritional quality of school meals also appears to be a promising, cost-effective way to improve student learning, even without accounting for the potential short- and long-term health benefits.

**Reading** – **Getting off on the right foot**

Developing literacy is a fundamental requirement for educational success. The need to teach children to read for by the third grade and the consequences for those who cannot read (particularly without comprehension and understanding) can result in poor school performance, behavior problems, low self-esteem, drop-outs or even on welfare or the criminal justice system. And, in adulthood illiteracy directly affects an individual’s employment options, likelihood to live in poverty, likelihood to be incarcerated, access to adequate health care and health outcomes, and life expectancy. The wide-ranging [consequences of functional illiteracy](http://ijariie.com/AdminUploadPdf/The_Economic_and_Social_Cost_of_Illiteracy__An_Overview_ijariie1493.pdf) include large-scale political disengagement; aggregated economic loss in the form of suppressed GDP; greater dependency on social welfare programs; and higher incarceration costs. Responses could include:

1. Identify and address [undiagnosed reading disabilities](https://dyslexiaida.org/dyslexia-basics/) such as dyslexia or other brain-based learning difficulties as early as kindergarten and ideally before the second grade.
2. Incorporate science of reading into the classroom. Comprehensive Literacy State Development (CLSD) grants support literacy from birth to 12th grade among school districts and nonprofits with “[a demonstrated record of effectiveness](https://www.federalregister.gov/documents/2020/04/03/2020-07014/applications-for-new-awards-comprehensive-literacy-state-development-program)”.
3. *Interventions* –
   1. The U.S. Department of Education should include grant application guidelines on how to utilize CLSD funds to specifically support effective local literacy programs.
4. The federal government should encourage incorporating reading instruction standards across disciplines for teacher preparation programs and early child and elementary licensure.

One highly attractive solution is the use of phonics which can increase reading ability to age-appropriate levels, particularly with intensive, early intervention. *(Additional sources for information on this issue and the phonics approach are listed in footnote 4.)*

Structured Literacy, now out of favor throughout all elementary public education, is a teaching process that could fix reading. To liberate young readers and let them choose the best path forward, teachers-in-training should be studying research on cognition, language, and learning as well as work in neuroscience, behavioral and molecular genetics, and developmental neurobiology. Teacher training should involve a curriculum embracing reading science, child development, and cognition, among other areas.

One program, Springboard Collaborative, seeks to build a solid literacy foundation by coaching teachers to deliver high-quality instruction and by training parents as literacy coaches. It has teamed up with  [Cadence Learning](https://cadencelearn.org/) which seeks to equip teachers with strategies and curricula to lead effective math and literature lessons for children through the 8th grade to help students not only avoid regression but instead make significant academic gains. Another example is Page Ahead in Seattle that partners with elementary schools, pre-school programs such as Head Start and ECEAP, and social service agencies across Washington State to improve the reading and language skills of at-risk children. Their programs include providing books free to low-income children, reading to children programs and other services.

Another organization making a real difference is The Augustine Literacy Project® of the Triangle which trains and supports intensively trained volunteer tutors who provide free, long-term, one-to-one instruction, to improve the literacy skills of economically disadvantaged children.

Finally, the Bethlehem PA school district introduced the science of reading to its teachers, measured success, then scaled up to expand throughout the entire district.  Their approach has achieved great success.

The mandate the No Child Left Behind act was “learn to read, and then read to learn.” But many elementary educators are rediscovering that this approach, however logical-sounding and well-meaning, simply doesn’t work well with many children. A more evidence-based mantra would be, “learn a bit about everything, so you can read about anything”—or in the words of University of Virginia cognitive scientist Dan Willingham, “Teaching content is teaching reading.” This points to a seismic shift in how we allocate students’ learning time in the early grades.

The Knowledge Is Power Program for middle schoolers (KIPP) is now the biggest and best-known national charter network. Almost all KIPP students are poor and minority, now extending from pre-K through high school and college graduation. At the outset, their approach to reading focused on teaching kids how to decode words (phonics, phonemic awareness, etc.), followed by plenty of exposure to texts targeted precisely at students’ current reading levels, plus ample practice at the skills of reading comprehension. In later grades, early progress appeared to fade. Students could decode words, but often struggled to comprehend what they were reading. With the adoption of the Common Core standards and especially with the implementation of aligned assessments, the flaws in America’s approach to reading instruction became clear. ELA proficiency rates plummeted nationwide. For even the best charter schools, the achievement gap was once again a mile wide.

Willingham has been arguing for years that background knowledge in subjects such as history, geography, science, and literature is essential for students to comprehend the wide variety of passages they later encounter—in class, online, at the library, or on state tests. The way to address this isn’t to drill seven-year-olds on SAT words, but to teach about dinosaurs and other animals, the history of the United States and the world, cultures here and abroad, key folk stories and works of children’s literature, and so on. This is particularly important for low-income students, who tend to learn most content in school and, unlike affluent children of college-educated parents, generally do not benefit from trips to museums, story times at the library, and other opportunities. Most importantly, learning about the world and how it works need not wait until kids learn to read. In the early grades, children can and should learn essential content by listening to books read aloud, watching educational videos, and partaking in experiential activities—opportunities that wealthier kids enjoy. By middle school, when children can “read to learn” about these topics, many disadvantaged youngsters are hopelessly behind in their reading comprehension abilities, precisely because they lack the knowledge base that makes comprehension possible.

By reading texts in history/social studies, science, and other disciplines, students build a foundation of knowledge in these fields that will also give them the background to be better readers in all content areas. Students can only gain this foundation when the curriculum is intentionally and coherently structured to develop rich content knowledge within and across grades.

The KIPP-Wheatley curriculum had three goals. First, be “joyful” with children learning to “love books, to love reading, to love writing.” Second, build students’ reading and writing skills, with particular focus on close reading. Rather than having students read little snippets of text, they would read something meaty over and over again through different lenses. The group’s final, and arguably most important, goal was to develop “world knowledge”—science, social studies, art, and literature—commencing in kindergarten with lots of read-aloud. The curriculum is designed around topics, such as bridges or the Underground Railroad. “We stay with those topics for seven weeks, intentionally,”

Because of the importance of content knowledge, and because as students go deeper into a content area, the level of text complexity that they can handle rises and their vocabulary expands. The ability to tackle more complex text is the key to boosting reading comprehension. In response to a K–8 coherent curriculum based on the same principles. “Students and teachers love the texts, are engaging more with the texts, and writing and vocabulary are improving.” The curriculum’s use in KIPP schools is voluntary, though “strongly encouraged.” Uptake has been high, however, as teachers hear from one another about the successes they are seeing with their students.

Several other high-performing charter networks are also discovering the need for a new approach to teaching reading. Success is particularly aggressive about a well-rounded curriculum. District schools can use Great Minds’ Wit & Wisdom curriculum or download the Success Academy curriculum for free from the internet.

A 14-member the National Reading Panel found that the following combination of techniques is effective for teaching children to read:

* **Phonemic awareness**—the knowledge that spoken words can be broken apart into smaller segments of sound known as phonemes.
* **Phonics**—the knowledge that letters of the alphabet represent phonemes and that these sounds are blended to form written words.
* **Fluency**— Children gain fluency by practicing reading until the process becomes automatic; guided oral repeated reading is one approach to helping children become fluent readers.
* **Guided oral reading**—reading out loud while getting guidance and feedback from skilled readers. The combination of practice and feedback promotes reading fluency.
* **Teaching vocabulary words**—teaching new words, either as they appear in text or by introducing new words separately also aids reading ability.
* **Reading comprehension strategies**—techniques for helping individuals involve having students summarize what they have read to gain a better understanding of the material.

**7. School Assessment**

School quality measures (student-teacher ratio and teacher salaries) are strongly correlated with educational outcomes for black and white children with poorly-educated parents—meaning that school quality increases absolute upward mobility (defined as educational attainment) and can lead to higher intergenerational human capital accumulation. Better accountability measures are required. *Without* [***meaningful accountability, traditional school districts may push struggling students into low-quality alternative schools***](http://app.mx3.americanprogressaction.org/e/er?s=785&lid=202033&elqTrackId=0b6cc823b1254a2185a8fa6b59644917&elq=5cee2e3d96f44b3ba14fdca622e5c3f0&elqaid=38017&elqat=1).

As indicators that better measure academic attainment, high school completion, and other measures of “school quality and student success”, states and districts should consider:

* Whether measures for alternative schools can include indices for graduation rate; academic proficiency; and school quality and student success.
* Develop a uniform definition of alternative schools, including the student population served, educational setting and programmatic characteristics.
* Combine data of sufficient size and scope to make statistical analyses reliable and more sophisticated benchmark comparisons realizable.
* Pilot and validate measures before committing to them for an accountability system.
* Gather explicit feedback from school leaders and teachers.

The federal government, when considering the next reauthorization of ESSA, should:

* Consider providing authority for states to engage in a pilot of accountability indicators for alternative high schools, like the authority granted to develop innovative assessments.

Potential lessons from high performing schools include:

* [High-quality preschool](https://www.tandfonline.com/doi/full/10.1080/02568543.2016.1273285)
* [Effective, evidence-based reading instruction](https://www.nichd.nih.gov/research/supported/nrp), including phonics and phonemic awareness
* Ample instruction in history, science, and the arts to [boost students’ vocabulary and reading comprehension](https://www.theatlantic.com/education/archive/2018/04/-american-students-reading/557915/), as well as vital knowledge;
* [A great curriculum aligned to academic standards](http://www.edreports.org/); effective, well-trained, [well-supported teachers](https://scholar.harvard.edu/mkraft/publications/effect-teacher-coaching-instruction-and-achievement-meta-analysis-causal);
* [Longer school days or years](https://www.americanprogress.org/issues/education-k-12/reports/2016/10/11/145084/workin-9-to-5-2/); and
* [Wrap-around supports](https://www.chalkbeat.org/posts/us/2018/02/20/do-community-schools-and-wraparound-services-boost-academics-heres-what-we-know/) to make sure that kids’ physical and emotional needs are met, so they can learn.

It is clearly not just the home and environment that are contributing to apparent deficiencies in the education of our young. A major part of the blame in many instances can be laid on the schools themselves. Besides the decline in literacy, the effectiveness of education in creating thinking, analytical and reasonable adults appear to be faltering. “Critical thinking”, the rage for years, can go awry in at least two ways.

1. When it replaces knowledge, actual information, or facts. I*f educators don’t teach kids to acquire, possess, and value facts, there’s no way they can teach them to value truth* (Emphasis added).
2. Critical thinking going off track stems from postmodernism (that “Interpretation is everything”) in higher education, where educators learned what they are applying in elementary and secondary schools. And it is worsening in our schools—despite the valiant efforts of the Common Core, the AP program, and others to push students to seek actual evidence in original texts rather than just saying what they think about something—what historians call “presentism”? Rather than striving to understand why something happened the way it happened *when* it happened, we judge what happened by today’s norms, values, and prejudices.

It’s not that educators are knowingly filling kids’ minds with false facts. Rather, *they’re not supplying nearly enough actual facts—fundamental knowledge* (*Emphasis added*)—and this vacuum, matched with an overemphasis on “thinking skills” and refracted through postmodernism’s focus on interpretation, is contributing as much as anything to the decay that should worry us all. Education is not simply filling a kid’s head with facts and figures and then putting a test in front of them, but teaching them the important and effective *Mental Acuity*, i.e., the ability to think critically, to handle information effectively, to judge whether something heard or read is important and to incorporate accurately new information into their understanding of the world around them and dismiss information that is unimportant. Formal education is about teaching brains to think in disciplined patterns.

The federal laws regarding special education and title programs are necessary even though they do not fully cover the special education budget they require. While the expansion of public-school choice has allowed parents or guardians to select schools that best meet their children’s needs, some application and enrollment processes can present barriers to families with less time or familiarity with the system. A centralized system can simplify enrollment for both families and schools. But depending on how a district assigns each student, some families can unfairly manipulate the system to make it more likely that their child secures a seat at a more in-demand, usually better-performing school. A handful of cities, including New Orleans, Indianapolis, Denver, and Camden, have implemented a specific centralized process that is both simple for families to navigate and efficient for schools and districts choosing and enrolling in public schools. Their process employs algorithms that can improve the efficiency of enrollment systems, while also ensuring that every student has a fair shot at the school he or she wants to attend—something that can, in the long run, improve academic outcomes.

**Troubled Schools**

Fixing—or closing and replacing—troubled schools is really hard. School accountability has traditionally been seen as having three parts: Academic standards, assessments of student performance (mostly using standardized tests), and consequences for schools whose students fail or meet them. Today, most experts recognize that a fourth part needs to be added: attention to the capacity of schools, districts, and states to fix their shortcomings. It doesn’t help kids just to ding their school for its failures if nobody at that school has the capacity to make it better.  Going forward, policy leaders should consider whether their schools (and districts and states) possess the human, fiscal, political abilities—and will—to engage in necessary reforms and recommit to results-based accountability adapted.

Another approach is state takeovers as have happened in all major regions of the country—across states that differ in their political leanings, demographics, and educational contexts. There are two main reasons states typically give for enacting takeover: low academic performance and fiscal challenges. What does research say about whether state takeovers achieve their primary aims of improving academic achievement and fiscal health?

* **How does takeover affect academic performance?** State takeovers, on average, do not improve student academic performance in math or reading. In fact, evidence suggests that they were disruptive to reading achievement in the early years of reform. There is considerable variation across districts. On average, takeovers were more harmful to student achievement when undertaken in majority-Black communities (and more beneficial when enacted in majority-Latino districts).
* **How does takeover affect school district finances?** Takeovers led to increased state revenues and expenditures per pupil, but did not increase expenditures or other measures of fiscal health in districts serving majority-Black student populations.
* **Why are the impacts of takeover inequitable?** Majority-Black communities are most likely to be targeted for takeovers which may impact student achievement and school funding through its effects on who controls decision-making in targeted communities.
* **What can be done to improve low-performing school districts?** Extended learning time and efforts to improve the quality of the teaching force are associated with greater gains in both math and reading achievement. Individualized instructional approaches, especially when implemented with teachers selected based on merit, are also a promising approach.

In sum, research suggests that takeovers have been better suited to addressing financial than academic concerns and appear to be especially risky when undertaken in majority-Black communities and within school districts that are not among the lowest performing in the country. That said, research on of takeovers that generated benefits—as well as on efforts to improve low-performing districts without a dramatic governance change—provide some guidance for leaders.

**8. Homeschooling**

Homeschooling which [shot up during the pandemic](https://link.axios.com/click/33342687.447660/aHR0cHM6Ly93d3cuYXhpb3MuY29tLzIwMjEvMDgvMzEvaG9tZXNjaG9vbGluZy1wYW5kZW1pYy1jcml0aWNhbC1tYXNzP3V0bV9zb3VyY2U9bmV3c2xldHRlciZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj1uZXdzbGV0dGVyX2F4aW9zYW0mc3RyZWFtPXRvcA/61684c06fd3aad0dc63531e9Bb5f6e8fc) is now the fastest-growing form of education in the U.S. There are an estimated 1.9 million to 2.7 million homeschooled students in the U.S., but, while the number has grown, it still represents a single-digit percentage of U.S. students. Some reasons why parents stuck with homeschooling, even after witnessing the flaws of pandemic-era virtual learning include:

* **Families with kids** with developmental disabilities are choosing homeschooling because schools aren't always able to meet their children's needs.
* **Families of color** and those with religious affiliations want to [avoid bullying and racism](https://link.axios.com/click/33342687.447660/aHR0cHM6Ly93d3cubnByLm9yZy8yMDIxLzEyLzEzLzEwNjE3ODcyMzMvbW9yZS1ibGFjay1mYW1pbGllcy1hcmUtaG9tZXNjaG9vbGluZy10aGVpci1jaGlsZHJlbi1jaXRpbmctdGhlLXBhbmRlbWljLWFuZC1yYWM_dXRtX3NvdXJjZT1uZXdzbGV0dGVyJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPW5ld3NsZXR0ZXJfYXhpb3NhbSZzdHJlYW09dG9w/61684c06fd3aad0dc63531e9B1a0fb72a).
* **Parents also cite** the [increase in school shootings](https://link.axios.com/click/33342687.447660/aHR0cHM6Ly93d3cuYXhpb3MuY29tLzIwMjMvMDkvMTQvc2Nob29sLXNob290aW5ncy1yZWNvcmQtaGlnaC15ZWFyP3V0bV9zb3VyY2U9bmV3c2xldHRlciZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj1uZXdzbGV0dGVyX2F4aW9zYW0mc3RyZWFtPXRvcA/61684c06fd3aad0dc63531e9Bc6e4e16d) as a reason to keep their kids home.

1. **School choice**

School choice is a central feature in contemporary K-12 educational policy. Some school choice occurs across educational sectors— 7% of school-aged youth in the U.S. are enrolled in charter schools, 9% in private schools, and between 3% and 5% are homeschooled. *But the most common type of school choice policy operates within or across public school systems*. While the implications of school choice for educational quality and equity are hotly contested, scholars generally agree that in most circumstances, *charter schools worsen levels of racial segregation* (Emphasis added).

As important as it is to confront individual racism in the school choice process, it is only one part of the story. School choice policies have many gradations—how school choice programs are designed plays an important, but not well-studied, role in shaping families’ school choices. For example, districts decide how many schools families can choose from, which schools provide door-to-door transportation for, and where to locate magnet programs. Districts also specify the default school of attendance for families—a decision that significantly influences families’ eventual school choice. Since each of these aspects of school choice policy design influence school segregation, district leaders must keep the goal of educational equity front of mind as they ask crucial policy questions: How much choice, for whom, and how?

A New York study sought to create a system in which no school had an enrollment of more than 40% economically disadvantaged students or more than 25% of students performing below grade-level on standardized tests. To achieve this goal, the district’s controlled choice program provided each family with a curated set of schooling options consisting of at least five different schools—including one default school of attendance, or a “base” school. Families were provided with at least three magnet school options—neighborhood magnets with door-to-door transportation, magnets with a nearby park-and-ride location where children could access bus transportation to the school, and magnets with no transportation provided. Base school designations for a small share of students (5% to 10%) were changed each year with an eye toward maintaining socioeconomic diversity.

**Findings:**

1. **Residential segregation significantly constrained the desegregation initiative**
2. **Most families enrolled their kindergartners in their assigned base school**
3. **If you give families segregating options, they’ll take them - T**he likelihood of Asian and white families attending their base school declines significantly as the share of Black students in their base school increases. Black and Latino families’ enrollment decisions were unrelated to schools’ racial makeup.
4. **Controlled school choice programs can both help *and* hurt school desegregation efforts –** While default school assignments are a powerful policy lever available to districts—with profound implications for school diversity and segregation, the study also underscores the limitations of controlled choice programs. For one, the backdrop of residential segregation and district and family preferences for geographically close default school assignments inherently limits how ambitious policymakers can be in using school choice programs to advance desegregation goals. Also, racial preferences and anti-Black racism shape how parents navigate choice contexts. Many Asian and white families avoid schools with large Black student populations when given the opportunity.

The allegation that school choice will harm or even destroy the public schools—is one of the few lines of attack that tends to soften support for charter schools and vouchers. But what does high-quality research say? One author answers:

*Contrary to what some critics claim, traditional public schools have seen some*[positive effects](https://eric.ed.gov/?id=EJ1328826)*from competition. One*[recent study](https://www.nber.org/papers/w26758)*found that the presence of charter schools resulted in improvements for students in district-run schools. (Part of the*[overall improvement](https://files.eric.ed.gov/fulltext/ED622023.pdf)*came from low-performing district-run schools closing.)*

Evidence that charter competition has salutary effects on district-run schools has now been detected in a wide variety of settings, from the dense urban cores of Milwaukee and New York City to the sprawling suburbs of Florida, North Carolina, and Texas. The research on competition from private-school choice is even more positive. In an aggregated review of all relevant studies, at last count, twenty-five of twenty-seven studies show positive effects on public schools, with the other two finding null effects. The review states, “no empirical study of the competitive effects of private school choice programs concludes that the effects are negative.”

Several of these studies find disappointing results for the students *participating* in the school choice programs—while at the same time finding benefits for the public school students “left behind”.

In Florida’s massive tax-credit scholarship program over fifteen years there were positive competitive effects on both academic outcomes and student behavior. The more competition that schools faced, the greater the impacts. Though less than 1 percent of a standard deviation each year, those impacts added up year after year, especially for the most disadvantaged students in the schools facing the most competitive pressure.

The conclusion was reached that school choice is a rare win-win policy, one that’s generally good for families taking advantage of greater options, while also helping to improve traditional public schools, as well. We should root for all these sectors in American education to succeed. And we should root for the myth about the “death of public schools” to die.

Inasmuch as school choice is nearly universal in the United States, then opportunities for choice need to be as equitable as possible. To become more equitable, school choice needs to become as extensive for all families as it is for affluent ones, who currently enjoy high-quality schools by purchasing a home in expensive neighborhoods. Charter schools need to be expanded in number and size, especially at the secondary level. Private-school vouchers and tax-credit scholarships should be made available statewide to low-income students. Large school districts should offer a portfolio of autonomous schools with a variety of curricular and pedagogical approaches. Persistent opposition will make providing new, more equitable forms of choice difficult. With this in mind, the Hoover Institution recommends:

*Six Principles to Guide Future Action*:

1.  States should encourage multiple forms of school choice.

2.  US education needs greater flexibility and adaptability than what is currently offered by a rigid system of elementary neighborhood schools and comprehensive high schools.

3.  A family’s choice of school should not be distorted by fiscal policies that favor one sector over another.

4.  School choice should facilitate desegregation.

5.  The focus should be on enhancing choice in secondary education.

6.  Choice by itself is not enough.

*Specific Actions recommended include:*

*All Sectors*

A. Encourage common enrollment systems across district, charter, and private sectors.

B. Arrange for and cover the cost of comprehensive transportation systems that provide equal access to all students regardless of school sector.

C. Provide special education in a wide range of settings without imposing specific numerical constraints on certain schools or networks. Parents should be given opportunities to choose programs from the district, charter, and private sectors.

District Sector

D. Provide schools in portfolio districts with the autonomy needed to offer a diversity of genuine choices among quality schools.

Charter Sector

E. Facilitate charter growth by fostering both proven providers and minority entrepreneurs.

F. Pay attention to charter school authorizer quality.

G. Relax charter teacher-certification rules.

Private Sector

H. Consider tax credits as alternatives to vouchers.

I. Broaden income eligibility for private choice programs.

J. Preclude low-quality private schools from participating in government-sponsored programs but resist the temptation to regulate the private sector.

**10. Charter schools**

Charter schools, now 6% of public-school students, are publicly funded, voluntary enrollment schools created through a legislatively defined process that binds the school to the provisions of a performance contract in exchange for relief from compliance with a specified set of state statutes and regulations. While there are a variety of state statutes, federal law holds that they are a specialized form of public school, and therefore [must ensure that they serve all segments of the public that funds them](https://www2.ed.gov/about/offices/list/ocr/letters/colleague-201405-charter.pdf), i.e., advancing equal educational opportunity for all – a goal often, but not always, achieved.

Charter schools vs public schools:

* Black and Hispanic students learn more in charter schools, and that competition from charter schools has a positive, or at worst neutral, effect on traditional public schools, and that expanding charter market share in black and Hispanic communities could dramatically reduce racial achievement gaps.
* Charter schools on the whole do significantly better in terms of educational outcomes than conventional schools. Further, traditional public schools, backed by powerful teachers’ unions and their enabler politicians, behave as monopolies and have skewed the learning gap between White and minority students. It concludes that no such gap exists where charter schools have been successful. Moreover, it maintains that “black and Hispanic students [in charter schools] achieve educational results far above [students in] most schools in affluent white neighborhoods.” The argument is that, though charter schools are publicly funded, administrators and teachers are driven by incentives and accountability.
* The schools’ survival is ultimately based on parents’ decisions to enroll their children as well as student performance. By contrast, traditional public schools remain open regardless of educational outcomes.
* Maryland charter schools showed on average greater academic progress than their counterparts in traditional public schools equivalent oto them getting about an extra month of learning over the typical 180-day school year. For black and Hispanic students, the progress was even more pronounced.
* The distinction between public and charter is our historic dependence on single, quasi-monopolistic management, which has continued to approach the issue in the same way, producing the same product each year. Voucher and charter schools diversify the supplier, give families some choice and provide a stimulus for local boards to be competitive. A second approach is to empower parents, i.e., providing them more information regarding the schools their children do or may attend, providing a base for activism toward improvement. One way to accomplish this is to apply local management, ala charters, to public schools.
* Regarding the advantages and disadvantages of charter schools, the Thomas B. Fordham Institute states that, despite some unevenness, research is less positive for charters operating outside of urban centers. The evidence for expanding charter schools in urban areas is stronger than ever. Also, internet-based schools and charters that serve mostly middle-class students, perform worse than their district counterparts.
* Studies comparing academic trajectories in charter schools versus traditional public schools with similar characteristics and levels of academic achievement have shown students making more progress in English language arts (ELA) and math than similar students in traditional public schools. In another, students who enrolled in an urban charter school for at least four years gained a total of 72 days of learning in ELA and 108 days—over half a year’s worth more progress in English language arts (ELA) and math than similar students in traditional h of learning—in math – notably concentrated among low-income Black and Latino students with little evidence that the success of students in charter schools comes at the expense of their peers in traditional public schools
* Charter students are more likely to attend college, enroll for at least four semesters. Similarly, students who had previously experienced large test-score gains were also more likely to enroll in college.” And admitted female students were “12.1% less likely to be pregnant in their teens,” while male students were “4.3% less likely to be incarcerated.”
* Students in one state saw increased high-school exit exam pass rates, post-secondary enrollment, odds of voting, more likely to earn a standard diploma and to attend college. Another found that students who attended a charter high school were less likely to be chronically absent, suspended, be convicted of a crime as an adult, and more likely to register and participate in elections.
* In later high-quality studies, charter schools students gained in average days of learning in English language arts (ELA) and in days of learning in math per year, even larger for Black and Latino students

Implications for race and segregation

* Charter schools, which are always schools of choice, have a substantially higher racial imbalance relative to their catchment area than traditional schools, which typically serve students assigned to them based on their families place of residence.
* 1 out of 7 charters has had an enrollment that was at least 99 percent minority, possibly because most charter schools intentionally locate in inner-city neighborhoods that are highly minority and are designed to appeal to racial minority parents.
* District-level school quality, measured by how well students in each district prform on state tests, is a powerful correlate of racial imbalance in high schools for blacks.
* The ability to compare schools online and to see side-by-side information on school performance does not have much influence on school choices. Information on racial composition dominates school choice searches.
* Charter schools have the freedom to choose educational approaches that will appeal to families of different backgrounds—and, in most cases, to enroll students from a broader geographic area than allowed by a typical neighborhood attendance zone, loosening the tie between school and residential segregation. In some states, charter schools can even use a weighted lottery based on student characteristics or geography to help ensure diverse enrollment. These integrated charter schools also help disrupt segregation across the entire system. Integration across public education requires that schools coordinate so that a diverse environment for one set of students is not created at the expense of others.
* Evidence regarding charters’ impact on exacerbate segregation is mixed. In a recent review of 10 studies, two found charters increased integration, five found no significant effect, and three found that they decreased integration.
* Despite providing options to families who otherwise may not have them, expand families’ tuition-free options, and close the gap in choices between wealthier and poorer families, barriers such as performance-based admission standards and lottery-based admissions may get in the way.
* Severing the tie between place of residence and school assignment spurs the growth of diverse neighborhoods in areas that, save for the low quality of the local school, would be attractive places to live for families from many different backgrounds.

Measuring success

* Charters are not the silver bullet. The work everywhere is the same and comes down to the way teachers and students engage with the curriculum.
* All schools in a region (not necessarily a “school district”), including public, charter, and voucher should be held comparably accountable for ensuring diversity and a consistent level of quality education for all students, including comparable access to quality instructors and to a variety of both academic and non-academic opportunities.
* Recommended policy ideas to better promote integration ranged from using weighted lotteries, to funding transportation, to mandating that data on integration is considered as part of the authorization oversight process.
* All levels of government have a role in assuring that all schools are accountable, transparent, well governed, efficient, and effectively administered. Throughout the charter school authorization cycle, this principle should be baked into the charter school proposal process, the charter school contract, the annual oversight of charter school performance, and the periodic consideration of charter renewal.
* One direction to obtain greater diversity in school-level student populations would be to nudge parents to make choices that lead to less self-sorting and more diversity.  For example, rather than giving parents the online equivalent of a blank sheet of paper on which to list schools to which they want their child assigned, parents could receive a default list that is pre-populated based on an algorithm that takes into account school quality, school diversity, and travel distance.  Another alternative is to have school lotteries, incorporating bonus points for applicants that are from groups that have historically been under-represented at particular schools.
* Possible postulated reasons for charter successes include:
* Urban charter schools are more likely to embrace evidence-based practices.
* Urban charter schools are more likely to maintain diverse and effective teaching staffs.
* Charter authorizers have closed low-performing schools, including in states that used to have low-quality sectors.

Issues

* Progress has been impeded by the opposition of the United Federation of Teachers which sees student achievement in charter schools as an existential threat.

Going forward

* Charter schools, and all other schools – both public and private need to be held to high standards. High expectations and accountability are essential to raising academic accomplishment across the board.)
* One argument is to treat every public-school like a charter school and that the charter formula—autonomy, accountability, diversity of school designs, and parental choice—is far more effective than the centralized, bureaucratic approach we inherited from the 20th century.
* to empower parents in public schools apply local management, ala charters, to public school, providing them more information regarding the schools their children do or may attend, i.e., a base for activism toward improvement.
* Relieving urban educators from significant challenges in adopting promising practices, of burdensome teacher union contracts, and of dysfunctional central offices and meddlesome school boards will give policymakers a chance to improve student outcomes dramatically.
* However, informal barriers may remain, some more easily remedied by policy than others. The following are examples:
  + **Transportation**

A family can’t choose a school if their children cannot physically get to the schools they want and are settling for nearby alternatives. In New Orleans, with the most extensive choice-based education system in the country, charter contracts schools to provide [free and adequate](https://opsb.us/wp-content/uploads/2018/02/Transportation_Expectation-Summary_Sep2017.pdf) transportation to students. Virtually all New Orleans charter schools provide yellow school bus service citywide—a substantial cost that is carried by charter operators.

* + **Enrollment**

In some cities, enrollment is managed by individual schools. Some cities have streamlined choice through unified enrollment systems that allow parents to submit a ranked set of school requests and place students in schools using an algorithm. These systems are not a silver bullet for eliminating enrollment-related barriers—for example, algorithms that give strong priority based on students’ neighborhood of residence might limit access to high-quality schools—but they can help to [simplify the admissions process](https://www.crpe.org/sites/default/files/crpe-guide-unifying-enrollment.pdf), [improve students’ placements](http://www.nber.org/papers/w21046), and [increase transparency](http://educationnext.org/new-orleans-oneapp/). Another enrollment-related barrier in both decentralized and centralized enrollment settings involves asking families to visit schools, often during school hours.

* + **Information**

Navigating school choice processes and choosing schools is difficult, especially for families who are new to an area, do not speak English, are not tapped into social networks with rich information about schools, or do not know where to find formal information. Fortunately, these barriers are currently receiving a lot of attention….

* + **Other barriers and considerations**

Other barriers, like a school culture that feels uninviting to certain families or selective marketing and recruiting, can be more difficult to see and less suited to policy solutions. Still, removing barriers is critical for making choice-rich school environments equitable. Removing these barriers can be challenging, requiring policymakers to make trade-offs between expanding families’ access and infringing on schools’ autonomy. However, charter schools’ autonomy is not absolute. While charters should be able to choose their teachers, mission, and curriculum, they should not be able to choose their students. Making charter schools accessible is a fundamental responsibility of policymakers.

**11. Vouchers**

Vouchers and charters are very different. A voucher school could be a private school, whatever its identity, or a school established to take advantage of public private school tuition funds. Private school vouchers, including the traditional ones as well as education saving accounts and tax credit scholarships, are ostensibly designed to give parents the opportunity to seek out the best education for their children. However, particularly in rural areas, they divert funds from and may cause stress for public schools. As low-performing and low-income students are often overrepresented in voucher programs, students with the greatest need will likely experience preventable declines in student achievement, casting a negative image on vouchers.

Additionally, rights guaranteed for public schools are not present under voucher such as discriminatory dress codes which may have racial overtones, e.g., prohibiting certain hairstyles and other educational protections, e.g., for students with disabilities, those with specific religious convictions not coherent with those of the voucher sponsors, or issues surrounding gender identification. Public schools provide paths to resolve a problem not present with vouchers. Voucher schools must be held to the same standards of civil rights and academic performance as public schools with comparable recourse when standards are not met.

* 1. **Education Savings Accounts**

Education savings accounts place a portion of a child’s funds from the state funding formula into a private, parent-controlled bank account to allow families to help students access opportunities in person or online and customize a child’s education to fit his needs. They are distinct from private school vouchers and other scholarships because families can customize a child’s education according to their needs by choosing a new school or several learning opportunities simultaneously including hire a personal tutor, find a class online, pay for individual public-school classes or extracurricular activities, pay for distance learning classes to learn the job skills pay private school tuition, or even save for college. In some states students can use their accounts to pay for college classes before or after they graduate high school, helping to prepare them for the ever-changing workforce.

Some states have enacted laws that would open Education Savings Accounts (ESAs) to most if not all school-age children. There is growth in companies working to automate and streamline ESA programs. But there have been [**controversies over implementation**](https://educationnext.cmail20.com/t/r-l-ttdhlrkt-nothihydl-t/)**.** The flexibility makes them attractive to homeschoolers, but it can be hard for administrators to [**draw boundaries between genuine education expenses and recreational or general family use**](https://educationnext.cmail20.com/t/r-l-ttdhlrkt-nothihydl-i/). A major question is how to put the infrastructure in place to be able to scale these things up and create a public education system that’s built around customization.

Many inner-city public schools and rural schools have limited capability (including qualified teachers) to provide gifted programs. ESAs give families even more choice by putting them in total control of their children’s education, e.g., seeking and paying for special services, either in addition to those in their assigned schools or in separate schools which become feasible as the demand such special programs for this cohort is aggregated. The hope is that ESAs will yield strong returns for student achievement.

But the flexibility over how education dollars may be spent has raised questions about whether families will spend ESA funds responsibly. Opponents [allege](https://www.sosaznetwork.org/2023/universal-esa-vouchers-wide-open-for-fraud-abuse/) that ESA policies have “few legal guardrails” and “loopholes the size of the Grand Canyon.” Yet independent audits and the agencies charged with providing oversight tell a very different story. For instance, the most recent [review](https://www.azauditor.gov/sites/default/files/20-103_Report_0.pdf) of Arizona’s ESA program found an improper payment rate of 0.001 percent, far more financially accountable than other government programs. almost zero. Moreover, much of the misspending was [documented](https://www.goldwaterinstitute.org/fraud-in-arizonas-empowerment-scholarship-accounts-not-so-much/) to be the result of innocent mistakes, not fraud.

There is always room for improvement, but policymakers should keep things in perspective. Spending on Arizona’s universal ESA constitutes only two percent of the state’s education budget and improper ESA payments are nearly zero.

Of course, for the opponents of school choice, the real scandal is what ESA families are *permitted* to purchase, such as “items like kayaks and trampolines,”. But public schools “are already—and appropriately—doing all of these things.” Moreover, ESA parents had to receive approval from the Arizona Department of Education for each purchase. In many cases, parents making unusual requests even reached out to the department’s helpdesk for preapproval, at which point they explained the context of their purchase.

Education savings account policies like Arizona’s have demonstrated their capacity to empower families with greater educational opportunities while maintaining a high degree of financial accountability.

* 1. **Military Schools**

The many crises threatening U.S. Schools today (e.g., Artificial Intelligence, Culture Wars, Admissions and Race) do not generally apply to military schools, which are not run by a local school board or charter network, but by the Defense Department. With about 66,000 students — more than the public school enrollment in Boston or Seattle — the Pentagon’s schools for children of military members and civilian employees quietly achieve results most educators can only dream of.

On the [National Assessment of Educational Progress](https://www.nationsreportcard.gov/reading/states/scores/?grade=8) Defense Department’s schools outscored every jurisdiction in math and reading last year and [managed to avoid widespread pandemic losses](https://www.nytimes.com/2022/10/24/us/math-reading-scores-pandemic.html). They had the highest outcomes in the country for Black and Hispanic students, whose eighth-grade reading scores outpaced national averages for white students, and eighth graders whose parents only graduated from high school performed as well in reading as students nationally whose parents were college graduates.

While the achievement of U.S. students overall has stagnated, the military’s schools have made gains on the national test. And even as the country’s lowest-performing students — in the bottom 25th percentile — have slipped further behind, the Defense Department’s lowest-performing students have improved in fourth-grade math and eighth-grade reading.

The schools are not free of problems. Despite their high performance, Black and Hispanic students, on average, though the gap is smaller than in many states. The Pentagon has also faced scrutiny for its [handling of student misconduct](https://media.defense.gov/2020/Sep/09/2002493579/-1/-1/1/DODIG-2020-127.PDF) at its schools, including reports of sexual assault.

But as educators around the country are desperately trying to turn around pandemic losses, the Defense Department’s academic results show what is possible, even for students dealing with personal challenges.

**How does the military do it?**

* Defense Department schools are well-funded, socioeconomically and racially integrated, and have a centralized structure that is not subject to the whims of school boards or mayors.
* While the schools look a lot like regular public schools, there are key differences**.:**
  + Families have access to housing and health care and at least one parent has a job. “Having as many of those basic needs met does help set the scene for learning to occur.”.
  + Teachers are well paid – about $25,000 per student, [on par with the highest-spending states](https://www.census.gov/newsroom/press-releases/2023/public-school-spending.html#:~:text=Other%20highlights%3A,and%20New%20Jersey%20(%2422%2C160).) [Competitive salaries](https://www.dodea.edu/offices/human-resources/work-dodea/your-salary?page=1) — scaled to education and experience levels — help retain teachers at a time when [many are leaving the profession](https://www.chalkbeat.org/2023/3/6/23624340/teacher-turnover-leaving-the-profession-quitting-higher-rate).

These results show what can happen when all students are given the resources of a typical middle-class child: housing, health care, food, quality teachers – i.e., the basic, everyday things.”

The schools are more socioeconomically and racially integrated than many in America. The military isn’t perfect — there is still racism in the military – but access to resources isn’t racialized.

Defense Department schools are [not immune](https://nypost.com/2023/03/23/woke-dod-official-kelisa-wing-reassigned-after-gop-highlights-anti-white-tweets/) to [other conflicts](https://markgreen.house.gov/_cache/files/c/4/c4972b71-0365-46da-830b-7ae2edfe36e3/EDA9A2F3B493597D1A8818413435E80F.1rep-green-letter-congressional-letter-to-dodea-director-thomas-m.-brady-on-sexually-obscene-materials-at-dod-schools.pdf), including charged debates over race, gender and identity. But the schools are inherently less political — big decisions come from headquarters — and therefore less tumultuous.

Case in point: Defense officials attribute recent growth in test scores partly to a 6-year academic overhaul that began in 2015 and has stuck ever since. While changes shared similarities with [the Common Core](https://www.nytimes.com/2019/12/06/us/common-core.html), unlike the Common Core, which was carried out haphazardly across the country, the Defense Department’s plan was orchestrated with a methodical rollout, one subject area at a time: [New curriculum](https://www.dodea.edu/education/curriculum-and-instruction). Teacher training. Global coordination.

Logistical planning, including a predictable budget was one key to success. At Faith Middle School, the teacher cannot supplement curriculum and must work off an approved list. She receives detailed feedback from coaches and administrators who observe her class. Collaboration with other teachers is required and built into the weekly schedule.

The approach is meant to guard against a teacher who helps students soar in one classroom, while an instructor down the hall struggles. Instead, the goal is to raise the floor for all students. American school districts often have an “all-star team mentality,” relying on exceptional teachers and principals to get results. But the most effective jurisdictions have a “systemic way of improving everybody on the team.”

1. **Teachers**
2. **General**

While there are a multitude of factors leading to educational success or to less than acceptable outcomes, no attribute has as much influence on student achievement as having great teachers. Students with highly effective teachers (in the 90th percentile) learn 1.5 years’ worth of material in a year, while students with teachers in the 10th percentile learn just half a years’ worth in the same period. Students in disadvantaged schools stand to benefit the most from effective teachers. But just the opposite is happening: Disadvantaged schools have *less* qualified or *less experienced* teachers, compared to advantaged schools. Many countries ineffectively attempt to address inequity by creating smaller classes or lower student-teacher ratios for worse-off schools. But, c*lass size and money are not the education interventions that have the biggest effect on student performance. While expenditures per student have more than doubled, achievement has remained flat. Building better teachers and giving better feedback to students are*. (Emphasis added.)

Countries should assign high-quality, not just more, teachers to the most challenging schools. High-performing systems tend to treat teaching as a high-status profession for which one needs rigorous, ongoing training accompanied by policies that help attract high-quality teachers and develop and retain them, as well as how to allocate them to different schools.

According to an OECD report, the best-performing school systems had [three things in common](http://blogs.edweek.org/teachers/teaching_now/2018/06/oecd_pisa_teacher_professional_development.html?cmp=eml-enl-eu-news2&M=58513138&U=1726424) when it came to teachers: 1) Most had a required and extended [period of on-the-job training](http://www.edweek.org/tm/articles/2016/10/05/universities-revamping-teacher-prep-to-provide-more.html) during which they received feedback and support from mentors in a formalized program; 2) most professional development was in-house, rather than imported by experts; and 3)teacher evaluation focused on useful feedback for improvement. Also, teachers felt valued in society.

Educational equality and socioeconomic equality are closely related. Increasing educational quality is a major factor in addressing other socio-economic and racial issues. But unfortunately, a significant limiting factor in the equation today is the quality of teaching.

Factors such as money, school location, curriculum, and class size are not the primary determinates of educational outcomes, especially for children from less advantaged circumstances. Rather, the primary factor in success is well trained, empathetic, effective teachers, supplemented by measures to address social issues – without expecting teachers to address these.

There are some who feel that the quality of elementary school teachers is not what it once was. Teacher prep programs do little to ensure aspiring elementary teachers learn the core content they need to thrive in their careers. Only a handful of training programs either required that elementary teacher candidates take courses in core topics like elementary math, world literature, U.S. history, or biology, ortest candidates early enough to guide them toward the coursework they need.

On the most commonly required elementary content licensing test, more than half of test takers fail the first time they take it. After allowing for multiple attempts (retakes that cost both time and money to the candidate), one in four people still fail. Candidates of color are hit hardest meaning that school districts, cognizant of the [importance of students of color having teachers of color](https://www.nber.org/papers/w25254), are missing out on more than 8,000 aspiring teachers of color each year who want to teach, and who enter teacher prep programs, but do not pass the licensing exam and so cannot earn a standard teaching license. Diagnosing content needs for all aspiring candidates early in college and requiring relevant content coursework could boost passing rates for candidates of color.

Requiring a stronger series of coursework later in college may be a viable way to boost candidates’ preparation for licensing exams. Stronger content knowledge may not eradicate gaps in passing rates but making these feasible changes in aspiring teachers’ preparation would be a big step in the right direction.

Many teachers who successfully pass their state’s licensing exams (which vary in rigor) and are hired as elementary teachers still report not feeling confident in their knowledge of the content they are expected to teach.

1. **Teacher shortages**

The teaching profession faces an existential crisis. America’s Covid-19 pandemic exacerbated a national teacher shortage, depriving students of the full abilities of their most effective teachers at a time characterized by learning loss leading the country to face a less well-prepared workforce, with enormous cumulative losses to GDP over coming decades. Recovery from the damage can only come from an expanded role for these teachers.

There are tens of thousands of vacancies in the U.S. — and more than 160,000 jobs are filled by under-qualified teachers. Turnover rates are high, and not enough young people want to become teachers. An NEA survey found 55 percent of teachers were thinking about retiring earlier than they’d planned, due to the pandemic., double the number from 6 months earlier. The problem is **worst** in the South and Southwest. More than a half-million teachers left the profession between the start of 2020 and mid-2022. 2020 saw [more teachers than normal leave](https://www.governing.com/now/with-omicron-schools-are-literally-running-out-of-teachers) in the middle of the school year and, while it’s long been common for teachers to quit during their first five years, districts are now losing lots of teachers with lots more experience. A recent survey found teachers and principals are experiencing frequent job-related stress at about double the rate of most workers.

A teacher shortage is especially severe in schools with high shares of students of color or students from low-income families. The problem is simply that there are too few qualified teachers willing to work at current pay levels, given the increasingly stressful environment facing teachers.

A shortage of qualified teachers and other staff threatens students’ ability to learn, undermining the education system’s goal of providing a sound education equitably to all children. This situation must not be allowed to continue. To end the teacher shortage, we must address the two most pressing reasons for the problem:

• The long-standing decline in the pay of teachers relative to other workers with a college degree; and

• The high and increasing levels of stress public school teachers face every day in the classroom.

Regarding challenges of a national teacher shortage, recent commentary has made the following points:

* While the pandemic exacerbated challenges facing teachers, “most of these declines occurred steadily throughout the last decade suggesting they are a function of larger, long-standing structural issues with the profession.”
* Across every instance the share of parents wanting their child to become a teacher, which had remained above 65% between 1993 and 2011, fell to just 37% by 2022. Interest in teaching as a profession also fell.
* There was a decline in the number of college graduates preparing to enter teaching. At its high point in 2006, the number of teaching licenses issued was equal to 22% of the total number of college graduates, but the rate fell to just 11% by 2020.
* Teacher pay declined relative to college graduates in other fields and that teachers face high levels of stress on the job
* Since 2010, teachers have reported lower rates of satisfaction in professional prestige, interest in teaching, enrollment in preparation programs, and job satisfaction in their field. The percent of teachers who were “very satisfied” fell from 62% in 2008 to 12% in 2022.
* “While the pandemic exacerbated challenges facing teachers, ‘most of these declines occurred steadily throughout the last decade suggesting they are a function of larger, long-standing structural issues with the profession.’”

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“There was a time when teachers could just close the door and use their best judgment on how to teach a class,” says the director of the U. of Colo. National Education Policy Center. “Now, there’s a lot more oversight of teachers. That comes with both good and bad [outcomes], but for a lot of teachers, it makes their job feel less professional and less fulfilling.” Many teachers now feel under attack as schools become a front in the culture wars. Aside from some states putting new restrictions on what teachers can say about racial history or gender identity and sexual orientation, teachers across the country express frustration about being micromanaged by rigid curricula that turn them into little more than data collectors and standardized-test proctors. Meanwhile, with low unemployment and labor shortages in many other fields, lots of teachers recognize they have other options.

Researchers have found extraordinarily consistent results about the relationship between teacher effectiveness and student achievement, with the best teachers providing a year and a half of academic growth each school year. Teacher effectiveness is not just an issue for inner-city schools or minority students, but for suburban and rural schools as well.

We do not yet have very good ways to improve the general effectiveness of teachers. A more compelling solution lies in keeping and rewarding the most effective teachers while getting rid of the least effective ones. Sadly, this prescription is energetically resisted by the teachers’ unions. While most of the country’s over 13,000 school systems still use rigid salary schedules unrelated to teacher effectiveness and do nothing to distribute teaching talent more equitably, reforms focused on teacher effectiveness have been implemented in several places, and the very positive results show a clear path to improving the schools.

To rescue today’s students, a focus on more effective teachers could be implemented quickly by providing salary incentives to effective teachers to take on more students. Teachers will respond to financial incentives, but what will not work is the solution touted by the unions of simply increasing all teacher salaries, regardless of talent. The only solution to the profound learning deficit created by the pandemic is to ensure that, as students work to catch up, they are helped by the best teachers we can find. A number of states are providing teachers with salary increases — in some cases, the biggest they’ve seen in years. Putting teachers together in a shared classroom addresses many issues. They feel less isolated, for one thing, and they don’t have to put off doctors’ appointments or other personal needs until the summer. Not only do more teachers say they like coming to work, but more kids are passing their classes, suggesting that having experienced teachers work with junior peers helps them navigate through the mandated curricula.

Buying out the contracts of ineffective teachers would move schools in the same direction. In the long run, providing incentives for effective teachers will attract and retain more of them. (Some districts are trying new approaches to bring in talent, e.g., pay raises, bonuses of up to $10,000, and paid residencies and apprenticeships — a relatively unheard-of practice in the education world.) What remains to be seen is whether teacher unions will continue to resist any effort to assess the work of their members and reward them accordingly.

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As described, the teacher shortage is increasingly recognized but it is still poorly understood. Much attention has focused on the size of the shortage, its monetary costs, and the negative effects on students, teachers, and the public education system at large. But multiple complex and interdependent causes have received less scrutiny. A “Perfect Storm in the Teacher Labor Market” offers a series of five reports that examined the full magnitude of the shortage and the working conditions and other factors that contribute was joined by a sixth report on policy recommendations. Key findings from five studies and a policy agenda presented in the sixth are contained in the appendices.

The report summary concludes:

EPI’s targeted teacher shortage policies plot a course to return teaching to a profession in which teachers are compensated on par with their college-educated peers, operate in environments where they can teach effectively, get the training they need early in their careers and the professional development they need throughout their work lives, and see their professional judgment and expertise respected and incorporated into school policies and programs, i.e., having a role in shaping what goes on in their classrooms and their schools. Specifically, the targeted policies call on school districts, state and federal policymakers, and other institutions and stakeholders involved to:

* Raise teacher pay to attract new teachers and keep teachers in their schools and the profession and acknowledge and take steps to address other financial burdens that arise when teachers in under-resourced schools must take on social services roles.
* Elevate teacher voice, and nurture stronger learning communities to increase teachers’ influence and sense of belonging.
* Lower the barriers to teaching—such as students coming to school unprepared to learn, hungry, and sick, or threats to teachers’ physical safety and mental health.
* Design professional supports that would include ensuring that teachers have access to coherent, high-quality, lifelong systems of supports, are engaged in designing these systems, and provide teachers with the option of meaningful second jobs that offer career advancement, not just survival.

The report calls for continued research and urges that researchers and policymakers scrutinizing teacher labor markets and the drivers of the teacher shortage use the quality and equity framework used in the series.

As state and local finances rebounded following the recession of 2008, many red and purple states cut their income taxes, with property taxes [remaining depressed](https://www.brookings.edu/articles/state-and-local-budgets-and-the-great-recession/) due to the subprime-mortgage crisis. The result: sharp declines in [public-school funding](https://www.cbpp.org/research/state-budget-and-tax/a-punishing-decade-for-school-funding) per student, [reduced salary](https://www.nctq.org/dmsView/The_Recessions_Impact_On_Teacher_Salaries_NCTQ_Report) increases through the recovery, and widespread teacher shortages. While, nationwide, the number of teachers and other school workers fell 135,000 following 2008, yet as that number declined, the number of students rose by 1.4 million.

This squeeze on school funding made teaching a less attractive or sustainable job in many cases… pay, benefits, and retirement… erosion in all these compensation factors over time, especially in states without the architecture for unionization.”

Teacher pay suffered a sharp decline compared with the pay of other college-educated workers. Low pay makes recruiting and retaining highly qualified teachers difficult. A lack of well-qualified teachers means we cannot equip future tech innovators, researchers, and educators with the training they need to emerge as leaders.

The downward trend in teacher pay must be reversed. Local and state politicians and community members can show respect for the profession by significantly boosting teacher pay. Targeted policy action is needed on school funding as well. State and local governments will require federal support to maintain and improve resources for schools. Finally, public-sector collective bargaining should be expanded since unions can advocate for improved job quality and a higher level of resources.

A Dallas program addressed the limited success of efforts to attract and retain effective educators in high poverty public schools. It offers salary supplements to educators with records of high performance who are willing to work in the most educationally disadvantaged schools, resulting in immediate and sustained increases in student achievement, providing strong evidence that the multi-measure evaluation system identifies effective educators who foster the development of cognitive skills. Improvements were dramatic highlighting the central importance of performance-based incentives to attract and retain effective educators in previously low-achievement schools.

Teachers generally receive a higher share of their total compensation as benefits of employment such as health and other insurance, and retirement plans than other professionals do, partially offsetting the weekly wage penalty. But that still leaves teachers with a significant total compensation penalty.

In addition to the importance of basic skills for students, the teachers themselves must be appropriately trained not only in teaching technique, but in the subjects for which they will be responsible. And that is not enough. Good professional development is as critical. But some highly valued professional development activities are not broadly available to teachers. Teachers largely don’t get the time and resources they need to study, reflect, and prepare their practice,. These shortcomings affect teacher recruitment and retention and play a role in the teacher shortage.

Unfortunately, [interest in teaching](https://www.edworkingpapers.com/ai22-679) among high school and college students is at the lowest level it’s been in decades. Further, national trends hide considerable differences across states.

[Multiple](https://www.uh.edu/education/research/institutes-centers/erc/reports-publications/ryht-report-20211.pdf) [studies](https://cterin.ucop.edu/resources/cterin-briefs/policy-briefs/policy-brief-vol1no1-diversifying-ca-teaching-force.html) across multiple states [have](https://ies.ed.gov/ncee/pubs/20154015/pdf/20154015.pdf) [found](https://journals.sagepub.com/doi/10.3102/0162373712454328) that candidates from traditional student-teaching programs and residencies are more likely to complete their training and stay in the profession than those from alternative routes that do not provide full preparation before new teachers enter the classroom.

Teaching has become one of the most draining jobs in America, having first been hit by **the pandemic and, more recently, school shootings. Further, classrooms** have become political minefields, as local residents are invading board meetings, lawmakers dictate [what they can teach](https://link.axios.com/click/27970239.483821/aHR0cHM6Ly93d3cuYXhpb3MuY29tLzIwMjEvMDYvMjAvdGVhY2hlcnMtaGFyYXNzbWVudC1maW5lcy1jcml0aWNhbC1yYWNlLXRoZW9yeT91dG1fc291cmNlPW5ld3NsZXR0ZXImdXRtX21lZGl1bT1lbWFpbCZ1dG1fY2FtcGFpZ249bmV3c2xldHRlcl9heGlvc2FtJnN0cmVhbT10b3A/61684c06fd3aad0dc63531e9Bb9d4ad2c), what students [read](https://link.axios.com/click/27970239.483821/aHR0cHM6Ly93d3cuYXhpb3MuY29tLzIwMjIvMDEvMTcvYS1ib29rLXB1cmdlLXN1cmdlP3V0bV9zb3VyY2U9bmV3c2xldHRlciZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj1uZXdzbGV0dGVyX2F4aW9zYW0mc3RyZWFtPXRvcA/61684c06fd3aad0dc63531e9B50151c8f), and what programs are offered to help kids with their [social and emotional](https://link.axios.com/click/27970239.483821/aHR0cHM6Ly93d3cuYXhpb3MuY29tLzIwMjIvMDQvMTQvY2hpbGRyZW4tbWVudGFsLWhlYWx0aC1zY2hvb2xzLWN1bHR1cmUtd2FyLXBhbmRlbWljP3V0bV9zb3VyY2U9bmV3c2xldHRlciZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj1uZXdzbGV0dGVyX2F4aW9zYW0mc3RyZWFtPXRvcA/61684c06fd3aad0dc63531e9B787e066e) needs.

While low compensation plays one factor in the decline in teacher recruitment and retention. another is decreased power exerted by organized teachers through their unions. But one contributor to this project feels that teachers’ unions exert too strong an influence on schools and which, by their opposition toward vouchers and charter schools, impair the opportunities of disadvantaged children to leave low performing schools and attend those offering greater chances for quality education.

One increasingly difficult issue for teachers is that, in communities successful in attracting significant high-tech companies, the cost of housing has made it unavailable to teachers. Some companies have provided teachers with housing and some communities have seen charitable support made available to subsidize housing costs. In other communities, teachers may be forced to live significant commuting distances away from their schools. But other communities are making a concerted effort to assure that new housing required for the tech companies includes affordable housing for rent or purchase as well

One approach is to let teachers live at school, i.e., construction of new apartments on school property (or even in the same building), which would be rented out to low-income people but give preference to school staff. But, while the rent is cheaper, the teacher’s union calls the proposal “insulting”. There is concern about how their work and home lives might mix if they live at the school. Moreover, it may benefit primarily younger teachers who are less likely to have families.

Low compensation plays one factor in the decline in teacher recruitment and retention, another is decreased power exerted by organized teachers through their unions. But one contributor feels that teachers’ unions exert too strong an influence which, by their opposition toward vouchers and charter schools, impair the opportunities of disadvantaged children to leave low performing schools and attend those offering greater chances for quality education.

With a rise in depression, cursing, fighting, disrespect, disruption, violence and disengaged parents, it's never been harder, more stressful, more dangerous or more thankless to be a teacher. We're staring down a [severe staffing shortage](https://link.axios.com/click/27993008.485758/aHR0cHM6Ly93d3cuYXhpb3MuY29tLzIwMjIvMDYvMDcvdGVhY2hlcnMtc2Nob29sLXNob290aW5ncy1jb3ZpZC1wb2xpdGljcz91dG1fc291cmNlPW5ld3NsZXR0ZXImdXRtX21lZGl1bT1lbWFpbCZ1dG1fY2FtcGFpZ249bmV3c2xldHRlcl9heGlvc2ZpbmlzaGxpbmUmc3RyZWFtPXRvcA/61684c06fd3aad0dc63531e9Bc9b8613e) in schools. In response, one article offered the following ideas to make teachers feel appreciated for wrangling and molding us, our kids, and our friends.

1. **Say "thank you."** Tell the teachers in your life you appreciate them, and post on social media to spread the message in your network.
2. **Make calls (**If you don't have their numbers, look for them on social media and reach out there), and write notes and cards to the teachers at your local public schools.
3. **Volunteer** in classrooms, in the library or in the cafeteria — and try to give our teachers and school staff a long-overdue break.
4. **Give gift cards** for school supplies and a stash of healthy snacks.
5. **Be kind.** When you’re emailing your child’s teacher, remember that they’re barraged with demands and complaints. Be cheerful, appreciative and efficient: They may well be answering you on their own time.
6. **Bring donuts.** It may sound frivolous, but it's not. Show up with goodies or coffee to your kids' school.
7. **Empathize.** Dial back the political attacks. They, like all of us, are simply trying to do what's best for our kids.
8. **The bottom line:** Recognize the crazy stress teachers face. They joined a once admired, albeit modestly paid, profession — and now are vulnerable to physical attack, while being pelted with political grievances.
9. **Teacher Recruitment**

It is important to make high expectations and grading standards a part of the teaching culture through hand-on teaching, optimized incentives and strong professional development. Unfortunately, the economic picture for teaching isn’t being supportive. *A world-class public educational system cannot be accomplished without the best and the brightest heading our classrooms. And it cannot be done on the cheap.*

## A 2015 report found that just 30% of teachers are “engaged in their work,” resulting in millions of lost workdays due to stress or similar factors. To reduce teacher stress—and, in turn, teacher absenteeism, f[**ocusing on organizational culture—not just policies—can reduce teacher absenteeism**](https://connect.brookings.edu/e2t/tc/VWRVsl2XhDmLN6P9lklbNlh0W8ZpTlp49zv2SN2F3N2p5nx7hV3Zsc37CgV3-W4HHP2L1SqH_ZW49ygGt7xG3KkW1xSblD4yGDN4W4tDh2Y1W7Q5cW3Lhhm851Bt_MW41wnmt7fKqP_W83QJ722_BWbKW6br2v716nf1pW3XvPf_35htpBW1HWMbt5JYF_xW8gJH5V6bPMdwW1GzNR73PmRRrVZVRNm7vmw38W6dxxms71JFnwW6xQHYc183dXBW5ySyJH88LTl5W2Ks0pc90z9yCW15xX-k45V0L8W1HzTGs4XkBj1W3Sx8kr1WrWBSW2BRFZX4K_CrcW5snWVz6lkg7LW5SV9HY7dc--SW3xJJSs12mdttW4_QTM52msSkjVyqZX66JLNMxW87y3sf6xbt1FW7vTMQk7CGcGvW47JrwF1rss6MW3gL_HQ3QZQNqW4N7whl9g0-gKW5XWD2w3PVx8lW5w3jYd4Zyd1HW3dx2bP1Gg99kW5DLkBP5XlJ1BVnK-2W1VrY_-33Py1)**. S**chool leaders must complement policy with a rewarding, positive culture.

One positive example of addressing the problem is the District of Columbia Public Schools which has achieved lasting improvements in K–12 student outcomes.

* Armed with information from an evaluation system which revealed who the best teachers were, they pulled people together and asked them to develop curriculum with them. Lofty goals included wanting it to be rigorous and joyful and for young people to see windows and mirrors, and other communities, but also to see themselves mightily reflected in the things that they were learning. They wanted to ensure that it wasn't just around the core subjects, but that they were creating an interdisciplinary curriculum to develop the whole child.
* Because nobody in a school district was stepping back to look at the human-capital continuum: recruitment, selection, onboarding, induction, professional development, career ladders, and exits, they created the first office of human capital in any school system in the country.
* Publicly available data provided a level of transparency in school districts never seen before allowing them to identify and attract top-caliber talent, people who were experts, and then letting them do their thing. They negotiated a teachers’ union contract that completely changed how they were able to hire, eliminating tenure and seniority, and creating a pay-for-performance system and a new teacher evaluation system. Eighty percent of the teachers’ vote ratified the contract.

Priorities shifted and evolved across during that period. The chancellor’s job was to listen to people, to be in constant communication with teachers, principals, and central office staff to know what they needed to be successful.

While, first, human-capital work continued, it became very clear that, second, curricular work was also needed, i.e, an equity floor. What is the least to be guaranteed to every single kid across the district? Any additions had to be at a high enough standard that one would be happy sending their kid to any school in the district. We wanted kids to see themselves, and we built curriculum where kids’ communities were featured prominently. We watched kids attach to this stuff and engage in ways that I had never seen before. The third priority was community engagement—co-creating solutions with our students, our parents, and our community members. After release of the curriculum, they went to institutions in the city and asked, “Where does your content overlap with our curriculum, and how can we create field trips so that parents can take kids to places that align with what they’re learning?”

Then, to “How did you do it at DC Public Schools?”, the answer was those three things: human capital, curriculum, and family and community engagement.

1. **Diversity**

Nationally, about 80% of American public-school teachers are white, even though white students no longer represent a majority in public schools. Having teachers who reflect the race of their students is important, researchers say, to provide students with role models who have insight into their culture and life experience. But as demands from administrators over what and how to teach are growing, a disproportionately high number of Black and Hispanic teachers are leaving the profession in growing numbers.

A major culprit is stress — from pandemic-era burnout, low pay and the intrusion of politics into classrooms. But the burdens can be heavier in schools serving high-poverty communities that also have higher numbers of teachers of color.

The departures are undoing some recent success that schools have had in bringing on more Black and Hispanic teachers. Turnover is higher among newer teachers. And researchers have found that teachers of color, who tend to have less seniority, often are affected disproportionately by layoffs.

A teacher shortage is especially severe in schools with high shares of students of color or students from low-income families. The shortage is not because there is an inadequate number of qualified teachers in the U.S. economy. The problem is simply that there are too few qualified teachers willing to work at current pay levels, given the increasingly stressful environment facing teachers.

A shortage of qualified teachers and other staff threatens students’ ability to learn, undermining the education system’s goal of providing a sound education equitably to all children. This situation must not be allowed to continue. To end the teacher shortage, we must address the two most pressing reasons for the problem:

• The long-standing decline in the pay of teachers relative to other workers with a college degree; and

• The high and increasing levels of stress public school teachers face every day in the classroom.

Black and Hispanic teachers are more likely to be uncertified or teaching in an underfunded district, all of which is associated with someone leaving the profession at a higher rate, and they are often in a position with less resources and worse working conditions.

The leader of a Center for Black Educator Development said schools around the country come to him seeking help in recruiting teachers of color. But they don't have plans to retain them, such as providing opportunities to help shape policies and curricula.

To address the problem, schools can start by ensuring students of color have better experiences in school themselves and offering them opportunities to consider teaching. Black teachers also are more likely stay on in school systems that have Black leaders, he said, as well as a culture and approaches to teaching that are anti-racist.

Attrition by teachers of color can vary greatly by state or region. Overall, it has been higher compared with white teachers for two decades, since around the time federal policies began encouraging the closure of schools with low test scores. In underfunded schools with large populations of Black and Hispanic children, teachers say they can expect more responsibilities, fewer resources and more children troubled by poverty and violence.

In the last few years teachers everywhere have had to navigate COVID-19, a pivot to distance learning and the struggles with misbehavior and mental health that accompanied students' return to classrooms. And, then there’s the pay: Educators’ salaries have been falling behind their college-educated peers in other professions.

Teachers’ unions have warned of flagging morale, and there are signs lately that more educators are heading for the exits. Black teachers reported significantly higher rates of burnout and being significantly more likely to leave their job than white teachers, according to research sponsored by two national teacher’s unions and published in June by the Rand Corp. think tank.

Finally, administrators — including those who are Black or Hispanic — put more pressure on Black and Hispanic teachers, believing they we can handle more. As one teacher observed, “Because we develop relationships better, the kids understand us more, so they’re more likely to behave for us or do what we ask them to. So, we get fitted with the children who are more challenging or have more requirements. It’s crazy.” And it leaves those teachers with less time for the rest of their better-behaved students.

Most agree that America must continue to seek how best to increase racial and socioeconomic diversity of its selective high schools and colleges, as well as participation in its top professions. Thousands of early high-achieving children don’t end up taking AP exams, achieving high marks on their ACTs, or going to four-year colleges, not only limiting opportunities to move up the social ladder, but also threatening the nation’s economic competitiveness and aspirations for a more just society where children from all backgrounds can become inventors, doctors, and business leaders.

Teacher diversity matters now more than ever. Promoting more racial diversity among teachers and more inclusive work environments in schools will be good for everyone and disproportionately benefit students of color, helping to narrow these longstanding educational gaps.

The average American home price has risen 40%, per the nonprofit National Council on Teacher Quality, while starting teacher salaries have only risen 15%. To combat both the teacher shortage and the housing affordability crunch, school districts across the country are betting on various models of constructing housing for teachers, e.g., below-market rents, working with for profit and not-for-profit developers and often leveraging tax-free, district-owned land.

Diversity beyond the classroom matters, too. [Diverse school leadership](http://jhr.uwpress.org/content/early/2021/02/03/jhr.58.4.0218-9328R2.abstract) is associated with a greater likelihood of employing diverse teachers (to students’ benefit overall).  Also, diversity among professional staff including school counselors and administrators is associated with [improved test scores and reductions in absences](https://edworkingpapers.com/sites/default/files/ai21-500.pdf). Further, a study finds white students’ test scores improve when taught by teachers of color, too. the appropriate policy prescription is not simply to diversify the teacher workforce—a critical, though insufficient step—but also relies on professional development to improve practices among existing, predominantly white teachers.

Additionally, since 2017, the average American home price has risen 40%, per the nonprofit National Council on Teacher Quality, while starting teacher salaries have only risen 15%. To combat both the teacher shortage and the housing affordability crunch, school districts across the country are betting on various models of constructing housing for teachers, e.g., below-market rents, working with for profit and not-for-profit developers and often leveraging tax-free, district-owned land.

Public opinion of enacted and mooted policy approaches varies widely.

* Polarization and partisanship frequently predict policy preferences, eclipsing demographic factors like age, race, and ethnicity, and even material self-interest.
* Combined with rhetoric from political leaders, in our increasingly polarized political environment, distrust of the other political party can lead voters to oppose policies based on political endorsements and to impede goals of the other political party on politicized issues.

Rather than relaxing standards in K-12 education, a surer approach is to increase the supply of top-notch education offerings to help more high-potential kids from disadvantaged backgrounds compete successfully with others of the nation’s best and brightest.

A sizable number of third-grade high-achievers “lose altitude” by eighth grade. Black and Hispanic students participate in gifted programs at lower rates than their peers and, while Black and Hispanic students have been participating in larger numbers in Advanced Placement classes, their passing rates on AP exams show the effects of weak preparation in elementary and middle schools.

The state of Ohio has two positive policies. 1) require school districts to identify students as gifted and talented using a broad definition and a variety of metrics. 2) a universal screening policy, incorporating measures of achievement and growth among gifted students in its school accountability system, and providing modest funding for identification and services.

Integration and diversity in the educational experience are important goals not only of the student bodies, but of the faculty as well. All students, particularly those of color benefit from having teachers of color in the classroom. But it is equally important to recognize that teachers of color also need a strong and supportive school climate to thrive. Two factors that cause teachers of color to leave the field are [poor working conditions and lack of autonomy](http://www.cpre.org/sites/default/files/researchreport/1221_minorityteachershortagereportrr69septfinal.pdf), the prime intrinsic motivators for teachers whose prime interest is making real differences in their children’s lives. The unequal burden of student loan debt faced by educators of color may also contribute to the existing lack of diversity in the teaching profession.

One strategy effective has been establishing a high-quality school in low-income communities of color that, in turn, will draw children from more well off families in essentially white, higher income neighborhoods. *(This has been the experience of the Oaks Academy Indianapolis. By policy 50% of their students come from low-income families. They draw white students from long distances so they can be a part of the success story.)*

When poor families become less poor, their kids to better on achievement tests and graduation rates. The progress was greatest and most widespread in math, but also strong in reading, and [pretty good in science, writing, U.S. history, and civics](https://fordhaminstitute.org/national/commentary/student-outcomes-have-improved-more-just-reading-and-math). In all cases, gains were greatest for the lowest-achieving students, for students of color, and at the fourth and eighth grade levels.

Major concern and action are also required to assure that all lower-income, and often less well educated, *parents* are treated with respect and provided whatever support may be necessary for them to be effective partners in the educational process.

An “all of the above” strategy is almost certainly necessary if districts are going to have a chance to achieve meaningful integration.

1. **Teacher evaluation**

Teachers are expected to impart so many things, from how to study and take notes to how to share and take turns. Deciding what constitutes good teaching is a messy business.

* Teachers who were good at raising test scores tended to receive low student evaluations. Teachers with great student evaluations tended not to raise test scores all that much.
* High student achievement was associated with teachers who delivered more cognitively demanding lessons, going beyond procedural calculations to complex understandings.
* Teachers who incorporated a lot of hands-on, active learning received high marks from students and raised test scores. These teachers often had students working together collaboratively in pairs or groups, using tactile objects to solve problems or play games.
* These doubly “good” teachers maintained orderly classrooms chock full of routines. They were proactive in setting up clear behavioral rules at the start of each class, had a good sense of pacing, and understood the limits of children’s attention spans.
* Students who had more engaging elementary school teachers subsequently had higher math and reading achievement scores and fewer absences in high school and were generally doing better in high school too, though long-run benefits faded out somewhat. Though we all want children to learn to multiply and divide, it may be that engaging instruction is ultimately more beneficial.

Teaching has become one of the most draining jobs in America: first **the pandemic, more recently, school shootings, and now classrooms** have become political minefields, as local residents are invading board meetings, lawmakers dictate [what they can teach](https://link.axios.com/click/27970239.483821/aHR0cHM6Ly93d3cuYXhpb3MuY29tLzIwMjEvMDYvMjAvdGVhY2hlcnMtaGFyYXNzbWVudC1maW5lcy1jcml0aWNhbC1yYWNlLXRoZW9yeT91dG1fc291cmNlPW5ld3NsZXR0ZXImdXRtX21lZGl1bT1lbWFpbCZ1dG1fY2FtcGFpZ249bmV3c2xldHRlcl9heGlvc2FtJnN0cmVhbT10b3A/61684c06fd3aad0dc63531e9Bb9d4ad2c), what students [read](https://link.axios.com/click/27970239.483821/aHR0cHM6Ly93d3cuYXhpb3MuY29tLzIwMjIvMDEvMTcvYS1ib29rLXB1cmdlLXN1cmdlP3V0bV9zb3VyY2U9bmV3c2xldHRlciZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj1uZXdzbGV0dGVyX2F4aW9zYW0mc3RyZWFtPXRvcA/61684c06fd3aad0dc63531e9B50151c8f), and what programs are offered to help kids with their [social and emotional](https://link.axios.com/click/27970239.483821/aHR0cHM6Ly93d3cuYXhpb3MuY29tLzIwMjIvMDQvMTQvY2hpbGRyZW4tbWVudGFsLWhlYWx0aC1zY2hvb2xzLWN1bHR1cmUtd2FyLXBhbmRlbWljP3V0bV9zb3VyY2U9bmV3c2xldHRlciZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj1uZXdzbGV0dGVyX2F4aW9zYW0mc3RyZWFtPXRvcA/61684c06fd3aad0dc63531e9B787e066e) needs.

In response, **long underpaid t**eachers are asking whether the burdens are worth it. As America's demands on its educators have mounted, staffing shortages are emerging. The 1970s 200,000 new teachers a year has [fallen](https://link.axios.com/click/27970239.483821/aHR0cHM6Ly9hYWN0ZS5vcmcvd3AtY29udGVudC91cGxvYWRzLzIwMjIvMDMvQ29sbGVnZXMtb2YtRWR1Y2F0aW9uLUEtTmF0aW9uYWwtUG9ydHJhaXQtRXhlY3V0aXZlLVN1bW1hcnkucGRmP3V0bV9zb3VyY2U9bmV3c2xldHRlciZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj1uZXdzbGV0dGVyX2F4aW9zYW0mc3RyZWFtPXRvcA/61684c06fd3aad0dc63531e9Bf3fa1642) to below 90,000 and 55% of educators are considering leaving the profession earlier than they planned.

Schools are still filled with passionate teachers who care deeply for their students. In response, administrators around the country are trying to find small ways to ease the burden on teachers, e.g., free breakfast and coffee, and extra paid time off. Everyone else should send messages of support and cards of thanks.

The Heritage Foundation president makes the following argument:

* The people least prepared to teach a subject are education majors, who have encounterd the least substance and rigor. Rather, schools should look for subject-matter experts with a heart for teaching.
* Much of the blame lies with university-based colleges of teacher education programs and state certification mandates that bolster their enrollment. States should end requirements for teacher certification and instead empower schools to hire based on subject-matter expertise.
* In higher education, accreditation has a poor track record of quality assurance, a problem exacerbated by [a cartel](https://urldefense.com/v3/__https:/www.heritage.org/education/report/its-time-congress-dismantle-the-higher-education-accreditation-cartel__;!!F0Stn7g!FSVEw4T6fxwbmpQ_hUAyBGWEqH_zEDPHaDn1F9-XN6THCT_9JohxyZMLw4iGNGqYVaBT1vJjrmGhdKEUQjY$) of so-called regional accreditors who split the country into regions and conspired not to encroach on each other’s territory.
* Teachers’ unions have also operated like a cartel. Congress should rescind the federal charter of the NEA — the only union with a federal charter — no longer putting the federal imprimatur of support on the special interest group.
* In states that lack the political support to eliminate teacher certification altogether, states should recognize or charter additional private organizations to certify which teachers are ready to teach and introduce market competition in the validation of teachers.

Unfortunately, an impediment to resolving these issues is the reluctance of some schools to take any action that might portray the school in a negative light. On the TIMSS, a multi-national curricular outline of what 4th and 8th grades kids *should* learn in school in math and science, the average scores of American kids are *declining*, in every case the U.S. average was well below what TIMSS terms its “high benchmark” at which children don’t simply possess some knowledge, skills, and understanding, but are actually able to apply them. Attributes favoring higher scores included: students having more educational resources in their homes and beginning school with stronger literacy and numeracy skills and schools with a higher emphasis on academic success and safe and orderly schools with fewer discipline problems.

A study in North Carolina found that [students assigned to teachers who improve student attendance and discipline are less likely to have contact with the criminal justice system between the ages of 16 and 21](https://connect.brookings.edu/e3t/Ctc/DF+113/c1x-m04/VWnbcq6wbZjqW6PsGqc2pxs3XW3hB9jJ4N1VvyMhPPRy3q2SGV1-WJV7CgPDSW18x-tx85lm8RW40sk2p8yBjxkW872N228xd_N5W1j7xGL5GwYN6W2H2xCL24SfKdN2QXZ2PfJBPpVGZnxd48r035V86hYh8hmHvZW1XNW4G1rw7VSW20PnX58SDyN8W4G56mW80fk3FW8s13gF6PtFX3W7jqM452cgtzqW1wXWVJ526PMkW943hS93mSm6DW46n5sK6dzJfFVW4lgH5J--63W2xGNs_7zrPscW8ffVLS1T3VSyW1j4xHC21XhZT3p_Y1), while teachers who improve academic performance have a positive impact on long-run academic prospects, they do not appear to influence the likelihood of criminal justice contact. Policies based solely on teachers' test score quality may inadvertently remove teachers with important impacts on students' future [criminal justice contact].

**6. Apprenticeships**

Teacher apprenticeship, a promising model for increasing access into the teaching profession, boosting the incentives to train as a teacher, and strengthening clinical preparation had been formally registered in 26 states plus Puerto Rico and under development in five states plus the District of Columbia by October 2023. Teacher apprenticeship has the potential to transform teacher preparation in a number of positive ways and at the very least will challenge the status quo. Details of five takeaways regarding the still-evolving teacher apprenticeship landscape are contained in Appendix Y.

**7. Maintaining classroom discipline**

**Disruptive students**

A major cause of quality teachers leaving and reduced numbers entering is disruptive students who keep teachers from doing their successful teaching and cheat peers who want to learn out of significant amounts of instructional time. It only takes a small number of disruptive students, and their followers, to make learning difficult for all and teaching a more than small challenge and less than rewarding occupation.

In the 1990s harsh punishments which required educators to suspend or expel students for infractions were used for even minor, nonviolent infractions to dissuade individuals from committing more serious offenses. These appear to be fading and, more recently, growing numbers of schools have adopted alternative discipline practices like restorative justice programs and behavioral interventions, some of which can reduce the prevalence of exclusionary discipline. And some can have positive effects on student and teacher perceptions of school safety.

A majority of U.S. public schools have zero-tolerance policies—or mandatory penalties for students who break certain rules, primarily at the secondary level and most commonly at schools serving mostly Black students. Most only apply to more serious offenses like bringing a weapon to school although a small share (6%) continue to include low-level, nonviolent offenses.

Alternative approaches to exclusionary discipline include:

* Positive Behavioral Interventions and Supports, a program that aims to define schoolwide behavioral expectations and norms, rewarding students who meet those expectations while providing support to students who do not.
* [Restorative justice](https://www.taylorfrancis.com/chapters/edit/10.4324/9781003275312-6/restorative-practices-schools-sean-darling-hammond-trevor-fronius) programs and practices to cultivate a more inclusive and equitable school climate
* Multi-tiered systems of support related to improving school climate and preventing student behavioral challenges.

Optimally, correcting this situation will require changes in the home situations, a community awareness of and support for change, acceptance of responsibility and support (currently often non-existent) from school authorities, and the ability to move disruptive students from regular classrooms, not by expulsion but to situations more specifically designed to address their needs.

Recognizing that “school discipline brings into play a number of important but often competing goals for school districts”, the following are “seven suggestions for superintendents and district-level administrators to consider for their discipline policies.”

* DO worry about racial discrimination and implicit bias when determining punishments for students who misbehave.
* DON'T assume that racial bias alone explains disparities in discipline rates.
* DO show empathy for kids whose misbehavior is due to difficult life circumstances. Educators need to understand the truly tough circumstances that some children face outside of school and do their best to help them cope.
* DON'T engage in the soft bigotry of low expectations. All students need to learn how to control their impulses and behave in acceptable ways, as well as cultivate an attitude that reflects motivation and engagement.
* DO find ways to address misbehavior that leads to positive changes and protect opportunities to learn. Long suspensions reduce learning time for those being punished and may not improve their behavior.
* DON'T just send disruptive kids back to their classrooms.
* DO address "suspension factories." A 2013 report by researchers at The Civil Rights Project at UCLA found that thousands of public schools suspend more than a quarter of their students every year.

Potentially even better, however, than these disciplinary interventions are programs from the earliest pre-school and school years designed to teach appropriate behavior. One such program consists of a 20-minute exercise for 2nd graders at the start of the day designed to build students’ social skills. This has improved teacher insight into the students and significantly reduced discipline referrals.

**Bullying**

Although responsibility for countering school bullying must be shared by the entire community prime responsibility for bullying rests with schools, which can:

1. Develop an agreed well supported anti-bullying policy to direct operations
2. Become aware of their moral and legal obligations in responding to bullying in schools
3. Deliver information to students about bullying and involve them in classroom activities that will enable them to acquire attitudes and skills that will help them to develop and maintain positive relations with their peers
4. Help children come to terms with new forms of bullying, especially in cyber technology
5. Work with students who can be trained to support bullied vulnerable children.
6. Work with the police, especially in responding to criminal activity.
7. Adopt appropriate intervention strategies for dealing with bullying.
8. Seek to prevent bullying and deal with cases of bullying through cooperation with parents.

**Truancy**

Chronic or repeated individual absences are often associated with a peer with whom they systematically skip class. Perhaps intervening in that relationship may offer some value.

Another related issue is problems with the school day schedule. Starting times cut into sleep time required by student’s biologic clocks. Better-rested teens [do better in school](http://www.sleepforscience.org/stuff/contentmgr/files/52a3d7d8fccfd8d14eb35108b5ef8f67/pdf/wolfson_carskadonsmr2003.pdf), [get in fewer car crashes](https://www.ncbi.nlm.nih.gov/pubmed/23689363), and [are less prone to depression](https://www.ama-assn.org/ama-supports-delayed-school-start-times-improve-adolescent-wellness).

And, on the other end of the day, parents’ lives also tend to be mismatched with school-day schedules. More than a thousand American schools [have extended their school days by an hour and a half](https://www.theatlantic.com/family/archive/2018/09/school-day-parents/569401/).

**8. Teacher Compensation and Funding**

Most important, despite the perception that educator jobs are unionized and guaranteed-tenure, hundreds of thousands of American teachers have seen their wages and benefits erode in recent years, more so than for many other types of workers. The relatively low level of compensation now often impinges on teachers’ ability to put a roof over their heads. So, fewer young people choose teaching as a career and many of our best are leaving careers early, some are taking second jobs nights, weekends and during summer break, or even living in their cars. Moreover, what public-school teachers earn compared with comparably qualified individuals in the private sector is large and growing. **In 2017, female teachers were making 15.6 percent less than comparable female workers, and male public-school teachers were making 26.8 percent less.**

Research shows: 1) teachers are paid significantly less than they could earn outside of teaching. 2) teacher salaries have been stagnant, largely because personnel budgets have been more directed toward increasing the number of educators and administrators than toward supporting teachers, coupled with pressures on public budgets—due importantly to the growing costs of public pensions and health benefits. Moreover, the nation has a substantial equity problem: achievement gaps have been constant for a half century despite a wide variety of federal, state, and local policies designed to address them.

Moreover, the teacher pay gap—i.e., what public-school teachers earn compared with comparably qualified individuals in the private sector—is large and growing. **In 2017, female teachers were making 15.6 percent less than comparable female workers, and male public-school teachers were making 26.8 percent less.**

Teachers are critical and deserve to be adequately compensated for the work they do leading our nation’s classrooms, regardless of their gender. Women account for roughly three quarters of the teaching workforce. but gender wage gaps persist, with male teachers earning $2,200 more than female teachers of similar characteristics. Supplemental school-based compensation plays a lead role in these gaps. Average male teachers earn $1,700 more in extra duty pay than their female colleagues with similar qualifications and in comparable contexts. There is also a gender gap in the likelihood of receiving payment for performing extra duties and being compensated for them. Men are even more likely to be paid for this extra work when the principal at the teacher’s school is male. These income sources off the salary schedule provide the most likely avenue for gender-based wage discrimination among teachers.   The article offers three key findings:

1. All school income sources show gender wage gaps; most troublesome in extra duty pay.
2. Differential compensation in extra duty pay suggests discrimination.
3. Gender wage gaps shape-shift depending on the union context.

It concludes that wage gaps are real and pervasive across many settings (e.g., contract restrictiveness, union strength). These gaps warrant policy interventions to mitigate them. (Note: This report reveals areas where gender discrimination may be taking place among teachers, not whether a discriminatory act has occurred. Further research, particularly audits, would be useful in exposing these instances.)

Student achievement overall has increased little from generation to generation. Inequities in teacher quality may offset benefits from federal programs designed to target low-income students, as the schools serving those student populations tend to have less experienced teachers than schools in wealthier communities. U.S. [teachers are paid 22 percent less](http://blogs.edweek.org/edweek/teacherbeat/2019/02/higher_pay_leads_to_smarter_teachers_global_study.html) than comparably experienced and skilled college graduates doing other jobs. Increased salaries boost teacher retention, increased salaries get a different set of people into the classroom, and in our regular lives, we know salaries matter."

**The issue**

Public education spending in the U.S. has nearly tripled over the past half-century while math, reading and science test scores have [remained flat](https://protect-us.mimecast.com/s/Kt_XC31rZ2h6AjKPuEwT1o?domain=object.cato.org). Most increases in education expenditures [go toward administration and support staff](https://protect-us.mimecast.com/s/3B_kC4xv1RfM0Z5nI3ci0w?domain=edchoice.org). Instead of preparing citizens for the real world today, public schools, the bulwark of a civil society, are endangered by radical privatization and aggressive commercialization of education.

In a survey of more than 1,800 US educators, school leaders, and school mental health professionals approximately one-third said they planned to leave their role before the next school year began, which equates to roughly 900,000 teachers across the nation. This pending turnover could further exacerbate inequality, hampering efforts to create more resilient and equitable K–12 education systems.

High vacancy districts occur in US areas that tend to have more legislation that restricts what can and cannot be taught in the classroom, limiting teachers’ freedom. Such regions also tend to have less investment in public education, notwithstanding stimulus funding.

Pandemic stimulus aid expired in September 2024, forcing districts to make ends meet with less, which, coupled with declining enrollment trends and staffing issues, could erode the underlying credit of school bonds, particularly in smaller districts and areas with weaker revenue pledges. And, from a bondholder perspective, schools are usually funded on a per-pupil basis so if that trend continued, it would represent potential risk.

As state and local finances rebounded after the pandemic, many red and purple states cut their income taxes, with property taxes [remaining depressed](https://www.brookings.edu/articles/state-and-local-budgets-and-the-great-recession/) due to the subprime-mortgage crisis. The result: sharp declines in [public-school funding](https://www.cbpp.org/research/state-budget-and-tax/a-punishing-decade-for-school-funding) per student, [reduced salary](https://www.nctq.org/dmsView/The_Recessions_Impact_On_Teacher_Salaries_NCTQ_Report) increases through the recovery, and widespread teacher shortages.

On the other hand, a blog from the Fordham Institute states that, although teachers’ unions continually push for higher pay for public school teachers regardless of gains in student achievement, today’s educators don’t in fact live a meager existence.

According to the NEA, the average teacher salary is $66,433 nationwide. In addition, their benefit packages are equivalent to 45 percent of their base salary, compared to just 19 percent for the average worker. Adding these benefits to annualized base wages—including the summer months when schools are not in session—the average teacher salary would be $116,000.

However, public school teachers could be earning more. Over a period of more than half a century, teacher-student ratios went from 1:27 to 1:16, which means that we are hiring more teachers rather than paying the ones we have more. Unions seeking more members, colleges of education seeking more students, administrators seeking to hire more subordinates—these are the factors driving increases of teaching professionals.

It concludes that we’ve taken the huge increases over those decades in per-pupil spending on K–12 education and—instead of directing those dollars into better pay for the teachers we’ve got and using it to get and keep exceptionally able and effective teachers—we’ve used them to hire more people.

An immediate culprit is inflation. Public schools are less nimble when it comes to [raising pay](https://link.axios.com/click/32894057.470387/aHR0cHM6Ly93d3cuYXhpb3MuY29tLzIwMjIvMDcvMTEvZ292ZXJubWVudC1qb2JzLXBhbmRlbWljLXJlY292ZXJ5LWZlZGVyYWwtc3RhdGU_dXRtX3NvdXJjZT1uZXdzbGV0dGVyJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPW5ld3NsZXR0ZXJfYXhpb3NtYXJrZXRzJnN0cmVhbT1idXNpbmVzcw/61684c06fd3aad0dc63531e9B900ce186) than the private sector. Whilethe earnings of other college grads managed to just about keep pace with price increases, they eroded teachers' real pay considerably.

There is no single factor that drives teachers to leave or stay, but research has revealed areas of distinction and overlap. Teachers who are thinking of leaving cite compensation, unreasonable expectations, and an inability to protect their well-being as their top motivators, while those who plan to stay cite meaningful work, quality colleagues, and compensation. Pending teacher departures would disproportionately affect low-income families and students of color. Four categories of teachers are more likely than others to consider leaving.

* Younger teachers.
* Teachers in low-income school districts.
* Teachers in districts with more students of color.
* Teachers working with younger and older students.

On the other hand, while we aren’t paying enough to get the level of teaching across the board we need, the quality of teaching in much of that workforce makes it hard to raise compensation until there is a better product.

States and localities cannot avoid dealing with issues of teacher compensation. Not only is it the largest budget item for many local governments, but also it is the place of largest leverage for improving the quality of schools. It is essential for the United States to recognize the vital role of effective teachers, and for states and local school districts to develop compensation systems that attract and retain them. This requires enhanced salaries for all teachers accompanied by a tilt in compensation toward those who are more effective.

The average American home price has risen 40%, per the nonprofit National Council on Teacher Quality, while starting teacher salaries have only risen 15%. To combat both the teacher shortage and the housing affordability crunch, school districts across the country are betting on various models of constructing housing for teachers, e.g., below-market rents, working with for profit and not-for-profit developers and often leveraging tax-free, district-owned land.

Having a same-race teacher improves test scores, a student’s likelihood of being selected for gifted and talented programs, graduating high school, and intending to enroll in college. Increased exposure to same-race teachers is also associated with improvements in[course grades](https://www.sciencedirect.com/science/article/pii/S0272775721000042),[students’ attendance](https://journals.sagepub.com/doi/full/10.3102/01623737211032241),[students’ grit and interpersonal self-management](https://www.edworkingpapers.com/sites/default/files/ai21-399.pdf),[their working memory](https://www.edworkingpapers.com/sites/default/files/ai22-511.pdf), and[the likelihood of taking an advanced math course](https://journals.sagepub.com/doi/10.1177/016146812012200709#:~:text=Findings%2FResults,course%20in%20the%20same%20school.).

Individual states and the federal government have proposed and enacted various policies to strengthen the teacher workforce, encompassing both financial interventions and non-pecuniary policies around teacher working conditions. These policies vary widely in scope, encompassing both financial interventions (e.g., teacher pay, loan forgiveness) and non-pecuniary policies around teacher working conditions.

**Impact of these factors**

Under-funding schools has led teachers to spend their own money to support a positive learning environment, spending for which they are generally not reimbursed. This situation is accentuated for high poverty schools where teachers spend more of their own money than they do in less challenging environments, possibly due to greater needs of those students or more deficient school funding. Further our schools are not up to par compared to many others in the world in part because we let poor teachers stay in the classroom for a long period of time.

Though compensation is a top driver of both attrition and retention, school districts typically do not have much leeway to alter salary ranges. States and districts are exploring different models of addressing compensation concerns, e.g., inflation adjustment and bonuses. One program in Chicago offers an additional $10,000 annual salary increase for teachers who have exemplified success in five key areas: student growth, classroom culture, instructional rigor, inclusion and relevance, and extended impact.

**Turnover:** Turnover rates have indeed [increased](https://www.chalkbeat.org/2023/3/6/23624340/teacher-turnover-leaving-the-profession-quitting-higher-rate) and are approaching or topping all-time highs. Turnover is inherently disruptive regardless of the reasons for the turnover, leading to higher proportions of teachers with limited experience, lateral entry teachers or those with provisional licenses, the latter particularly among schools with large concentrations of low-performing students or high rates of poverty. It suggested 3 mechanisms of the adverse impact: 1) higher proportions of teachers with weak qualifications reduce the quality of teaching and reduce student achievement. 2) new and inexperienced teachers can interfere with the development of a coherent curriculum. 3) the compositional change is likely to increase turnover in subsequent years because of the greater proclivity of [novice teachers](https://journals.sagepub.com/doi/abs/10.3102/0002831218790542?journalCode=aera) and [alternatively certified teachers](https://journals.sagepub.com/doi/full/10.3102/0002831216653206) to leave schools.

**Proposals to attract and retain educators.**

Educators are planning to leave primarily because of compensation, but also because these educators also feel overworked and undervalued. Meaningful work is by far the top reason that motivates teachers to stay. So what are some steps for attracting—and retaining—educators?

* [Improve school working conditions](https://journals.sagepub.com/doi/abs/10.3102/0162373711398128) by raising the quality of [a school’s leadership](https://journals.sagepub.com/doi/abs/10.3102/0002831216667478) or providing differential pay for teachers to remain in hard-to-staff schools or subjects
* Adopt policies designed to make schools more resilient to the loss of teachers, like enhancing the teacher pipeline for such schools and providing strong mentorship programs for early career teachers.

Though compensation is a top driver of both attrition and retention, school districts typically do not have much leeway to alter salary ranges. States and districts are exploring different models of addressing compensation concerns, e.g., inflation adjustment and bonuses. One program in Chicago offers an additional $10,000 annual salary increase for teachers who have exemplified success in five key areas: student growth, classroom culture, instructional rigor, inclusion and relevance, and extended impact.

* Among policies to reduce the gender wage gap, increasing pay transparency and including supplemental pay in collective bargaining agreements have the most potential to achieve pay equality. Additionally, salary history bans and participatory budgeting hold promise and warrant further exploration. Existing research provides some clear guidelines on ways to improve current teacher compensation in order to support higher student achievement:

• Move away from policies and practices that are unrelated to educator effectiveness.  
• Introduce compensation policies with clear linkage to educator effectiveness.  
• Shift compensation from retirement payments toward current salary.  
• Address teacher shortages explicitly, not generally.  
• Bring directed teacher quality programs to disadvantaged schools.  
• Use evaluation systems, whatever the method, consistently and effectively.  
• Allow flexibility for local districts to make appropriate trade-offs.

**Other methods**.

1. **Invest in systems to collect and manage data to** guide the community schools strategy..
2. Districts and state education systems could consider tailoring bonuses to teacher segments that are particularly prone to attrition, such as those working in higher-poverty districts or with younger grade levels and high schoolers. Innovative staffing models that harness the expertise of senior teachers by allowing them to lead lessons across several classrooms have also proven to be a cost-effective intervention that may allow districts to increase compensation by up to $10,000 in select cases.
3. In a market economy, employee compensation inevitably depends on employee performance and productivity. But public-school teacher compensation depends very little on performance, but rather is largely tied to seniority and the completion of various certification and summer teacher enrichment programs. Moreover, teacher compensation typically does not reflect market pressures for teachers across different teaching fields. In particular, compensation for teachers in the difficult-to-fill STEM teaching areas is often the same as in areas that do not have the same scarcity. This makes it very difficult to hire and retain qualified math and science teaching specialists.
4. To address overwork concerns, districts could consider a cross-coverage model. For example, school administrators and other staff can provide backup support to cover classes so that teachers don’t have to take on extra work without adequate breaks or planning. Coupled with other efforts such as professional development and staff get-togethers. This backup support has contributed to a record 90 percent retention rate at the school even amid the pandemic.
5. To increase teachers’ sense of purpose and meaning in their job, leaders could employ nonfinancial incentives that are common in other workplaces, such as public recognition, taking steps to increase the time available for leaders to connect with students and provide greater support to teachers—both in and outside of the classroom—through coaching, feedback, and mentorship, and providing support for completing administrative task (which could help free up leaders’ time so they could focus on developing relationships with stakeholders in the district and help alleviate challenges associated with well-being and burnout.)
6. **Invest in systems to collect and manage data to** guide the community schools’ strategy.
7. Districts and state education systems could consider tailoring bonuses to teacher segments that are particularly prone to attrition, such as those working in higher-poverty districts or with younger grade levels and high schoolers. Innovative staffing models that harness the expertise of senior teachers by allowing them to lead lessons across several classrooms have also proven to be a cost-effective intervention that may allow districts to increase compensation by up to $10,000 in select cases.
8. Considering only compensation is likely to be insufficient. One survey found that teachers value a school that provides a full-time nurse, counselor, education paraprofessional, and special education co-teacher more than they value a 10 percent salary increase. As such, investments in support staff may prove to be both more economical for schools and more valuable for their teachers and school leaders.
9. To address overwork concerns, districts could consider a cross-coverage model, for example, school administrators and other staff could provide backup support to cover classes so that teachers don’t have to take on extra work without adequate breaks or planning. Coupled with other efforts such as professional development and staff get-togethers, this backup support has contributed to a record 90 percent retention rate at one school even amid the pandemic.
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11. The long-run gains of merit pay may be even much higher by changing the future composition of teachers. High-performing individuals don’t enter the teaching profession at the same rate as they used to because they won’t be paid what they are worth. Teaching is now attracting individuals who are extremely risk averse, meaning that they value job security (provided by teacher tenure) much more than other workers in the economy.
12. In many cases, stable or slightly improved benefits are being offered *instead of* raises “making benefits a larger share of the overall compensation package for teachers than for other professionals,” in the process driving down wages even more. And those added benefits don’t put food on the table. The fact is that there is a [widening “wage gap”](https://www.citylab.com/equity/2018/04/mapping-the-widening-teacher-pay-gap/557618/) between public-sector teachers and their other college educated peers, and these losses are only slightly offset by the monetary advantage teachers get in the form of non-wage benefits.
13. Some school systems have responded by switching to four-day school weeks or allowing college students and veterans without a license or formal teacher training to instruct children.
14. To some degree, teachers have brought on their own problems. Their unions are notorious for making it all but impossible to fire underachievers. Teachers would do far better if they were willing to accept more accountability in return for better compensation, as they have in some places.
15. High-performing teachers are effective even in classrooms with a large number of students. It is hard to imagine a better investment than paying teachers according to their performance. We need more and better students enrolling in our Schools of Education, create more and better scholarships for that purpose. If we need more of our Ed School graduates teaching in Indiana, then a bonus for such behavior should be financed…. More of our experienced teachers might remain in the non-vocational classrooms, if two things were done: First, provide more funds for retirement as a teacher reaches various advanced milestones in a career. Second, reduce the financial benefits of becoming a school administrator.
16. **One question might be whether there is some opportunity to provide “employment” during the summer months for those wanting it that would offer an opportunity to compensate our teachers more equitably.**
17. **Another approach that would be positive for children, parents, and teachers, provided they were appropriately compensated, would be year-round schools. In addition to improving teacher compensation, it would lessen a documented significant educational loss that children experience with those months away from the learning environment.**
18. Teachers’ unions: One of the last outposts resisting merit-based pay.” They fight for long tenured members at the expense of new hires and fight for arcane licensing requirements at the expense of competence. Unions claim several reasons, such as (1) merit-based pay introduces competition into teaching and this would ruin a collaborative and collegial workplace, (2) merit-based pay will lead all teachers to teach the same way, and (3) it is inherently difficult to evaluate teaching performance.
19. To the above, the Hoover Institution responds: Regarding (1), most effective workplaces exhibit both collegiality and performance-based pay, and this includes teachers at community colleges, colleges, and universities. Regarding (2), if there are clear best practices in teaching, then we should hope that they will be adopted broadly. Regarding (3), teachers are evaluated when they are hired, and they are evaluated for their tenure decision. In fact, just ask any parent whether they can distinguish between effective and ineffective teachers.
20. This is an issue which the federal government has every bit a responsibility to address. Just as they spend over $15 billion annually to support graduate education for those in the health workforce, it would be reasonable for them to improve the floor under teacher salaries.
21. Use the tax code to create a permanent $10,000 refundable federal Teacher Tax Credit, essentially serving as a wage boost. This would result in a significant increase in take-home pay—more than $190 per week. This would cover the average weekly cost of groceries for a family of four on a low-cost plan raise while preserving and increasing state funding levels.
22. High-poverty school districts are more likely to be underfunded and lack the resources that educators need to be successful. Doing this for these teachers will lessen pay inequities, reduce teacher turnover, and support efforts to increase teacher diversity—and by doing so, will increase overall student achievement. The full tax credit would be directed toward teachers in high-poverty schools—defined as schools where 75 percent of students or more receive free or reduced-priced lunch (FRPL). The tax credit would then phase out as the percentage of students receiving free or reduced-price lunch declines,

**Teacher Turnover**

There is no easy fix for lowering teacher turnover rates. Nuances exist in what motivates educators to stay or leave. For example, more than half of teachers say that compensation is driving them out the door, while more than a third say it’s why they are, instead, sticking with teaching. Furthermore, almost three-quarters of respondents who plan to leave cite an unmanageable workload, while nearly three-quarters of those who plan to stay say their workload is manageable.

**Teacher Residency Programs (TRP):** [Teacher residency](https://nctresidencies.org/) is an alternative pathway into teaching for career switchers or recent college graduates that is co-led by school districts and institutions of higher education. programs are and discuss the nascent evidence on their effectiveness and cost.  Teacher residency programs (TRPs) recruit aspiring teachers to train and work in hard-to-staff positions—with training often taking place in the specific school where they will eventually become full-time teachers. TRPs are co-designed and co-led by school districts and university-based teacher preparation programs, This model allows local districts to tailor the program toward their specific staffing needs and community context. Additional [programmatic elements](https://ies.ed.gov/ncee/edlabs/infographics/pdf/REL_MA_FACTSheet_What_are_teacher_residency_programs.pdf) of TRPs typically include a competitive admissions process for both aspiring teachers and mentor teachers, co-teaching opportunities for candidates, induction support, and access to professional learning communities. Teacher candidates often finish residency programs with a master’s degree and teaching certification.

Importantly, TRPs can provide a more affordable pathway for aspiring teachers. Teacher residents are often paid a stipend and can receive tuition remission if they work for the sponsoring district for a certain period, usually three to five years.  TRP graduates also go on to work in high-need subject areas at higher rates than traditionally trained teachers. Moreover, early data also suggests that TRP may boost student achievement and reduce teacher attrition. Determining the most cost-effective training programs for the district to partner with depends heavily on how long each program’s teachers stay in the classroom. As such, given their higher retention rates, TRPs (and to a similar extent, the TEACh program) begin to look like a much smarter investment for districts relative to TFA hiresTRPs are expensive, making them challenging to both fund and sustain. There is also limited research on their effectiveness in terms of student achievement, although what evidence exists is largely positive. And importantly, compared to traditionally prepared teachers with similar years of experience, TRP graduates have higher teacher retention rates in challenging, hard-to-staff settings. While TRP has high upfront costs, given the high costs of teacher turnover in high-need settings, TRPs could be worth the investment in the long run.

TRPs also achieve other outcomes of importance to the health of the teaching profession and the needs of public school students. TRPs tailor teacher preparation to the needs of specific communities and can help increase diversity and improve stability in the teacher pipeline.

**9. Alternative Teaching Approaches**

**Coaching**

Low-income parents attending community college face a myriad of challenges to balance their education with careers and raising their children. To break the cycle of poverty and build prosperity, [LIFT](https://www.whywelift.org/) — a national organization that strives to interrupt the generational transmission of poverty — offers free individualized coaching to hundreds of student parents annually to build their:

* Well-being.
* Financial strength.
* Social connections.

In 2020, Capital One launched a multi-year $200 million program to be offered in institutions like community colleges, pediatric clinics, and [Head Start](https://www.nhsa.org/) centers that strives to advance socioeconomic mobility and create a world where everyone has an equal opportunity to prosper through advocating for an inclusive society, building thriving communities and creating financial tools that enrich lives. An initial $500,000 grant has helped LIFT expand its virtual coaching sessions and efforts to improve upward mobility for those families. The virtual coaching enables parents and legal guardians to continue participating in LIFT’s one-on-one coaching, receive direct cash assistance, participate in group educational workshops, connect with resources, and creates improved outcomes for their children**.**

.  As of September 2021, 99% of participants are people of color and 91% of participants are women.

Through the program, every student parent is paired with a specific coach that they meet with roughly once every three weeks for up to two years to explore their goals and where they are currently in their journey.  In addition to navigating their education, coaches work with parents to improve their financial well-being through learning how to create a budget, apply for financial aid, apply for student loans, and access childcare while attending classes.

The investment in families who have been historically marginalized helps them move towards sustained economic mobility and break generational cycles of poverty. For parents in LIFT's program who saw one, then average annual increase was $15,000.

Coaching from LIFT has the power to help parents sustainably break out of generational poverty. “With Capital One’s support, we’ve been able to provide a virtual lifeline to families helping them to move through unprecedented times while still moving toward dreams and goals for themselves and their children,” says Michelle Rhone-Collins, Chief Executive Officer of LIFT.

**High-dosage tutoring**

Recent national testing shows a decline in math scores in 43 states and reading scores in 30 states, while no states saw an improvement in scores for either subject. Estimates are that 49 percent of students began the 2022-23 school year behind grade level in at least one subject.

High-dosage tutoring, sometimes called “high-impact” or “high-intensity” tutoring, is one of the few school-based interventions with demonstrated significant positive effects on math and reading achievement. Tutors are professionally trained and receive ongoing support and coaching, and students meet with the same tutor each session. Students are tutored one-on-one or in small-group sessions, with no more than four students per tutor using high-quality instructional materials that align with classroom content. They receive at least three tutoring sessions per week, with each session lasting at least 30 minutes during school hours.

**F**unding concerns rank among the most pressing challenges facing school leaders seeking to implement and maintain high-dosage tutoring programs. This is particularly concerning in light of estimates that it will take [three to five years](https://www.nwea.org/uploads/2022/07/Student-Achievement-in-2021-22-Cause-for-hope-and-concern.researchbrief-1.pdf) to recover learning loss at the current rate of recovery—time that many older students do not have.

Districts and schools face challenges in implementing high-dosage tutoring programs**.** Amid a teacher shortage, labor challenges persist in hiring tutors. Moreover, schools often face complex logistical issues when it comes to training tutors properly, rescheduling the school day to fit in a tutoring block, and vetting tutoring services run by outside companies.

Given the extent of learning loss caused by the COVID-19 pandemic, policymakers must work to support programs that address student needs and ensure equitable educational opportunity in the years to come. High-dosage tutoring is a proven strategy for recovering learning loss and providing targeted support for struggling students. Through designating long-term funding for tutoring, amplifying the National Partnership for Student Success, expanding the federal work-study program, collecting more robust data on access and participation, and better equipping districts to support students in learning loss recovery, the federal government can play a vital role in scaling up high-dosage tutoring programs for student success.

**Teach For America (TFA) ,** the staffing organization that selectively recruits recent college graduates and midcareer professionals to teach in high-need schools for a two-year commitment period, has shrunk by [nearly two thirds from its peak](https://www.chalkbeat.org/2022/3/8/22966304/teach-for-america-declines-pandemic-teacher-preparation) just 10 years ago. TFA has long attracted [its share of criticism](https://rethinkingschools.org/articles/an-open-letter-to-new-teach-for-america-recruits/) for its [operational model](https://www.peterlang.com/document/1118293), with allegations that it reinforces disadvantaged students’ low access to qualified teachers and accelerates staff turnover in settings that need stability. On the other hand, the organization has also been praised for bringing individuals from elite backgrounds into the classroom, filling critical vacancies, and even initiating a new cadre of [leaders in the nation’s education system](https://www.educationnext.org/creating-a-corps-of-change-agents/).

Despite increasing to its peak at nearly 6,000 in 2013, TFA’s retreat is hard to overlook despite the plethora of evidence documenting TFA’s efficacy. Multiple [random assignment evaluations](https://direct.mit.edu/edfp/article-abstract/7/2/124/10152/Random-Assignment-within-Schools-Lessons-Learned?redirectedFrom=fulltext) have shown that TFA corps members are [at least as good as](https://files.eric.ed.gov/fulltext/ED618270.pdf)—and [in math, often better than](https://www.jstor.org/stable/30162702)—peer teachers in the same high-need schools. Another study showed similar TFA performance advantages against peer teachers in the same schools in math and in English Language Arts. TFA corps members also showed a [modest improvement](https://direct.mit.edu/edfp/article-abstract/13/2/168/10293/The-Impact-of-Teach-for-America-on-Non-Test) in other outcomes beyond test scores, such as students of TFA teachers being less likely to miss school from absences and suspensions. These improvements [persisted one year](https://caldercenter.org/publications/persistent-teach-america-effects-student-test-and-non-test-academic-outcomes) after exposure to TFA, showing students may benefit in a variety of ways. Principals in schools employing TFA corps members consistently report [satisfaction at 80%](https://www.rand.org/news/press/2015/09/24/index1.html) or [higher](https://www.rand.org/pubs/research_reports/RR2192.html) in recent waves of national surveys. Surveys have found that principals would hire another TFA corps member if they had a vacancy at their school.

Scholars have concluded that their performance advantage is primarily about the selection process. [One examination](https://www.hks.harvard.edu/publications/teacher-characteristics-and-student-achievement-evidence-teach-america) found TFA’s highly selective screening process did a good job of selecting candidates prepared for both teaching in challenging settings and future leadership. [Another](https://onlinelibrary.wiley.com/doi/abs/10.1002/pam.20585) found that much of the TFA advantage in math can be explained by measures such as college selectivity and teacher licensure scores. [Another recent study](https://doi.org/10.1177/0895904819843595) found that a revamp of TFA’s selection process in 2005 created a stronger performance advantage among later cohorts.

But retention is its Achilles heel.

1. The primary drawback is the limited two-year commitment. National estimates indicate [just over half of TFA corps members leave](https://eric.ed.gov/?id=EJ943646) their placement school once it’s fulfilled and about 15% remain in place at the five-year mark. This brings two disadvantages. First, teachers improve rapidly in the initial years of their careers, and the two-year commitment means that being in a TFA classroom is strongly associated with being exposed to a novice teacher. However, [several](https://www.sciencedirect.com/science/article/abs/pii/S0272775707000775) [different](https://edworkingpapers.com/index.php/ai22-675) studies have found that the TFA advantage is large enough to offset the lack of experience.
2. High turnover rates burden school administrators and students. [Turnover imposes costs](https://journals.sagepub.com/doi/abs/10.3102/0002831212463813) on schools both in the form of searching for replacements and in disrupted instruction, exacerbating inequalities. TFA’s retention rates are also lower than other [teachers in high-poverty settings](https://journals.sagepub.com/doi/abs/10.1177/016146811511700305), though turnover in these settings is high even without TFA. While new teachers also require support from school leaders and peer teachers, TFA’s local offices provide considerable induction support to mitigate the burden on school personnel. Still administrators frequently cite low retention as the primary drawback of hiring TFA.

However, this did not prevent these same administrators from reporting satisfaction with their overall TFA experience. Further, not all corps members leave after two years, with [those who are older](https://journals.sagepub.com/doi/abs/10.1177/016146811211401008) when they start being more likely to stay in schools long term, often eventually moving into school leadership roles.

Many principals have [struggled to hire teachers](https://nces.ed.gov/whatsnew/press_releases/3_3_2022.asp) in recent years, as schools have gone into overdrive to counter pandemic learning losses. Those in low-income schools have [disproportionately experienced the most trouble filling vacancies](https://hechingerreport.org/proof-points-researchers-say-cries-of-teacher-shortages-are-overblown/)–and especially in the STEM subjects in which TFA teachers appear to excel. The circumstances might be expected to represent a growth opportunity for TFA, but instead it is shrinking.

Why is that? [Recent reporting on TFA](https://www.chalkbeat.org/2022/3/8/22966304/teach-for-america-declines-pandemic-teacher-preparation) points to recruiting challenges being the primary drag, with fewer candidates willing to undergo the selection process for a position in a relatively low-paying occupation in a high-need setting. TFA’s recruiting struggles are not unique, as other teacher residency and university-based alternative teacher preparation programs have faced similar drops in interest during recent years. Traditional university-based training programs have seen [enrollment declines](https://www.americanprogress.org/article/make-declining-enrollment-teacher-preparation-programs/) for more than a decade.

Who is filling the gap in teacher preparation? Often, a principal’s alternative is from a different (and much less selective) alternative route. Indeed, other alternative certification programs, [especially for-profit programs](https://aacte.org/wp-content/uploads/2022/06/AltCertification-report-062122-UPDATED.pdf), have been scaling to meet schools’ staffing demands, even as TFA has been shrinking (see figure 1). This is an important development, foreshadowing what may become a permanent shift in the workforce’s composition.

In contrast to TFA, however, many of these other programs are only minimally selective in their recruitment, and there is little evidence on how effective graduates are once they reach the classroom. For example, the rapidly expanding Teachers of Tomorrow program is the country’s largest for-profit alternative certification provider. It is completely online and has [received criticism](https://aacte.org/wp-content/uploads/2022/06/AltCertification-report-062122-UPDATED.pdf) for [low program completion rates and academic rigor.](https://www.dallasnews.com/news/education/2022/04/29/texas-wants-tougher-accountability-for-largest-teacher-provider-plagued-with-problems/) We know of no evidence on how graduates of this program fare once they reach the classroom.

The experience of for-profit college students offers a cautionary, if imperfect, parallel to the rise of for-profit alternative certification. Leading up to and during the pandemic, [for-profit college enrollment](https://www.brookings.edu/blog/brown-center-chalkboard/2020/11/02/the-alarming-rise-in-for-profit-college-enrollment/) increases came despite the [lower documented student outcomes for the sector](https://www.brookings.edu/research/different-degrees-of-debt-student-borrowing-in-the-for-profit-nonprofit-and-public-sectors/), including lower graduation rates, lower employment outcomes, and higher student debt.

Though we wish for an environment that would increase professional and financial rewards for those who lead our nation’s classrooms, TFA’s retreat may signal a turn for the worse as untested providers rush in. Public perceptions of and young people’s interest in the teaching profession are [near or at historic lows](https://www.edworkingpapers.com/ai22-679) (spanning five decades). We suspect these new developments among alternative certification providers will only further these trends. Despite its drawbacks, TFA is an alternative certification model with an impressive record that we should be learning from, not shunning.

**10. Remote teaching**

During Covid, kids across the United States found themselves forced to learn from teachers on a screen. [The result was, by and large, disastrous](https://www.usatoday.com/in-depth/news/education/2023/06/12/us-schools-still-face-big-problems-post-pandemic/70198186007/). Scores of students are still struggling with knowledge and skills expected of someone at their grade level – losses largely attributable to the virtual instruction necessitated by the pandemic. But still today, countless schools nationally do not have enough staff to teach critical subjects. States have seen [an uptick in the percentage of departing teachers](https://www.chalkbeat.org/2023/6/27/23774375/teachers-turnover-attrition-quitting-morale-burnout-pandemic-crisis-covid) compared with pre-pandemic times. Last year, nearly half of schools participating in a national survey reported [at least one teacher vacancy](https://nces.ed.gov/whatsnew/press_releases/12_6_2022.asp).

Thus, with [lots of schools unable to hire certain teachers](https://www.usatoday.com/in-depth/news/education/2023/06/12/why-students-teachers-miss-so-much-school/70258140007/), virtual instruction in the form of remote educators has grown in popularity. Students gather in-person and learn from a teacher far away, typically alongside a second adult who helps manage the classroom and handle everything from technological glitches to rowdy behavior. This is not ideal. Students would prefer the instruction to be in-person and school leaders and scholars worry about the services' financial and academic costs.

But when schools in some locales are short of teachers in key disciplines, advocates say virtual teachers an inevitable if uncomfortable solution to a problem that – given generational shifts and post-COVID circumstances – will only get worse before it gets better.

Distance learning hit disadvantaged most.[And](https://www.usatoday.com/in-depth/news/education/2022/08/28/teacher-shortage-affects-these-disadvantaged-students-most/10310085002/) filling these vacancies is a challenge. Using a for-profit virtual company is a sort of stop-gap solution. And as far as emergency alternatives go, some have exceeded expectations. Teachers and students interact in real-time, and the software used for lessons has all kinds of fancy tools that allow educators to track individual kids’ progress.

Having, at a minimum, one teacher in the room is what can allow the approach to work. These adults are often paraprofessionals or aides or teachers-in-training who don’t have the requisite training to lead the class.

Teachers are leaving the profession because they want flexibility. While there’s no such thing as a 40-hour week in teaching, the profession is so much more manageable when done remotely. When surveyed, virtual teachers cited wanting to work from home, to pick their own hours, and to work from anywhere. They are also drawn to the relative lack of bureaucracy at virtual teaching companies.

Education 'is a social enterprise'and many students feel more comfortable interacting with others virtually. Harvard education professor [Susan Moore Johnson](https://www.gse.harvard.edu/directory/faculty/susan-moore-johnson) has observed and studied teaching for more than four decades and said many of the ingredients found in effective learning conditions aren’t present in this model. “Good teaching, learning, schooling is a social enterprise,” she said. The work needed to catch kids up post-pandemic “won’t happen when someone is beaming in then going onto another school, another classroom.”

Anecdotal evidence shows how the model can go awry. There have been reports of students leaving classrooms midway through a lesson, and of parents not knowing until much later that their children were assigned virtual teachers. And data from the emerging research on pandemic-era remote learning reveals teachers simply weren’t as effective in virtual classrooms.

Further, this is an expensive solution.That virtual providers are for-profit companies is one of the model’s fundamental flaws. “This is American business, … a way for investors to make money. They found that market because there’s a state failure to pay teachers appropriately and treat them as professionals. And they’re taking advantage of state failure.”

While the virtual programs help schools address vacancies, they aren’t necessarily a more cost-effective option. In fact, the virtual teacher model used at one company – which in addition to the educator and learning coach includes other virtual support staff – is double the cost of a traditional in-person educator. For most of another’s partners, having a virtual instructor costs between 20% and 40% extra.

Individual districts are now spending thousands and sometimes millions of dollars on this model. While national data isn’t available, these options are concentrated in low-income schools and almost nonexistent in wealthier communities.

A former teacher who co-founded an early company said its virtual instructor model needs for-profit backing given the high up-front costs of developing technology and curriculum. She doesn’t pretend ed tech is a cure-all. “Most online learning is bad,” she said. But that’s largely because it tends to be asynchronous – a teacher recording and uploading a lesson with students participating and completing assignments at their own pace. Much virtual instruction is also less rigorous than it would be in-person, she said.

One model tries to address those challenges head-on. A majority of its teachers, unlike those working for some of the other players in the industry, are full-time. The company, whose educators have eight years of teaching experience on average, also puts a lot of emphasis on coaching and training. Given both current shortages and the chronically unequal distribution of quality teachers and funding, virtual educators may be a necessary option to ensure all kids get the instruction they deserve.

Richard Culatta, CEO of the International Society for Technology in Education says that by far the biggest factor comes down to how educators trained and how are they delivering on their vision for the class, how they foster human interactions and how are lessons individualized based on students’ needs. “Technology can be the most powerful tool for closing opportunity gaps in learning,” Culatta said. “But at the same time, it’s also probably one of the largest craters of those gaps if used inappropriately.”

The virtual schools approach is so new as not to be fully understood or accepted. It may allow a return to learning for those who otherwise have “dropped out” or considered throwaways in the brick and mortar, or traditional, schools, i.e., the effectively academically illiterate, as many as half of whom have been previously expelled and most of whom have a failing academic record beginning in their earliest grades. State tests and the grading system for schools can be enormous obstacles for virtual charter schools because (1.) Students are spread out across a state and may be required to travel to test sites when travel is problematic because of jobs or lack of transportation, and (2.) These “F” students are academically damaged and do not do well with tests. Their comprehension is poor. The challenge is how to reach a young woman and man who was not taught to read by the third grade and passed along each grade until expelled, “counseled out”, or quit.

Assisting failing high school 18-24-year-olds to have a high school degree by this process is an attractive option but will require review, and amendment as necessary, of existing laws and regulations. Further, using completion rates for evaluating such schools is fraught because, whether or not these students actually graduate, any progress improves the likelihood of their becoming successful citizen.

All of this is new and the issues surrounding online learning and virtual schools are yet to become clear. However, quality and accountability, though perhaps redefined, must be maintained.

1. **Students**
2. **Special Students**

In the 1980s and 1990s there was a deep movement aimed at the preservation and enhancement of child self-esteem with the objective of never letting a child feel as though he or she was not successful – any kind or degree failure was to be avoided at all costs. But self-esteem is not something conferred, it is earned through taking risks and developing skills.

In addition to recognizing potential early, it is equally important to help all students prepare for the realities of education and life after. Excellence is not an action, it’s a habit. Confidence comes from competence - we do not bestow it as a gift. Rather, we need to return to a time when children learned how to avoid danger, act responsibly with others, and manage adversity. Tenacity is not a spontaneous flowering of good character. It is students whose training embraced hardship and taught students to deal with it. It’s doing what they were trained to do. An overprotective impulse doesn’t shelter people from fear; it makes them unprepared to deal with the fear that inevitably comes. Suicide rates are way up, depression rates have skyrocketed, especially for girls. Letting our children struggle is a difficult gift to give, but it is the “Gift of Failure”.

Ideally, school systems would fund counseling programs at the middle and/or high school level focused on students who will *not* attend a four-year college. During the middle school passage from childhood to adolescence, students need to explore a variety of interests, connecting their learning in the classroom to its practical application in life and work.

At the same time, children should be assisted to find their moral compass, that voice in one’s head that says stop before going too far. Somewhere in time we have separated mindfulness and morality from academics – the ability to get straight A’s without knowing how to live.

**High Achievers**

While there are issues across the educational platform, one area that has not received a lot of attention is the extent to which we do not offer as much support and opportunity to our more gifted students as might be beneficial. High potential students, particularly those in lower income schools, are among the most neglected populations in American public education and need to be recognized and supported effectively outside of school by their parents or primary care givers and mentors. And this is very much applicable to parents of average children, not just prodigies.

A challenge for both selective high schools and elite universities is how to attract and enroll the brightest, best motivated and most likely to succeed student body and, at the same time, provide opportunity to those with potential who have been up to that point, hindered by circumstances beyond their control. Today, minority and low-income students are considerably under-represented in these institutions, most of whom base admission on academic criteria, the one exception being a high school program in Chicago that is inclusive and geographically based.

the U.S. struggles to educate its most gifted and talented students. Thirty of the 56 leading economically developed countries have higher percentages of students scoring at the advanced level than the U.S., according a [2012 analysis](http://hanushek.stanford.edu/sites/default/files/publications/Hanushek%2BPeterson%2BWoessmann%202012%20PEPG.pdf) of the Program for International Student Assessment (PISA) test. This contributes to the U.S. [falling behind its global peers](http://www.businessinsider.com/pisa-worldwide-ranking-of-math-science-reading-skills-2016-12), ranking 40th in math and 24th in reading on the 2015 PISA.

Part of the issue is the “one-sized fits all” mentality in education. Mass education presents a difficult balance for teachers, in that students of varying ability levels are in a single classroom. … schools have been incentivized to increase the performance of the lowest performers while receiving little benefit for improving the outcomes of high achievers. Too many schools lack available seats for gifted and talented programs, disproportionately hurting minorities and low-income students. Whatever the cause, African American and Hispanic students are less likely to be assigned to gifted services even if they achieve the same test scores as a non-minority student.

That failure exacts a great cost from the nation’s economy, widens painful gaps in income, frustrates efforts to spur upward mobility, contributes to civic decay and political division, and worsens the inequalities that plague so many elements of our society. In a widely noted [recent study](http://www.equality-of-opportunity.org/assets/documents/inventors_paper.pdf) “low-income children start out on relatively even footing with their higher- income peers in terms of innovation ability, but fall behind over time, perhaps because of differences in their childhood environment.”

That “environment” includes many elements, including residential segregation, access to college, and exposure to innovation via family or neighborhood. But it also includes the quality of kids’ schools and the educational opportunities found therein.

A new Fordham study, [*Is There a Gifted Gap? Gifted Education in High-Poverty Schools*](https://edexcellence.net/publications/is-there-a-gifted-gap), shows …

* While schools attended by low-income children generally report *having* such programs at the same rate as schools serving more prosperous kids, enrollments in those programs are far smaller in low-income schools. Even within those meager enrollments, black and Hispanic pupils are sorely under-represented.
* Although most schools at every poverty level—and with every level of minority enrollment—report having gifted programs of some kind, students in affluent schools are more than twice as likely to participate in such programs, and minority youngsters, regardless of the school’s poverty level, are *much less likely* to participate.

Too often reform efforts intended to boost the prospects of such children focus entirely on those who, for a hundred reasons, are struggling to achieve academically. As a result, we tend to neglect the kids who are academically able and doing well.

A different two-step process would locate about 10 percent of high ability poor kids who are already high achievers or, in their teachers’ eyes, could be:

1. Take advantage of universal screening when they measure student achievement in core subjects. Looking for top performers in every school is why Texas allots 75 percent of U.T. admissions to an equal proportion of top graduates from *every* high school rather than the top graduates statewide.
2. Ask elementary teachers to nominate another 5 percent of their pupils, children who may not be top scorers but who show uncommon potential. Encourage them to look at everything, not just grades and test scores. With this approach far more disadvantaged students would have access to advanced courses, teachers trained to educate high achievers, classes with similarly able peers, and other opportunities to realize their full potential.

Policy makers, educators, and parents all over the world want students to understand and be able to apply their knowledge of math, reading, and science. Yet improving educational outcomes has proved elusive. The Program for International Student Assessment (PISA) goes beyond the numbers, asking students, principals, teachers, and parents a series of questions about their practice, attitudes, behaviors, and resources. McKinsey & Company applying advanced analytics and machine learning to PISA data identified the following factors that play a critical role in student achievement.

1. *Having the right mindsets matters much more than socioeconomic background* – Students’ attitudes and beliefs—what we term their “mindsets”—influence their academic performance. After controlling for all other factors, student mindsets are twice as predictive of students’ PISA scores than even their home environment and demographics consistent across all five regions, which amplifies its importance. The ability to identify what motivation looks like in day-to-day life, what we call “motivation calibration” was most highly predictive of performance. Students with a “growth mindset”—those who believe they can succeed if they work hard—performed better than those with a “fixed mindset”—those who believe their capabilities are static.
2. *Students who receive a blend of teacher-directed and inquiry-based instruction have the best outcomes* – In “teacher-directed instruction” the teacher explains and demonstrates ideas, considers questions, and leads classroom discussions. In “inquiry-based teaching,” students are given a more prominent role in their own learning—for example, by developing their own hypotheses and experiments. Of the two, teacher directed scores were generally higher. But what works best is when the two styles work together.

The book, *Learning in the Fast Lane: The Past, Present and Future of Advanced Placement,* considers the role of Advanced Placement (AP) in narrowing the gaps that exist in reaching high levels of academic performance for students from underserved populations. AP has the capacity to help students prepare for college, gain admission, and succeed. However, when it comes to participation and success on AP, race, and gender, socioeconomic status and where one lives matter far more than they should. Though participation by these students is increasing, success on the exams is still lower for low-income students and those of color. All responsible parties should give significant attention to ensuring that students from all backgrounds not only to AP coursework but also to the preparation and supports needed to succeed on the exams.

The first part of the report documents the basic outcomes of these early high achievers. Regrettably—but consistent with previous national studies— “excellence gaps” emerge by economically disadvantaged status and for Black students.

* On state exams in grades 4–8, economically disadvantaged early high achievers lost ground to their non-disadvantaged, high-achieving peers, indicating that excellence gaps tend to widen over time. In similar vein, Black early high achievers made less progress over time on state tests than their peers from other races.
* In Ohio, less than half of economically disadvantaged and Black early high achievers took the voluntary ACT, compared with 71 percent of non-disadvantaged high achievers.
* The average ACT math and reading scores of economically disadvantaged and Black early high achievers fell short of their more advantaged peers.
* Just 35 percent of economically disadvantaged and 26 percent of Black early high achievers went on to enroll in four-year colleges. This compares with 58 percent of non-economically disadvantaged high achievers who enrolled in such institutions.

Economically disadvantaged and Black students were less likely to be identified by eighth grade. This may reflect either a high bar for identification or perhaps uneven application of the criteria for identification. Thus, the terms “early high achiever” and “gifted student” are not interchangeable—and the raw outcomes data show that those high achievers who are identified as “gifted” outperform their non-identified peers.

Gifted identification itself provides a small boost to early high achievers from all backgrounds on state math and ELA exams, more substantial for Black students, particularly in math. Though not causal evidence, Black high achievers who are identified as gifted outperform non-identified Black high achievers on ACT and AP performance and college-going outcomes.

Without systemic data about the sorts of gifted services that students receive we don’t know whether gifted students are mostly receiving meager hour-a-week “enrichment” or more intensive programming with specialized curricula and classrooms. What happens *after*a student is identified remains hidden inside a black box.

Nevertheless, it’s clear from the research that more needs to be done on behalf of America’s high achieving kids, especially those from low-income backgrounds. What to do? Start by placing the needs of high-ability kids on the policy agenda. Consider just a few starter ideas:

* Screen all children at least once in elementary school for academic giftedness, ideally using the state assessment rather than a separate exam.
* Ensure that high-achieving (but not formally gifted) pupils have access to gifted programs and work to build sufficient capacity to make that possible.
* Include data about gifted students’ achievement and growth on annual school report cards.
* Require schools to provide gifted services and report pupil outcomes by the type of service received.
* Identify all students in the state who show potential for success in selective colleges by requiring high schoolers to take the ACT or SAT at least once.
* Remove barriers to AP or IB exams by fully covering test fees for low- and middle-income students.
* Ensure that all students are well-versed in higher education opportunities, including information about financial aid and which colleges might be an appropriate match.
* Empower parents of high-achieving children with options if their local school doesn’t offer satisfactory gifted programs or advanced coursework.
* Create specialized schools that cater specifically to the needs of gifted students and high achievers.

Rather than buying into the false assumption that high-achieving kids will do fine on their own, we need to do a better job of making sure that all high achievers, including those from low-income backgrounds, get the education they deserve.

[Policies aimed at fostering the talent of young, disadvantaged children who show early promise in academics could be particularly effective at boosting innovation and long-run growth](https://connect.brookings.edu/e2t/tc/VWBM2G7pHSG3W6zbyc159h3nQVBzM2_4q-GrTN8tN9C13p-F5V1-WJV7Cg-g1W5pgc3F6-Nn8MW7LC7vL8PbKdmW6Nn9Cf7yw98nW2PSQDR73Kv0YV6j09W8GYPCJW1T3KMK3zKLxMW1SYz-m51b7CBW2cqtsK3p6sfsV6H9BD3cw3R8W8jkLZF2Wf9CkW7R5bh_3Y-dXtW8pQ2DC1gnhbTN23KgfcL2mpkN7tvR-x-NLcnW3sQFrt98ZMF8W1MtVV912hr_vW69pCRY1hKcZMW2Kdbvh4hr7TRW8DGpzm241Rk0W3GQrm13gk_Cy36c61) by leading to an increase in the number of innovators in the economy. Targeting programs, such as tracking students into gifted and talented programs have been shown to push more talented students into innovation. In the shorter-term, immigration of highly educated workers can also boost innovation.

Two schools have shown that it is possible to focus on slower learners and, at the same time, accelerate the progress of those at the higher end. Focusing on the latter, in one such school, students have the ability to move beyond their grade level materials through their individualized learning and small group time in each subject. This happens in online learning programs and individual reading and work time, usually through next-level assignments. Through “guided reading,” students take ownership of their reading goals, always knowing which level they are and how to progress to the next. When students advance, even if the next level is technically aligned to a higher grade, the student can always access books at this level and immediately begin reading. Moreover, by having flexibility in classroom groupings, these Rocketeers can always access a teacher with the expertise to help them continue to master the skills required at their current reading level. This helps to prevent any backsliding in reading skills.

There is also small group instruction time, where a teacher can regularly “extend” a lesson or content area. Students are challenged at all times and helped to feel engaged in their learning, making sure all students have the appropriate materials for their individual learning level and to extend beyond.

A second school uses the Montessori approach, which can be thought of as a series of basic introductions to various ideas and skills that lay the groundwork for a wide variety of independent explorations. Montessori represents an age-appropriate tour of the whole of human knowledge, there is limitless potential to take a topic and go deep with it, constrained only by a child’s curiosity and the fact that there are always other topics worth exploring around the next bend.

**The Advanced Placement (AP) program** – Created to provide college-level academic experiences for high school students, this has been a staple of U.S. high schools for over a half-century. Now, with AP courses in dozens of subjects, nearly [23,000 high schools](https://reports.collegeboard.org/media/pdf/2021-number-schools-offering-ap-exams-by-subject_1.pdf) offer at least one AP course, with [about 35%](https://reports.collegeboard.org/ap-program-results/class-of-2021) of recent high school graduates taking at least one AP course. The AP program serves several ostensible purposes. Students can save time and money by earning college credit or placing out of introductory courses, demonstrate academic rigor for the college admissions process, and—at least in theory—prepare themselves to succeed in college. While the vast majority of schools offer AP courses, these courses are not equally available to all students. Black, Latinx, and low-income students are underrepresented.

The best causal evidence suggests that AP *can* benefit students—increasing their [college entry](http://jhr.uwpress.org/content/45/3/591.short) and [degree attainment](https://www.journals.uchicago.edu/doi/full/10.1086/687568), decreasing time-to-degree, [improving earnings](https://onlinelibrary.wiley.com/doi/abs/10.1111/ecin.12040), and swaying students towards [certain majors](http://jhr.uwpress.org/content/53/4/918.short). Importantly, however, the positive effects of AP are largely tied to taking and doing well on the associated exams. Simply taking AP courses without taking and passing the exams seems to have [no effect](https://direct.mit.edu/edfp/article-abstract/18/1/52/106759/Advanced-Placement-and-Initial-College-Enrollment) on [outcomes](https://stephanieowen.github.io/owen_ap.pdf). This matters because a [significant proportion](https://www.sciencedirect.com/science/article/abs/pii/S0272775721000741) of students who take an AP course do not take the associated exam, and many who take the exam do not receive a passing score.

**2. Challenges**

**a. Stress:** On its own it isn’t a *bad* thing. The body’s stress response is designed to give a boost of energy and increase focus so one can better tackle the task at hand. At the core of ACEs is adversity and when the stress of that adversity doesn’t go away, it can and become toxic without adequate support from our parents or caregivers.

Scientists have defined three different levels of stress:

* Positive - imagine a child walking into class for a big test or onto the field for an important game. The hearts pumps faster and palms sweat, helping engage the body for the task ahead - and things return to normal once the situation is past.,
* Tolerable – a more intense level of stress brought on by challenging situations, like experiencing a natural disaster or a big life change. As children, a caring adult can buffer this stress and make it easier for them to process the event.
* Toxic - The stress response turns toxic when the challenging situation doesn’t end, or when there is no adult to help process what one has been through. When stress response stays active too long, it can hurt the body and brain, and even affect behavior.

**b. Adverse Childhood Experiences**

Adverse Childhood Experiences (ACEs) can be highly stressful experiences that can happen to anyone before age 18. They are not an individual’s fault, and they don’t have control over when or why they happened. They can be a single event or an ongoing struggle where safety, security, trust, or even sense of self is threatened or violated.

The term Adverse Childhood Experiences – or “ACEs” – comes from an important study by the CDC and Kaiser Permanente in 1997 that looked at ten types of stressful or traumatic events falling into three categories:

* **Abuse:** physical, emotional and sexual
* **Neglect:** physical and emotional
* **Household challenges:** Divorce, incarcerated parent, substance abuse, intimate partner violence, mental illness

However, their 10 ACEs are not the only kind of adversities children face. Other common childhood adversities beyond the original ten ACEs can have similar impacts as ACEs. These include:

1. **Discrimination** based on race, ethnicity, gender identity or sexual orientation (such as LGBTQ+), religion, learning differences, or disabilities
2. **Poverty**
3. **Racism**, systemic and institutional
4. **Other violence**, like getting bullied, experiencing violence yourself, or seeing others get hurt in your neighborhood, community or school
5. **Intergenerational and cultural trauma**, like the displacement and genocide of indigenous people, slavery, and the Holocaust
6. **Separation**from a parent or caregiver because of immigration or foster care
7. **Other big changes in life**, like migration or immigration, being a refugee or seeking asylum, moving to a new area where you don’t know anyone, or separation from someone important to you
8. **Bereavement and survivorship**, like having a relative or caregiver die, or surviving an illness, injury or accident, or natural disaster
9. **Adult responsibilities as a child**, like caring for someone who’s sick or disabled, or being the one responsible for getting food on the table at a young age

ACEs can cause children to develop a toxic stress response. Parents with ACEs may pass on some ACEs to their kids, whether it’s through a divorce, a mental health condition or substance use. Things may happen beyond parental control – like an act of abuse by a neighbor or other adult, or a family member’s incarceration. Knowing a family’s ACE histories can be a catalyst for change.

Caring for kids is one of the most important – and challenging – jobs on the planet. It’s important for parents, caregivers, and other adults who care about children to know that they can buffer and support kids who are experiencing adversity. Wherever in the parenting journey, understanding of ACEs can help provide better support for kids**.** We can break the cycle of ACEs.

1. **Diversity**

**Gender**

There are wild gender gaps in education in the U.S. and across the economically advanced nations*.*In every U.S. state, young women are more likely than their male counterparts to have a bachelor’s degree. (Both gender gap and total educational attainment vary significantly across the states)

In 1970, just 12 percent of young women (ages 25 – 34) had a bachelor’s degree, compared to 20 percent of men – a gap of 8 percentage points. By 2020, that number had risen to 41 percent for women but only 32 percent for men – a 9 percentage-point gap, now going the other way, i.e., there are currently 1.6 million more young women with a bachelor’s degree than men. This gap emerges well before college, however: girls are more likely to graduate high school on time and perform substantially better on standardized reading texts than boys (and about as well in math). And, even before high school, boys were falling behind.

Exposure during high school to “high achievers” affects girls’ educational outcomes, but not boys’. G[*irls exposed to more high-achieving boys have lower math and science grades in high school*](https://connect.brookings.edu/e2t/c/*W4qCxKb8cc0pRN1ZwcPMJQ_mJ0/*N3SnFkBnZGg8N9ld5DZ8RmLR0/5/f18dQhb0Sjv793BmR-W8SMVYk2qwv31W1h4p2m4cqShVVf5v-H5mbMf4W1BQYgz8Tm-C4W61cWdy9dtj1hW4P0QZK5YpKkdW1hJT6V3GgWsFW83_Pyq834DLzW8XWrm17JtV4jW7tZTzk1h4MpqW6W3Rzq1ZJ4fwW4DqHqz6dgmw3W4yv2r03MlV4BW6tNb422KQ2YYW6lD20d49qcV7W3sxGzC9ffbr1VcWbVf4Wpz-0W2Csdb857rLQqW8GcYZ58hb5KxW5LMnCH12KgnnVGxg494r5l5jW8sgz7R4yB1m_W4KMN_W937lYkW7V5KZQ8ZstnyW5-QXzh3dZ63zW5V9XlM3f5_rbW6LK0NP7MhRLg0)*,* are less likely to complete 4-year college degrees, and have lower labor force participation and higher fertility as adults. But greater exposure to high-achieving girls increases bachelor's degree attainment for girls with lower test scores, without a college-educated parent, or attending higher performing schools. In contrast, boys are unaffected by high achievers of either gender.

The college gender gap begins in kindergarten. About two-thirds of the college gender gap was already apparent by the end of the fourth grade. Boys are playing catch-up the whole time, especially after making so little progress in kindergarten and first grade. Boys later make up some ground before falling behind again in early adolescence.

In the aggregate, at least, virtually all-American students who are academically well-prepared for college continue to matriculate into college and then go on to graduate. Many more of these are young women instead of young men. In other words, the college *readiness* gap is perfectly predictive of the college *completion* gap. Approximately 56 percent of college-ready students were female.

**What’s causing the gender gap in literacy?** An overlooked study found that teachers systematically underestimated little boys’ reading abilities—both at kindergarten entry and as they made their way through elementary school. Teachers tended to believe that their best readers were disproportionately girls, even when the literacy assessments themselves did not show that to be the case – with serious real-world repercussions for boys, as they are placed in lower reading groups than they qualify for and handed less challenging books than they can handle.

**So, what might we do?** Using formative assessments like NWEA’s MAP or Curriculum Associates’ i-Ready can help, as they provide hard data about kids’ current reading abilities, which might contradict teachers’ own perceptions, perhaps in a good way. Those data might encourage teachers to place more boys in the higher reading groups—and encourage them to assign them tougher books, too. It surely would also help if more early-elementary teachers were male.

Helping boys get off to a good start in school, however, especially by helping them become stronger readers, is squarely within our control. And there’s good reason to believe that if we keep the reading gender gap from opening in grades K–3, we could eventually close the college gender gap, as well.

**Race and Equity**

Like reporting one state Black and Hispanic students were falling further behind their white peers across key academic measures, from state tests to college-readiness exams and enrollment in education after high school and that swift action must be taken, or risk seeing too many Black and Hispanic students miss out on the many benefits that a high-quality education confers, from earning family-sustaining wages to accessing quality health care benefits and services. White students were [approximately four times](https://www.rmff.org/wp-content/uploads/2022/11/EducationForAllReport_RichardMFairbanksFoundation_English.pdf) as likely to be proficient in math than Black and Hispanic students and [less likely](https://protect-us.mimecast.com/s/sdg7CVO2XPhPPlzorCQ18hH?domain=rmff.org) than their peers to complete college within six years.

These [gaps](http://protect-us.mimecast.com/s/tRlzCQWKP0INN6JjGcMN0GT?domain=rmff.org/) also threaten a city and state’s economic and social vitality. In that community, nearly three out of four employers left jobs unfilled over the last year because they couldn't find workers with the knowledge and skills needed to fill the open positions.

It’s clear that factors such as poverty contribute to these outcomes, but another key driver is uneven access to high-performing schools, [located](https://protect-us.mimecast.com/s/sdg7CVO2XPhPPlzorCQ18hH?domain=rmff.org) in primarily white neighborhoods

What’s more, per pupil funding for students from low-income households and English language learners —which is used to hire and retain high-quality teachers and provide necessary supports for at-risk student populations, including translation services — is insufficient to meet the complex needs facing today’s students and their families.

A major problem, though progress may have occurred, a gap remains between predominately white schools in small towns and the suburbs and the significantly black schools in less affluent areas. Even after decades of affirmative action, policies meant to bring racial proportionality to our selective colleges have failed and the gaps are wider today. For many the trouble begins at K–12 where elementary and secondary schools with large numbers of black and Hispanic students are less likely to have experienced teachers, advanced courses, high-quality instructional materials, and adequate facilities. These deficiencies do the greatest harm to high-ability youngsters from disadvantaged circumstances, those being the kids most likely to gain acceptance into top universities, provided their primary and secondary schools cultivate their potential.

These children depend on public education. Many lack support from family and community, and many attend schools awash in low achievement, places where all the pressures on teachers and administrators are to equip weak pupils with basic skills in the three R’s. They’re not apt to have much energy or time, incentive or money for students who are already achieving adequately.

Historical factors, such as housing segregation and unequal funding, and the biases that cause teachers to underestimate black students contribute to black students being drastically underrepresented in gifted and talented programs in public schools. Race may be a factor in selection of students with the greatest potential given maximal opportunity – or, at the other end, offered special education.

Teachers do perceive students’ academic abilities and behavior differently depending on students’ race. This bias could also influence day-to-day decisions beyond referrals for education testing. The good news is that helping teachers investigate their own biases through training and awareness, such as pushing each other to think through their perceptions and get to know their students’ families and communities better can help.

Educational gerrymandering is not the only method of defeating efforts for integration and greater diversity. Even though Americans would like to believe that the long arc of history bends towards justice, a North Carolina law allows four affluent, majority-white suburbs to effectively secede from a county–city school system, not only abdicating the responsibility to serve all, but allowing in-groups and out-groups based upon metrics influenced by race and class…

The extra services necessary to help the gifted and talented students move ahead are often not available, particularly for gifted minorities and low-income students who might be aided in surmounting their origins if such programs were available. America’s failure to successfully integrate its schools is a root cause of educational inequality and a driving force behind the nation’s persistent racial divides. And this, in turn, is frequently noted to be associated with segregated neighborhoods.

But segregated neighborhoods are not inherent barriers to integrated education. A school desegregation program in Connecticut funded diverse magnet schools in Hartford and expanded an inter-district choice program in the suburbs. Today nearly half of all Hartford public school students [attend integrated schools](http://prospect.org/article/desegregated-differently), [and parents are clamoring for more](http://prospect.org/article/desegregated-differently).

There is no secret method of school integration that works best. Magnet schools, careful boundary drawing, even busing students to integrated schools instead of just the closest—all seem to work under the right conditions. Under “[controlled choice](http://files.eric.ed.gov/fulltext/ED430265.pdf)” families rank their top school choices and the district assigns students to schools taking those considerations into account, but also considers the demographics of each school.

Regardless of whether housing is integrated or otherwise, successful school desegregation requires a plan strong enough to discourage boundary trolling by parents. Indeed, the thing that unites the nation’s best school integration plans is a broad scope. Plans that extend across entire metropolitan regions can coordinate the activities of many different districts and prevent any area acting as a haven for white flight. What divides efforts that succeed from those that have failed often isn’t the presence or absence of resistance, but the authorities’ patience in overcoming it. Popular dissent over desegregation doesn’t last forever. If changes look inevitable—and can’t be easily escaped by moving to the next town over or enrolling in a different school—parents generally come to accept them.

Choice policies have many gradations. For example, districts decide how many schools families can choose from, which schools provide door-to-door transportation, and where to locate magnet programs. and the default school of attendance for families—that significantly influences families’ eventual school choice. Since each of these aspects of school choice policy design influence school segregation, district leaders must keep the goal of educational equity front of mind as they ask crucial policy questions: How much choice, for whom, and how?

A New York study explored the dual roles of district policy design and families’ school choices with a goal of creating a system in which no school had an enrollment of more than 40% economically disadvantaged students or more than 25% of students performing below grade-level on standardized tests. Their controlled choice program provided each family with a curated set of schooling options consisting of at least five different schools—including one default or “base” school. Other options included at least three magnet school options—neighborhood magnets with door-to-door transportation, magnets with a nearby park-and-ride location where children could access bus transportation to the school, and magnets with no transportation provided. Base school designations for a small share of students (5% to 10%) were changed each year with an eye toward maintaining socioeconomic diversity.

**Findings:**

1. **Residential segregation significantly constrained the desegregation initiative.** A wide range of school racial compositions were reflected in schooling options. Yet, because of the tight relationship between families’ race/ethnicity and the racial makeup of their designated base school, what different schooling options represented for different families varied.
2. **Most families enrolled their kindergartners in their assigned base school.**
3. **If you give families segregating options, they’ll take them.**
4. **Controlled school choice programs can both help *and* hurt school desegregation efforts –** The backdrop of residential segregation and district and family preferences for geographically close default school assignments inherently limits how ambitious policymakers can be in using school choice programs to advance desegregation goals. Also, racial preferences and anti-Black racism shape how parents navigate choice contexts.

At a time when student bodies are more diverse, federal budgets for teacher training and support for schools in low-income and predominately non-white districts has been curtailed. The result is continuation of limits on those groups moving on to college.

There is also an “[excellence gap](https://www.hepg.org/hep-home/books/excellence-gaps-in-education)“ – the sharp divides along lines of race and class at the highest levels of academic and educational achievement. Michael J. Petrilli, president of the [Thomas B. Fordham Institute](http://www.edexcellence.net/), calls “ the sharp divides along lines of race and class at the highest levels of academic and educational achievement the “[excellence gap](https://www.hepg.org/hep-home/books/excellence-gaps-in-education). His argument goes:

1. The excellence gap at the twelfth-grade level largely explains why Black, Hispanic, and low-income students are underrepresented at our most selective universities. Without affirmative action, this underrepresentation would be much worse.
2. The excellence gap appears long before high school, as far back as fourth grade, according to the National Assessment of Educational Progress. For example, just 4 percent of fourth graders who score Advanced in reading are Black, as are just 6 percent of Hispanic students.
3. The gaps are slightly smaller in fourth grade than in twelfth, especially for Black and low-income students, indicating that middle schools and high schools may be making the problem worse.
4. The excellence gap is even apparent at kindergarten entry, indicating that much of the gap is driven by out-of-school factors, especially socioeconomic inequality between the ages of zero and five.
5. Yet many more Black and low-income students are achieving at high levels in kindergarten, especially in reading, than in later years. This indicates that something is causing the excellence gap to widen in the early years of elementary school. (Other achievement gaps [tend to grow](https://www.urban.org/sites/default/files/publication/46391/411428-Gender-Gaps-in-Math-and-Reading-Gains-During-Elementary-and-High-School-by-Race-and-Ethnicity.PDF) during these early years, as well.)

If we can understand why a disproportionate number of Black and low-income high-achievers are “losing altitude” in grades K–3, we might identify strategies to reverse this trend. So what might explain it?

**1. Socioeconomic inequality beginning pre-school continues to exert downward pressure on student achievement**.

**2. Black and low-income high achievers may lack access to high-quality elementary schools**.

**3. Early elementary teachers may be biased against Black and low-income high achievers**. There is evidence that teachers in the early grades are biased against boys. [Teacher expectations matter](https://econpapers.repec.org/article/tprrestat/v_3a102_3ay_3a2020_3ai_3a2_3ap_3a234-251.htm), and they [tend to be lower](https://www.educationnext.org/power-of-teacher-expectations-racial-bias-hinders-student-attainment) for Black students. We need objective ways to identify students who could benefit from advanced education.

**4. These students may be struggling with reading comprehension, thanks to limited content knowledge,** i.e., a knowledge deficit; they haven’t been taught enough about science, history, geography, and the arts to recognize common words when they sound them out.. Encouragingly, a recent [Fordham Institute analysis of the ECLS data](https://fordhaminstitute.org/national/resources/social-studies-instruction-and-reading-comprehension) found that students made more progress in reading when their teachers spent more time on social studies.

Educational gerrymandering is not the only method of defeating efforts for integration and greater diversity. Even though Americans would like to believe that the long arc of history bends towards justice, but currently in North Carolina the legislature passed a law that allows four affluent, majority-white suburbs to effectively secede from a county–city school system, not only abdicating the responsibility to serve all, but allowing in-groups and out-groups based upon metrics influenced by race and class…

**Actionable steps recommended to help ensure all students receive a high-quality education:**

* **Identify students with the potential for high achievement via universal screening and local, school-based norms**.
* **Start universal screening in kindergarten**.
* **Improve Early Childhood Education** to set children up for future success. The state should mandate all early childhood providers enroll in the state’s [Paths to Quality](https://www.in.gov/fssa/pathstoquality/) rating system, which creates incentive for providers to improve their programming and is currently optional.
* **Go big on content knowledge, especially in grades K–3**.
* **Incorporate grades K–2 into state testing and accountability systems** focusing attention on student progress from year to year (rather than snapshots in time), and holding schools accountable for helping *all* students, including their high achievers, make ample gains.
* **Rethink K-12 Funding -** Changes to the state’s school funding formula have widened the gap between the amount of money that the wealthiest and poorest districts and schools. To help address funding gaps, the state should differentiate state aid based on local wealth and increase per pupil funding levels for students from low-income households, as well as English language learners.
* **Increase College Enrollment and Completion Rates -** Black and Hispanic students enroll in college and complete degrees at lower rates than their white peers. To place education after high school within reach — and make the cost manageable — the state should require Free Application for Federal Student Aid (FAFSA) completion as a prerequisite for graduating high school.

**Conclusion:** We’re never going to erase the excellence gap entirely until we erase socioeconomic inequalities from conception through kindergarten. But those in K–12 education have a responsibility to do everything they can to help every student achieve their full potential. Closing gaps in educational outcomes between white and Black and Hispanic students is critical. The action steps are clear. We must take them now, or risk setting back generations to come.

**4. Adverse circumstances**

**Poverty.** The “poverty” achievement gap – that is, the difference in academic achievement between poor and non-poor children – has grown faster than the racial achievement gap. And there is less widespread recognition of the severe traumas that children can face, including homelessness, domestic violence, parental drug abuse, neglect and physical or sexual abuse. Such trauma is consistently linked to a broad variety of negative life circumstances including poverty, juvenile delinquency, adult crime, low academic achievement, substance abuse, mental disorders and poor health. The consequences of early childhood trauma have serious implications for not only the victims, but also families, schools, and communities. Close tracking of every student and immediately addressing an adverse activity or hint thereof is required.

Our systems have all too often not recognized and have sidelined bright young people with great intellectual curiosity and potential simply because they come from a poorer, less sophisticated background with no aggressive adults to steer them through the educational system help them comprehend their potential or cultivate their abilities to the maximum. Fortunately, with the passage of the “Every Student Succeeds Act” (ESSA) there is a fresh opportunity for states to pay attention to the achievement of *all* their students, not just those below the proficiency bar. Several states are responding affirmatively and some going significantly beyond. Early-college high schools are springing up all over, and a number of nonprofit groups have awakened to the potential we have thus far inadequately taken advantage of.

In 2018, the Washington Post suggested that our increasing failure to get poor kids with good grades and potential into the right schools is a major issue confronting the success of achieving the American Dream. Rather than college, most of them instead go to community college — if that. But these are kids who don’t need any help in school. They just need help picking their next school which can make an enormous difference in their lives. Indeed, public colleges have played a pivotal role in catapulting generations of working-class kids into middle-class futures. But many of these young people don’t have parents, teachers, or guidance counselors who know a whole lot about the college admissions process.

Poverty need not, of necessity, be synonymous with low academic achievement. But prospects for disadvantaged youth are worse than ever. The most talented from the least affluent families don’t do as well in college or career as the least talented from the most affluent, even worse when considering race and ethnicity. Too much focus has been placed on post-high school education when greater attention and funding need to be directed toward K-12, without which college opportunity will remain skewed. They suggest many promising reforms designed to break down the institutional silos between K–12, higher education, and labor markets—including AP and IB programs, dual enrollment, linked learning, early college, and apprenticeships. But more can be done, including better career counseling and exposure earlier in the pipeline.  Providing the right support and holding systems accountable are essential to correcting this inequity.

The Source Book on K-12 Education contains an example of a successful initiative by the University of Michigan to inform and recruit high achieving, low-income kids who wouldn’t have gone to any college at all instead to go to one of the best public universities in the country.

While there are two high-achieving high-income students for every one high-achieving low-income student, there are somewhere between 8 and 15 of that first group applying to selective colleges for every 1 of that second group. We need to do better at both if we’re going to keep our society from calcifying along class lines, but it’s a lot harder to get more low-income kids to become high-achieving than to get more already high-achieving low-income kids to apply to college. The first is a matter of helping parents, improving schools, and stabilizing communities. Second, to preserve the American Dream, it doesn’t seem too much to ask our most elite educational institutions to accept the chore of sending letters.

**Schools in low-income areas**

Despite nearly four decades of reform, the nation’s public-school systems have not been reimagined and retooled to educate children living in poverty to high levels and they still fail to impart all children with the skills and knowledge necessary for economic agency and full membership in their communities. Obviously, all students must be able to meet rigorous standards in core academic subjects and finish high school; but for schools to achieve these outcomes, lawmakers and education leaders must equip schools and school systems serving low-income communities to comprehensively meet students’ holistic needs.

The Center for American Progress (CAP) proposes a “community schools” strategy which [to provide children in low-income communities with a high-quality education](http://app.mx3.americanprogressaction.org/e/er?s=785&lid=202457&elqTrackId=9904b1a907844ff98bf1ac2048ca72ee&elq=0b985fd71d0143e39acac3e0c5c9df8b&elqaid=38487&elqat=1). It centers public schools as hubs for communities and combines a rigorous, relevant educational program with extended learning opportunities, family and community engagement, and an infusion of social services. The CAP report includes four common “pillars” of a community schools strategy:

* ***Integrated student supports*** *(ISS)****:*** Sometimes called wraparound services, these are resources, programs, or services that schools coordinate with outside organizations to provide services on a case-by-case basis to meet students’ and families’ needs as well as to address structural barriers to students’ educational success. Examples range from tutoring, housing or food assistance, medical or dental care, and mental health services to English language or parenting classes.
* ***Family and community engagement* i.e.,** including students’ family and community members in school governance and decision-making.
* ***Expanded learning time and opportunities:*** Also called out-of-school-time (OST) programming or extended learning opportunities (ELOs), this refers to programming that takes place after school, on weekends, or during the summer. Some just lengthen the academic school day, but OST can include additional instruction or individualized tutoring as well as enrichment or other meaningful learning opportunities.
* ***Collaborative leadership and practices:* S**hare responsibility and decision-making within school buildings and across relevant sectors, e.g., the school district, municipal agencies, and local nonprofit and community organizations.

A community school should have a full-time school-level coordinator, also called a community school director, who brings these four components together by conducting an assessment of a student population’s needs and then working in partnership with the principal to execute a plan to meet the identified needs.

Ultimately, state governments must lead, so that every school serving students living in concentrated poverty can be a community school. The following are policy actions that decision-makers at different levels of government can take to move the nation’s school system in that direction:

**The federal government should:**

* ***Maintain and then increase funding levels for grant programs that support a community schools strategy.***
* ***Encourage states, school districts, and schools to adopt a community schools strategy*.**

**State governments should:**

* ***Adopt a comprehensive community schools policy.***State legislatures must then incorporate financial support for a community schools strategy into statewide school funding formulas..
* ***Include competencies that support a community schools strategy in educator preparation programs*.**
* ***Establish children’s cabinets to coordinate and align the work of children-focused agencies at the state level.*** Governors can establish these groups through an executive order.

**School districts should**:

* ***Adopt a community schools policy***
* ***Create community schools coordinator positions and compensate coordinators on par with building-level administrators* to** assess the needs of a student population and then find partnerships and services to address them. District-level coordinators can build the capacity of their school-based colleagues to complete these functions.
* ***Coordinate professional learning in a community schools strategy for all levels of staff*** and invest in their capacity to operate in a school environment informed by the strategy.
* ***Invest in systems to collect and manage data* to** guide the community schools strategy.

**Homelessness**[[3]](#footnote-3),[[4]](#footnote-4)

This is another problem whose impact on children is not often considered. This is discussed in the chapter on Housing but was graphically described in a New York Times report.

The largest single population in New York City’s shelter system is children under the age of 6. Infants carry a disruptive power. “At what age are you most likely to be homeless?” “The answer is 1.” Official causes of homelessness include eviction, overcrowding, family discord and domestic violence. Look closely and pregnancy is often intertwined. Infants are often “the tipping point” for families on the verge of losing a permanent home.

Not having a high school degree is the greatest single risk factor for experiencing homelessness after school. The longer a person remains homeless, the more difficult obtaining stable housing becomes. If a homeless student becomes a chronically homeless adult, they more often require not only housing but also services for mental health, physical health, and substance abuse treatment. Under the 1987 McKinney-Vento Act, passed to ensure that students experiencing homelessness “have access to the same free, appropriate public education” as other children, every school district in the nation is mandated to have a liaison. But the law and the accompanying federal funding don’t provide the level of support homeless students need.

Washington state passed several laws in the last decade to strengthen the McKinney-Vento Act, one requiring every individual school in the state to designate a staff member as a point of contact for homeless students. But that had the same problem of adding duties onto already burdened staff, usually counselors.

In Washington only 59 percent of homeless students graduate in four years compared to 83 percent of all students. A similar disparity exists nationally as well. But at North Thurston Public Schools in Washingtonthe 661 students who are sleeping on friends’ couches, in vehicles, in shelters or in tents — with or without their families — are graduating at nearly the same rates as their peers. The district has shown that this feat just requires dedicated and consistent support.

Six years ago, the director of student support repurposed federal McKinney-Vento Act funding the district was using primarily for tutoring homeless students to pay for one student navigator. It worked instantly. In the first full year of the program, the district’s graduation rates for homeless students rose 7 percentage points. The next year, she applied for a Washington-state specific grant to help homeless students, which paid for another student navigator. Then, with the pandemic, came funding from the federal government that enabled adding two more student navigators. The sole function of these student navigators,” is to attend to each homeless student’s needs, whether that’s housing or food, feeling like they belong at school, or planning for the future beyond graduation. For three straight years since the program began, the graduation rate rose.

The goal of the student navigator program is an effort to **“***remove all barriers***”** for homeless students. This has provided a blueprint for limiting the impact that homelessness has on the rest of a student’s life. The amount of time student navigators have to spend with their homeless students is what sets North Thurston apart from many other districts. For instance, a student navigator at Timberline High School invited a student into her office, spent hours on the phone with him to sign up for food stamps, and helped connect him with a foundation that provided him money for rent. Much of the North Thurston liaison’s time was spent on paperwork and meetings rather than one-on-one support for homeless students.

Many have duties beyond even that. Sometimes, the McKinney-Vento liaison is also a principal or the district’s superintendent. Nearly 60 percent of McKinney-Vento liaisons statewide said they have less than four hours a week to serve homeless students.

North Thurston’s student navigator program is “what the McKinney-Vento Act at its heart was designed to do but with the resources to actually do it.” But the funding is precarious and limited. Two student navigator positions may expire soon as money from the American Rescue Plan runs out.

Washington does better than most states at identifying and tracking its homeless students, but an analysis by the Center for Public Integrity shows that the lack of funding is likely causing many to fall through the cracks with more than 300,000 homeless students nationally, and at least 2,000 statewide, who [are likely unidentified and not receiving support promised to them](https://www.seattletimes.com/seattle-news/homeless/thousands-of-u-s-schools-including-in-wa-fail-to-count-homeless-students/) by law. North Thurston’s model of providing one-on-one support to homeless students is a best practice that should be emulated in districts around the state, but more funding is needed.

**Personalized Attention Leads to Graduation**

One of North Thurston’s student navigators and a former homelessness services provider, said she does what she hopes “a really good mom would do.” She scrutinizes her students’ attendance and grades and notices when they start falling off. She meets with students regularly, some every day, in her office in the high school. She provides them whatever they need. Sometimes that’s a sleeping bag, other times it’s just a listening ear.

Student navigators say they need to support students’ participation in sports and extracurriculars if they expect them to maintain an interest in school amid what is often turmoil outside of it.

**School District or Homelessness System?**

In many ways, North Thurston has created a homelessness response system within its school district where student navigators act like case managers. The district even repurposed an unused building into a space where homeless and low-income students and families can do their laundry and pick up food, household items, clothes and school supplies. Community organizations meet families there to offer housing, health services and help obtaining public benefits. All the food, clothes, and supplies are donated by individuals or local businesses. The district also received more than $150,000 last year in cash donations for homeless students. All of this generosity has also been cultivated by student navigators who have built relationships with the community.

**Foster care** [[5]](#footnote-5)

In addition to homelessness, young people are often victims in a system theoretically designed to help them, i.e., the foster care system. A recent investigation documented that the system often falls short, frequently due to underfunding.

Many states have at least partially privatized their systems with grim repercussions likely resulting from inadequate experience with this responsibility and shortcuts made in the pursuit of profit. Often these children are moved more than once from one foster home to another, eliminating the stability and emotional security so important to their development. Additionally, young people age out of the foster care system at age 18 without continuing care and direction, many unprepared to take on adult responsibilities for themselves.

**5. Mental Health**

The teen mental health crisis, characterized by suicidal thoughts, sexual assault and persistent feelings of sadness or hopelessness and affecting girls [almost twice as much as boys](https://link.axios.com/click/30543919.55820/aHR0cHM6Ly93d3cuYXhpb3MuY29tLzIwMjMvMDIvMTMvdGVlbi1naXJscy1zYWRuZXNzLXZpb2xlbmNlLWNkYy1yZXBvcnQ_dXRtX3NvdXJjZT1uZXdzbGV0dGVyJnV0bV9tZWRpdW09ZW1haWwmdXRtX2NhbXBhaWduPW5ld3NsZXR0ZXJfYXhpb3N2aXRhbHMmc3RyZWFtPXRvcA/61684c06fd3aad0dc63531e9B482bcf42), is worsening by almost any measure, with teenage girls in the midst of the worst mental health decline in a decade.

There's no single factor leading to this mental-health decline in teen girls**. The** [**pandemic**](https://link.axios.com/click/30544075.479151/aHR0cHM6Ly93d3cuYXhpb3MuY29tLzIwMjIvMTIvMDIvaG93LXRoZS1wYW5kZW1pYy1hZ2VkLXRlZW4tYnJhaW5zP3V0bV9zb3VyY2U9bmV3c2xldHRlciZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj1uZXdzbGV0dGVyX2F4aW9zYW0mc3RyZWFtPXRvcA/61684c06fd3aad0dc63531e9Becbae3a0), [social media](https://link.axios.com/click/30544075.479151/aHR0cHM6Ly93d3cuYXhpb3MuY29tLzIwMjMvMDEvMTEvc29jaWFsLW1lZGlhLWNoaWxkcmVuLXRlZW5hZ2Vycy1tZW50YWwtaGVhbHRoLXRpa3Rvay1tZXRhLWZhY2Vib29rLXNuYXBjaGF0P3V0bV9zb3VyY2U9bmV3c2xldHRlciZ1dG1fbWVkaXVtPWVtYWlsJnV0bV9jYW1wYWlnbj1uZXdzbGV0dGVyX2F4aW9zYW0mc3RyZWFtPXRvcA/61684c06fd3aad0dc63531e9B46615247), stressors at school, online misinformation and societal conflict all play a role. Girls [tend to dwell](https://link.axios.com/click/30543919.55820/aHR0cHM6Ly9qb3VybmFscy5zYWdlcHViLmNvbS9kb2kvYWJzLzEwLjExNzcvMDI3MjQzMTY5ODAxODAwMjAwMz91dG1fc291cmNlPW5ld3NsZXR0ZXImdXRtX21lZGl1bT1lbWFpbCZ1dG1fY2FtcGFpZ249bmV3c2xldHRlcl9heGlvc3ZpdGFscyZzdHJlYW09dG9w/61684c06fd3aad0dc63531e9B5b82e9ce) on their negative emotions as a coping mechanism and are more likely than boys to be [perfectionists](https://link.axios.com/click/30543919.55820/aHR0cHM6Ly93d3cuc2NpZW5jZWRpcmVjdC5jb20vc2NpZW5jZS9hcnRpY2xlL2Ficy9waWkvUzEwNDE2MDgwMTgzMDE4Njk_Y2FzYV90b2tlbj1fM3FXaDFkcFR3d0FBQUFBOnhzY2JtSXlkdzJFNTZZYmFhT0NpZWh6R0JKaHRUeEN3eEE1OFlyaE1EQWxsdjg4czJ5bzBZb2otamtsOWZ3Mkl6bm5nSFloNldIMCZ1dG1fc291cmNlPW5ld3NsZXR0ZXImdXRtX21lZGl1bT1lbWFpbCZ1dG1fY2FtcGFpZ249bmV3c2xldHRlcl9heGlvc3ZpdGFscyZzdHJlYW09dG9w/61684c06fd3aad0dc63531e9B0f300e93) to the point of burnout and intense self-critique. Nearly a third have reported seriously considering taking their lives.

Schools— the de facto frontline responders — have a responsibility to address mental health concerns with more tailored interventions and support. Early intervention by schools with resources to teach coping skills, train teachers how to understand and identify mental health and addiction and have on-site school counselors or psychologists can help. But they may not be equipped to provide them. Districts are hard-pressed to keep counseling, screenings, teletherapy and other services that have been sustained with federal COVID relief dollars.

1. **Online Issues**

## Students get distracted by using digital devices (such as smartphones, websites, or apps) or by others using them, impacting their test scores. One teacher tries, " to be very mindful of what we choose to put kids on computers for." For instance, students can use their laptops to practice math lessons using personalized learning software, but that practice time is limited to 30-45 minutes per week in school. Other lessons revolve around physical manipulatives and hands-on activities.

As advanced technologies have emerged and use of the internet become more pervasive, in education as in the general society, positive use of these new capabilities sought by schools and educators has become increasingly important. Kids struggle with ethics and decision-making online. Ignoring digital citizenship is not an option but is becoming as fundamental as sex education and physical education. While schools are assuming responsibility for teaching appropriate use of these capabilities as well as using them in their own teaching activities, a growing number of digital-citizenship curriculum providers are emerging. These include Common Sense Media, the Digital Citizenship Institute, Social Assurity, Schoology, and DigCit .

DigCit seeks to assure that young people know how to use the technology technically, but in a socially responsible manner and for good purposes. Approaches vary by grade, but often focus on on-line reputation, privacy and cyberbullying. Being developed and offered by a number of vendors nationwide, it is also using the reach of technology, especially social media, to improve the lives of others. The main goals proposed for digital citizens are:

* Inclusive - Hearing and respectfully recognize multiple viewpoints and engage with others online with respect and empathy.
* Informed - Evaluate the accuracy, perspective, and validity of digital media and social posts.
* Engaged - Use technology and digital channels for civic engagement, to solve problems and be a force for good in both physical and virtual communities.
* Balanced - Make informed decisions to prioritize my time and activities online and off.
* Alert - Be aware of online actions and be safe and create safe spaces for others online.

Measuring the efficacy of a curriculum this new is difficult, and challenges persist. Several schools don’t want screens in the classroom at all because they fear they can’t control what students say on social media. But social media can also serve as a “bridge between home and school.” If teachers post the day’s lesson on a classroom Facebook or Twitter account, parents can check the feed and ask their child about it that evening. The best online-responsibility classes teach kids how to put down their devices.

**Sports/Internet -** Caring, capable parents often worry about their children’s safety and, therefore, are more careful about knowing where they are, with whom and what doing. This has led to early adult organized and supervised activities. While the internet can open the outside world to them, too often it replaces personal interaction, self-actualization, and the ability to be individually and socially creative which are so important to developing a mature, self-sufficient, contributing adult. That the beneficial aspects of exploration, imagination, unsupervised play with its teaching of how to get along with others and resolving effectively interpersonal conflicts or misunderstandings all appear to have been largely lost is a cause for concern.

**Screens and learning**

In America today the dominant form of in-home recreation appears to have become the television. Shows designed specifically for entertainment have a negative impact, not because of content but because of the decline in positive time pursuits, such as reading. Over 90% of students have access to a computer or smart phone at home and most have more than one. Exposure to cable TV has not only been related to a decline in IQ but also to decreased participation in local elections. The message is to be careful what we give up in exchange for entertainment.

With respect to a positive impact of the internet, on their website the Zur Institute provides detailed facts, ideas, ways to respond, prevention and potential interventions for each of the following: Teen Suicide, Teen Violence, Cyberbullying (Online Bullying), Internet & Online Addiction, Eating Disorders & Anorexia, Teen Hookups, Substance Abuse, Video Games, Teen's Watching Porn, Teen's Watching TV Violence, Teenagers Exposed to Violence at Home, and Violent Culture.

While the new IT capabilities can “personalize” education, i.e., gearing online resources to an individual student, interacting with technology may actually have a negative effect on student learning. Two negative trends have been consistently found across studies of blended or personalized learning*.*

1. ***Simple substitution of in-person learning with online learning is not effective****. But* blended environments significantly outperform traditional face-to-face learning environments. .
2. **Students’ engagement with technology may *hurt* their engagement with school or feelings of belonging**. It may be that already-less-engaged students spend more time in online learning environments compared to their peers. Or it may be that the technology is being used to distance students from each other, their teachers, the content, and their school. Providing students with agency (autonomy and choice in the setting and path to meeting their learning goals, for example) actually increases feelings of academic engagement. Those seeking to implement blended learning should pay particular attention to the ways in which technology is being offered and used by students, and care should be taken to avoid the creation of new, isolating learning environments that can either amplify or create feelings of disengagement among students, and teachers. Truly understanding teachers’ and students’ needs, and supporting them before and during implementation, can raise your chances of achieving intended objectives.

Other issues, early in their development but increasingly part of the conversation, are online learning and “virtual schools”. These take advantage of the computer, a tool most young people relate to, and their use was given a boost by the pandemic. A variety of curricula are being developed for on-line teaching, as are organizations to provide the option. This capability can support those doing home schooling, attempting to move through their academic years more quickly, or who have identified a career path for which they may be able to train more quickly with that alternative available.

**Social Media**

Schools have other challenges as well. In the digital age, students are knowledgeable about and used to using a variety of on-line programs. These have, too often, been a distraction from time spent in quality learning as well as a tool for such damaging activities as on-line bullying.

While it’s nearly impossible to [prove a causal relationship](https://www.nytimes.com/2023/09/20/well/family/social-media-teen-brain-mental-health.html?smid=nytcore-ios-share&referringSource=articleShare) scholars *can* say is that the sudden rise in [teenage anxiety and depression](https://www.pewresearch.org/short-reads/2019/07/12/a-growing-number-of-american-teenagers-particularly-girls-are-facing-depression/), [suicidal ideation](https://www.cdc.gov/healthyyouth/data/yrbs/pdf/trendsreport.pdf), and [suicide](https://www.vox.com/the-highlight/2019/10/30/20936636/suicide-mental-health-suicidal-thoughts-teens) all happened at the same time that teenagers’ adoption of smartphones passed the [50 percent mark](https://www.theatlantic.com/magazine/archive/2017/09/has-the-smartphone-destroyed-a-generation/534198/)—around [2012 or 2013](https://www.pewresearch.org/internet/2015/04/09/teens-social-media-technology-2015/). They can also show that the children most likely to engage in heavy use of smartphones and social media—[girls, especially liberal girls](https://jonathanhaidt.substack.com/p/mental-health-liberal-girls)—also experienced the greatest increase in mental health challenges. And they can point to [other countries](https://jonathanhaidt.substack.com/p/sapien-smartphone-report) that show similar patterns.

A reasonable question, however, is whether phones and social media might also be behind the plateauing and decline of student achievement that we’ve seen in America, also starting around 2013, long before pandemic-era shutdowns sent test scores over a cliff. This may not have been the *only* cause. The Great Recession was also to blame, both because of its impact on families’ home circumstances, and because of the sudden and significant budget cuts that followed, especially in high-poverty schools.

Nevertheless because, unlike the Great Recession or the pandemic, adolescent phone use [continues to rise](https://www.commonsensemedia.org/sites/default/files/research/report/8-18-census-integrated-report-final-web_0.pdf) and is a problem we need to grapple with.

Before calling for more research, it’s worth pondering what mechanisms could link smartphone and social media use to lower student achievement. Most obvious are [problems around attention,](https://psycnet.apa.org/record/2014-43500-007) as [students’ brains adapt to the rush](https://www.nytimes.com/2023/01/03/health/social-media-brain-adolescents.html) from “likes,” YouTube videos, TikToks, and other platforms, and then struggle to listen to (much less read) slower-moving and less-vivid presentations, such as the ones they are likely to encounter in class and homework. (Our poor teachers!) Or it could be phones’ impact on mental health; [it’s hard to learn when you’re anxious or depressed](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8068628/).

There’s also the issue of [sleep](https://www.mdpi.com/2039-4403/13/2/54). We know that [kids sleep less today](https://emilyoster.substack.com/p/your-child-may-not-be-getting-enough) than before phones and social media entered the scene, and we also know that there’s a relationship between [less sleep](https://www.sciencedirect.com/science/article/abs/pii/S0022347616312355) and [poor mental health](https://www.sciencedirect.com/science/article/pii/S1087079221001416). But so too is there a relationship between [less sleep](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4824552/) and [less student learning](https://www.cdc.gov/pcd/issues/2023/22_0344.htm).

In response, the least we can do is try to encourage parents to curb their tweens’ and teens’ phone and social media use. Educators can do their part by setting and enforcing classroom rules that phones be turned off or at least stowed away, unless there’s a compelling instructional reason to use them. But schools could certainly encourage parents to limit screen time to a reasonable number of hours per day, be much tougher about earlier bedtimes, and require kids to dock their phones outside their bedroom during sleeping hours. There’s a strong foundation of research to back up any effort to protect and promote students’ sleep, which may help ease some uncomfortable conversations.

1. **Education Reform**

America’s children, especially those growing up in poverty, depend on us to dramatically improve their schools, lest they be sentenced to a life of low-wage jobs and lagging social mobility. Or that the country will continue to suffer from political and socioeconomic divisions and dwindling global competitiveness. Recent attention has increasingly focused on the many of the inequities in the school system, from the learning environment at home to [access to devices, internet, and high-quality education](https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-student-learning-in-the-united-states-the-hurt-could-last-a-lifetime). There is now both the political will and a sense of urgency to take on the challenge of fixing long-broken delivery models. Schools are beginning to step back and consider the longer-term imperative to create a better system for every child beyond the pandemic, starting with a key question: What are we trying to achieve, for whom, by when, and to what standards? Top-performing school systems can vary significantly in curricula, assessments, teacher behaviors, and even desired outcomes. What unites them is a focus on excellence for every child, regardless of race, gender, income level, or location.

The list of educational innovations and possible interventions is long and many are untested or associated with only emerging evidence. Bold education systems can take an agile and research-based approach, running opt-in pilots in small pockets to test parent appetite and student outcomes. Smart systems will also expand their partnership networks, collaborating with academia to bring the best of learning science, with employers to create linkages to the workplace, and with philanthropists to access funding. All school systems must challenge themselves to reshape their models to deliver a better education to every child. The following are suggested approaches looking forward from a variety of sources

**I. What Reform is Aiming to Achieve**

We’ll know that our K–12 system is succeeding when almost all parents are satisfied customers and when almost all graduates:

* Successfully complete some form of postsecondary education, whether it be a technical credential, two- or four-year degree, or military training;
* Become self-sufficient soon after completing their education, with a rewarding career that can support a family; and
* Participate as active and informed citizens in our democracy and civil society institutions.

Those are all medium- to long-term targets. In the short term, we want to see students:

* Make at least a year’s worth of progress in reading, writing, and math, every year, with low-performing students making greater gains;
* Develop a strong understanding of history, science, civics, and the arts; and
* Feel a sense of connection to their schools, as vital preparation for participation in civil society.….

**II. The Reform Agenda for Grades K–8:** We need to accelerate students’ progress so that many more leave eighth grade ready for high school–level work, even those children who enter kindergarten far, far behind. 5 major ways of doing that

* 1. *High Quality Schools of Choice* –
  2. *Accountability* –.
  3. *High quality, teacher-friendly, standards-aligned,* *Instructional Materials* –
  4. *Recruit and retain talented teachers (and principals)* by fixing the educator pipeline on the front end rather than trying to push mediocre teachers out on the back end.
  5. *Personalized Pacing* – with an assist from technology, will help poor kids and kids of color to go faster or slower depending on their mastery of the material. Allowing students to be matched to their current level of ability instead of the “grade” and to learn next to kids who are at their same level, regardless of how old they are.

The following summarizes Petrilli’s reform agenda for elementary and middle schools:

**For Policymakers:**

* Close the charter school funding and facilities gaps.
* Defend the higher standards, tougher tests, and smarter accountability systems.
* Reform the tenure-approval process to be much more than a rubber stamp.
* Allow students to be tested above or below their official grade levels.
* Look for valid and reliable ways to measure school quality beyond test scores.
* Celebrate and reward high-performing schools.
* Move to content-based reading tests.

**For Local Practitioners:**

* Identify and adopt high quality instructional materials.
* Provide extensive support and professional learning opportunities to teachers.
* Reader-friendly report cards and better approaches to the parent-teacher conference.
* Personalized pacing with multi-age classrooms, competency-based promotion policies, and the thoughtful use of digital instruction.

**For children behind in reading, writing, and/or math** there may not be enough time from kindergarten through grade five to help all kids catch up to grade-level expectations. Adding an extra grade to elementary school—call it grade 2.5. Students would enter elementary school at age five, but instead of leaving at eleven they would exit at age twelve. In effect, schools would create a default policy to retain most students after the second grade.

Every education policy be measured at least by ten basic principles, all interrelated and mutually reinforcing to produce a truly high functioning primary and secondary school system.

1. **The school system is a means, not an end –** Funding should be focused on how best to provide an optimal education to every child – not what a school should receive as it is.
2. **Public education should be concerned about whether, not where, kids are learning** – the focus should be on public *education*, not. public *schools*
3. **Education policy should be about kids, not adults –** We need to attract the best and the brightest to education while refusing to subsidize mediocrity and unnecessary bureaucracy.
4. **We should recognize that every child has** **unique needs, talents, aspirations, and personalities**. Flexible and efficient customized instruction, increasingly enabled by technology, can provide education tailored to each child’s unique needs and abilities.
5. **Schools should operate like businesses –** Reform that injects greater choice, competition, and business principles into the education enterprise can be effective.
6. **Public policy should be measured by how much power it provides to those on the educational front lines**: principals, teachers, and especially parents.
7. **Funds should be allocated toward students and their school of choice, not just schools.**
8. **Educational options should be as numerous and varied as the students who pursue them**.
9. **Education providers should be held responsible for outcomes –**. Bad teachers should be fired, and bad schools closed; good teachers should be well compensated, and effective educational providers rewarded.
10. **Reforms should be adopted with an urgency that reflects the reality** that the commodity in the shortest supply is *time*.
11. **Get the basics right –**  Every school system must first get these basic elements right:

* *Core skills and instruction*. Students need a strong foundation in literacy and numeracy. Research has identified the curricula, instructional materials, and teaching methods that are most effective in helping children learn. And the earlier that children get exposed to those skills, [in prekindergarten or other programs](https://www.mckinsey.com/industries/public-and-social-sector/our-insights/how-states-can-improve-well-being-for-all-children-from-birth-to-age-five), the better.
* *High-quality teachers and teaching*. Children learn best from people, not programs. Every system must develop and support teachers, especially as they learn new skills for remote and hybrid learning.
* *Performance measurement*. It’s hard to achieve excellence without data on current performance and benchmarks to aim toward. However, data should be used primarily to inform—to direct support to the students, teachers, and schools that need it most—not to punish. Instead of eradicating tests altogether, systems need better assessments and better tools to help each student succeed.
* *Performance level and context*. School systems at different levels of performance require different sets of interventions. Poor performers may need central control to build up basic infrastructure and provide motivation, scaffolding, and scripted lesson plans for teachers. Stronger performers may need more decentralized innovation, peer-led learning, and collaborative planning to engage students and staff.

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1. School systems around the world need to embrace more radical innovation, rethinking some fundamental elements of how we have educated students for generations. Consider the following:

* **Harness technology to scale access –**The challenge isn’t just to adopt new technologies but also to incorporate them in ways that improve access and quality.
* **Move toward personalized mastery-based learning –** Smart adaptive-technology programs have enabled personalization at a level impossible to achieve in the traditional classroom, integrating instruction, practice, and feedback to allow students to work at their own pace, only moving on when they have fully grasped the material. They can also make formative assessments more efficient, immediate, and fair, reducing teacher bias while freeing teachers time spent grading student work.
* **Support children holistically –** Schools need to address the whole child, helping them develop skills and awareness that go beyond what they need simply to find work Students with high levels of self-motivation, persistence, and independence thrive, while others have struggle. Similarly, there is a need to address anxiety, depression, and other mental-health issues as a precondition to helping students learn.
* **Help students adapt to the future of work –** The COVID-19 pandemic has likely accelerated workplace automation as employers continue to automate tasks to reduce costs and minimize the spread of infection. School systems need to help students adapt to rapid [changes in the workplace](https://www.mckinsey.com/featured-insights/future-of-work/jobs-lost-jobs-gained-what-the-future-of-work-will-mean-for-jobs-skills-and-wages) and other impacts of rapid digitization, from ethical standards and cybersecurity to the impact on health, forensics, and many other parts of the economy. In the digital era, educators need to expand their understanding of what it means to be literate in the 21st century: not replacing traditional learning but complementing it. Computer programming and digital literacy are becoming core skills. With the speed of change in the digital era, business leaders can also be critical partners in helping students develop job-ready skills.
* **Invest in new models of teacher preparation and development –**There is an opportunity to reimagine teacher training and development more fundamentally by leveraging advanced technology. Simulations could provide teachers a valuable learning experience before they spend their first day alone in a real classroom of children
* **Unbundle the role of the teacher –** School systems can examine the areas in which teachers spend their time and free them to spend more time on high-value activities that require deep teaching expertise and relationships.
* **Allocate resources equitably to support every student –** Ensuring inclusive and equitable quality education and promote lifelong learning opportunities for all will require a significant increase in investment for the students most at risk of falling behind.
* **Rethink school structures and policies**

1. **Educational funding**.

* Segregated housing and schools, gerrymandered districts and voter suppression are associated with lower property tax funding and less resources for education. Change requires breaking down segregation, discrimination and structural racism which requires fighting segregated schools.
* Funding should be open, transparent, and accountable to the public and provide equal support per student regardless of the school setting.
* To ensure goals and adequate protections for private school vouchers states should investing in stronger monitoring and compliance with the following provisions:
  + *Reduce income limits for program participation* - Private school voucher programs are intended to provide greater educational opportunities for low-income students and should be restricted to this goal. Policymakers could implement a ratable reduction to the size of the voucher that families are eligible to receive as their incomes increase.
  + *Increase accountability and transparency of existing programs* – To incorporate a meaningful school accountability system, national assessment norms must provide a basis for comparison
  + *Private schools receiving public support, just as public schools, should be required to have* at least 95 percent of their students take state assessments, and meet the same provisions (demographics, attendance rates, access to higher-level courses such as Advanced Placement courses, and information on educators’ credentials) in order to receive public funds and prominently include state accountability information on their websites so that parents are aware of the data and can make informed enrollment decisions.
  + *Transparency and accountability requirements in private school voucher programs should also extend to financial matters*.
  + *Schools receiving public support through private school voucher programs should* serve students regardless of their race, ethnicity, gender, religious affiliation, disability status, sexual orientation, academic background, or family structure.
  + *To protect students who attend private schools that receive public support, participating private schools should be required to report on student departures* to help determine, for example, whether the school is counseling out high-need students or discriminating against particular groups of students. Students who receive public support to attend private schools should not be required to participate in any religious activity.
  + *States should audit or require schools to publish the curricula used for core subject areas*, “substantially to the same extent as these subjects are required to be taught in the public schools.”
  + *Change the rules for tax credit scholarship programs* – states could also ensure that contributions to scholarship-granting organizations are actually charitable donations by reducing the state tax credit to no more than 50 percent

1. A retired economics professor makes the following suggestions aimed at improving educational excellence in our K-12 school systems:

* For the States:
* *A one percent* *state* *sales tax totally* refundable to the schools in the district or county where collected.
* Statewide internet service with a state-provided computer for every student enrolled in a public school.
* States should institute intensive studies, with specific recommendations, for improving schools of education.
* Local school administration
* Split boards of education with a minority elected and a majority appointed, at least one of whom does not reside in the district and is certified by a state qualifying board.
* To achieve the best teachers
* Scholarships for more highly qualified students to attend schools of education.
* An inducement for teachers to stay in education, e.g., an exemption from state income taxes on earnings from teaching in a *public*school,
* Exclusion of teacher dismissal orders from collective bargaining agreements. Unions may represent teachers in proceedings leading to a dismissal order but may not strike or take other actions in opposition to a dismissal order by a school board.

The obvious challenge is developing the political will to take such potentially beneficial steps.

From the League of Women Voters of California:

* **Education –** Support a comprehensive kindergarten through twelfth grade public education system which meets the needs of each individual student; challenges all students to reach their highest potential; develops patterns of lifelong learning and responsible citizenship.
* **Funding –** Support a system of funding which is adequate, flexible, equitable, reliable; derived from a combination of revenue sources; distributed fairly to ensure equal access to public education for all students. Support formulating broad general guidelines at the state level and developing and implementing program at the local level.
* **Equality of Opportunity –S**upport greatly increased educational opportunity through compensatory programs for disadvantaged groups beginning at the preschool level and extending through secondary education.
* **Childcare –** Support programs, services and policies at all levels of government to expand the supply of affordable, quality childcare for all who need it in order to increase access to employment and to prevent or reduce poverty.
* **Health Care –** A health care system that provides access: preventive care, primary care, maternal and child health care, emergency care, catastrophic care, nursing home care and mental health care as well as access to substance abuse programs, health and sex education programs and nutrition programs.
* **Basic Income Support/Meeting Basic Human Needs** to promote self-sufficiency for individuals and families by enacting policies and programs designed to:
* increase job opportunities.
* increase access to health insurance.
* provide support services such as childcare and transportation.
* provide opportunities and/or incentives for basic or remedial education and job training.
* decrease teen pregnancy.
* ensure that noncustodial parents contribute to the support of their children.
* **Intergovernmental Relationships –** Collaboration and coordination of services at all levels of government.

If we’re going to make a difference in the classroom, we also need to make a difference in the lives of these children, many of whom struggle against the debilitating effects of poverty and trauma. It is hard to know exactly how effective our schools are in preparing students for their next stage. One measure adopted 10 years ago as a gauge is the high school completion rate. But this now is under scrutiny.

The reported rate has been going up, but recent reports suggest some states and districts have counted students as graduates who should not have been counted.

The ‘adjusted cohort graduation rate’ is a mouthful but it is easy to measure and consistent between states and districts. Every year, a high school has some number of students enter its ninth grade—the cohort. Four years later, that cohort has some number of its members graduating. The on-time graduation rate is the number graduating divided by the number entering ninth grade four years earlier. The cohort of students entering ninth grade needs to be ‘adjusted’ because students transfer in or out … The paper-trail clause prevents schools from counting students as transfers when they actually had dropped out.

In the first school year after the regulation was in force, 2010-2011, the country learned that 79 percent of its high school students graduated on time. Since then, the rate has been rising, and is now 83 percent.… the trend seems encouraging, and some of those students graduate in five or six years.

… Campbell’s Law needs to be kept in mind: “The more any quantitative [social indicator](https://en.wikipedia.org/wiki/Social_indicator) is used for social decision-making, the more subject it will be to corruption pressures and the more apt it will be to distort and corrupt the social processes it is intended to monitor.”…

And, indeed, increases in the graduation rate have been followed by reports about states, districts, and schools playing games with numbers that made their graduation rates higher. Which raises a question—is the increase ‘real?’ *(Answer: NO)*

Four examples consistent with Campbell’s Law emerged recently. A fifth example is a curious program known as ‘credit recovery.’ In their own way, the five examples suggest that the country has an implicit two-zone approach for high school graduation. Students in the first zone attend school, pass classes, get credits, and are given diplomas. Students in the second zone don’t attend school, fail classes, don’t have enough credits, and are given diplomas.[[6]](#footnote-6)

**Conclusion:**

… What preserves objectivity when numbers are generated by actors in the system who are accountable to them? More audits may help. Giving parents and school staff a means to report on improprieties without fear of retaliation may help. Another path is to administer a national test to high school seniors to assess whether they had attained the skills and knowledge the country deems appropriate to graduate from high school. That seems unlikely; indeed, only a few states require their high school students to take a proficiency test to graduate. And a national test hints at a national curriculum, which is touching the third rail in K-12 education.

We are at an impasse. Today’s elementary and middle school students will move on to high school, and one day they may graduate. Did they accomplish a real milestone, or were they just moved along? They are owed an answer.

**Measures of progress**

The contributions by each individual member of a group to his or her group’s performance  [is not predicted by demographic characteristics such as age, gender, education, ethnicity or IQ.](https://connect.brookings.edu/e2t/c/*W3-Ml2M8gr3LhMW3J3mcLzDc0/*N3TmvFlm52FkVpGTC27fyRHH0/5/f18dQhb0Sjv793BmR-W8SMVYk2qwv15N4cyzqVJFptZVf5v-H5mbMf4W1BQYgz8Tm-C4W61cWdy9dtj1hW4P0QZK5YpKkdW1hY_wf2v7qlKW83_Pyq834DLzW8XWrm17JtV4jW7tZTzk1h4MpqW6W3Rzq1ZJ4fwW4DqHqz6dgmw3W4yv2r03MlV4BW6tNb422KQ2YYW6lD20d49qcV7W3sxGzC9ffbr1VcWbVf4Wpz-0W2Csdb857rLQqW8GcYZ58hb5KxW5LMnCH12KgnnVGxg494r5l5jW1LRsZ15SjXGLW1XCdC078125JW22mJyD4j287sW92JJ-w8tBfvMN3QzSrFQN_TjVBq0-g7MhRLg0) A combination of academic skills, being a team player and social intelligence predict group performance about as well as IQ alone.

**Section IV – Secondary or high school**

1. **Issues**

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**Young adults**

Younger adults, as they grow older, are expected to assume their place in a world that has dramatically changed; things are harder today. Additionally, there may be a lack of exposure to opportunities for natural progression because families often have both parents employed, fewer residents in the neighborhood, more diversion to various screens, a heavy emphasis on additional school activities – especially athletics, and the absence of first-hand experience and instruction on essential responsibilities of adulthood, such as budgeting, home repairs, self-maintenance (e.g., cooking).

There are serious concerns about the products of our high schools and their readiness for post-high school education or effective work. High school education in America sorely needs an overhaul. Achievement scores are flat—whether one looks at NAEP, PISA, TIMSS, SAT, or the ACT. Graduation rates are up—but incidents of padding, cheating, and fraud are appearing more and more often. Scads of kids enter college ill prepared to succeed. Scads of others enter the workforce without the skills to succeed there either. The military is rejecting many who would like to enlist. Upward mobility is more or less stagnant. And there are abundant signs of social and personal dysfunction among young people during and after high school. And that’s without even getting to the most heinous stuff like shootings.

According to the Bureau of Labor Statistics, in 2016, only 37% of white high school graduates tested as college-ready, but colleges admitted 70% of them. Roughly 17% of black high school graduates tested as college-ready, but colleges admitted 58% of them. Only 25% of students who took the ACT in 2012 met the test’s readiness benchmarks in all four subjects (English, reading, math, and science). It’s clear that high schools confer diplomas that show that a student can read, write, and do math at a 12th-grade level when, in fact, most cannot. That means most high school diplomas represent fraudulent documents.

Interestingly, a third of Americans between 18 and 34 are still living with parents. Additionally, the world itself has also changed: cases in point = the high cost of higher education with subsequent high levels of debt and the rapid rate of change in the dynamics and requirements of employment.

### While adult responsibilities are granted by age 18, the true age of maturity — at least as far as brain maturation goes — appears much closer to 25. For many young people, this period can be an incredibly fraught and vulnerable time in life and their first experience of severe anxiety, depression or even a major psychiatric disorder, sometimes from a stressful event like a poor exam performance or a relationship breakup. This observation raises other questions about the timing of adult privileges and responsibilities to young people. Should driver’s licenses be probationary until the 20’s, subject to suspension or termination based on inappropriate driving? And, since the reason for lowering the voting age to 18 was that, if one could serve and possibly die for the country at age 18, they certainly should be able to vote. If one accepts the original thesis of this chapter, should the voting age (and the age for military service?) be raised back up to 21 (or 25!)?

In 2017, an Indiana paper suggested things parents of in-coming high school students should be aware of. Among them were the following generally applicable suggestions:

1. *Look out for these apps on kids' devices* – Top five apps to watch out for are:

* KIK, an instant messaging app that the task force says is known for child predators.
* Chatstep, a web-based chat room where the task force says child predators can pretend to be teens and trade images.
* Yellow App, a location-based social search app that allows users to find others to share their Snapchat and Instagram usernames with no age verification.
* Monkey, a chat app that randomly pairs users.
* Musical.ly, a 15-second video sharing app, similar to Vine. The task force warns videos can be searched by city and downloaded.

Parents should review their child's device history, check privacy settings and make realistic rules on consequences. “Apps gain and lose popularity quickly and vary based on age group, so the best tools are knowledge and communication. Know which sites your child is using and talk to your children about the potential risk and your concerns.

1. *High schools say the SAT/ACT are still important* – A small, but growing number of colleges and universities no longer require standardized test scores on applications, but the vast majority still require ACT or SAT scores, as do some scholarship applications. So, many schools continue to urge juniors and seniors [to take the standardized tests](http://www.indystar.com/story/news/local/hamilton-county/2017/07/18/why-kids-still-told-take-sat-act-colleges-drop-requisites/448055001/) as one piece of their applications.
2. *Students should take advantage of dual-credit options* where students can earn high school and college credit at the same time.

High school graduation rates have risen significantly in recent years. But they often don’t reflect better outcomes; instead states and school districts have lowered graduation requirements. Nor are they followed by increases in college graduation, youth employment, or civic participation rates. School districts have immense discretion in determining the levels of learning needed to pass a course. Most districts use “Carnegie Credits” to measure academic progress toward a degree. These credits are based on the number of hours in a classroom, rather than actual learning outcomes, which means students may amass enough graduation credits without learning much. The result is that we are shortchanging our students.

All of the above raise questions regarding the quality and effectiveness of high school coursework and indicate a need for re-evaluation of what should be provided and required of those who successfully complete that level of schooling. Schools must focus on mastery of subjects rather than hours spent in the classroom. Closing the gap between what students learn in high school and what they need to successfully pursue college, training, or work after graduation means finding new ways for students to demonstrate what they know and what they can do.  While this might lower graduation rates in the short-term, continuing the current path is a costly charade that fails too many students. In contrast, focusing and measuring proficiency will mean better jobs for high school graduates and more opportunities for them in the future.

One professor believes U.S. schools are deeply dysfunctional because they don’t teach useful job skills, and students do not retain most of what they learn in classes. He advocates introducing kids to job training by age 12 so they can be ready to enter the job market as young as 15. “Not only would this save taxpayers money and boost the economy, it would allow kids to pursue the path they find most fascinating, sparing them hours of boring, pointless lessons.”

Hoover’s Educational Success Initiative (HESI) Senior Fellow Chester E. Finn, Jr. maintains that education policy makers should develop accountability systems that are based less on short-run gauges of “proficiency” and more towards students’ readiness for college, careers, citizenship, and adulthood. He makes four recommendations for the improvement of school accountability.

* Assess students entering kindergarten on their readiness to succeed.
* Test students’ English Language Arts and math prowess in grades two or three, four, six, and eight.
* Implement end-of-course exams in core subjects, as well as in career and technical curriculum.
* Require that high school students pass end-of-course exams at a satisfactory level to protect the value of their diploma.
* Evaluate schools and either improve or facilitate student moves to better schools.

Much of the foregoing suggests that readiness for career, whether or not via the college route, should be the primary goal of primary and secondary education. One such approach suggests that school districts be funded depending on whether grads after one year were still full-time college students, had earned a “high wage, high demand certificate” or were in the military.

Toward a goal of improved writing, with its associated benefits, there is a lack today of teaching of cursive, which is directly related to learning reading. Also to be lamented is the loss of sentence diagramming, that has not only damaged the writing and speaking ability of so many, but also is a loss of the kind of mental discipline and rational thinking that seem also to be in short supply. The amazing presence of grammatical errors noted at brief intervals in public or broadcast speech of allegedly well-educated speakers can be directly traced to this absence.

Underlying problems, dilemmas, or unresolved principles such as the following continue to get in the way of major progress:

1. Confusion and dissension over the end product. While our best high schools are doing a solid job of prepping sizable fractions of their mostly privileged students for mostly traditional colleges, they’re neglecting other kids. Our worst high schools aren’t preparing anyone for anything.
2. High schools have essentially no say over the preparation of their *entering* students. No control over what comes in plus lack of clarity about the product predicts high school failure
3. Which of either a)traditional metrics of course credits or b)“standards and competencies” is the right way to gauge students’ progress, success, and readiness to graduate?
4. We’re afraid of denying kids diplomas.
5. Our focus on raising graduation rates leads to fudging, hedging, and downright cheating.
6. We’re allergic to “tracking” at the secondary level, even the sophisticated, flexible, and non-discriminatory kinds that they do in other advanced countries.
7. We have killed off “vocational education”. Most educators still see as inferior to “college prep.”
8. For millions of kids, high school—at least the academic part—is too damn boring and pointless.
9. The considerable counseling that kids at this age need and ought to be getting is often minimal to useless, generally boiled down to course scheduling and college applications.
10. Finally, we encounter the usual grown-up bickering over control, power, jobs, and budgets. Why isn’t high school—and the resources and decision-making that come with it—shared with employers, union-based apprenticeship programs, community colleges, and more? Why not with many more independent and charter schools? If we’re serious about career and technical education, how do we divide budgets and control between college-prep schools and CTE providers?

While the basic role of education is to teach the fundamentals regarding how to navigate American life (this is the reading, writing, arithmetic, how to read a map and a contract etc.), it is also to assist them in being effective, contributing members of the total American family. This includes teaching character, grit, and civics, all creating an essential fealty to the fundamental principles of democracy and democratic institutions.

Some organizations across the country have instituted “courses” teaching young adults how to act like grown-ups. These include lessons, either guided or via online video, in such varied life skills as: paying bills, budgeting and how to deal with student-loan debt, calling the car insurance company, looking after your health, bike safety, holiday gift-giving for the cash-strapped. opening a bottle of wine without a corkscrew and assembling a weekly nutritional plan.

Today, the fact is that a required component of retaining a fully functioning and fair republic is bridging increasing divides now confronting us. Recognizing the problems in this county of poor cross-class communication and understanding, Michael Tomasky in a new book, *If We Can Keep It,* among other recommendations suggests student exchange programs within the US, shortening college to three years and substituting year four with national service, and attempting to infuse school curriculums with a serious dose of civics.

By at least one measure—rising high school graduation rates—educational attainment in the United States is the highest it has ever been. But, without subsequent increases in college graduation, youth employment, and civic participation rates, however, questions persist around [the quality of education that the high school diploma represents.](http://app.mx3.americanprogressaction.org/e/er?s=785&lid=201394&elqTrackId=e94d8bf8e3b24989af0e6b2f56dd01ed&elq=9d222724cd62454c8c30f63c60bac432&elqaid=37364&elqat=1)

A high school education should ensure students are eligible for their chosen pathway of what comes next: college and careers, as well as civic life. [Given the gap between low rates of proficiency in academics and rising graduation rates, it is almost a guarantee that America’s schools are graduating students who have not learned as much as they should in high school](http://app.mx3.americanprogressaction.org/e/er?s=785&lid=201394&elqTrackId=0d83c429e6244a279140c133df976ad7&elq=9d222724cd62454c8c30f63c60bac432&elqaid=37364&elqat=1)

One way to assess the effectiveness of our secondary schools is the readiness of their graduates to move on to satisfactory post-high school activities. College readiness should be a measure of a high school’s effectiveness. However, this appears to be an area of less than stellar accomplishment.

Without subsequent increases in college graduation, youth employment, and civic participation rates questions persist around the quality of education that the high school diploma represents. Put simply, high school coursework requirements for a basic, nonadvanced high school diploma matter because they create, or stifle, what is possible for students as they progress through and beyond high school.

In almost every state for at least one subject, there is a preparation gap that necessitates students seeking admission to the state public four-year university system to take additional coursework not required for a standard high school diploma. Students can graduate high school having done well in their courses, but still not have met the requirements to enroll in college because of the problem of misalignment. Additionally, because state high school graduation requirements do not meet the full range of quality standards—college readiness, career readiness, and a well-rounded education—even if the requirements are aligned to college entrance requirements, students might not be truly prepared for the next step.

This preparation gap can have significant impacts, especially on low-income students and students of color who are far more likely to have insufficient support in navigating the differences between high school graduation requirements and college entrance requirements. Without sufficient support from guidance counselors or tech-based solutions, such as virtual college counseling, students may be unaware that they are not truly prepared for college.

One promising approach to address the alignment and quality concerns is competency-based graduation requirements. Instead of measuring how many credits students take in specific subjects, competency-based requirements require students to demonstrate mastery of academic knowledge through assessments or other means. But this approach is still in the early stages.

Also, being mindful about the potential for technology to correlate with disengagement, and explicitly focusing on maintaining or increasing student engagement can likewise boost the odds of meeting goals. In this instance, there do exist some models for implementing blended learning that maximize students’ voice and choice–such as allowing students to determine their own learning goals, and methods for demonstrating mastery of content–which [do also increase students’ engagement and sense of belonging](http://www.udlcenter.org/research/researchevidence/checkpoint7_1). Somewhat reassuringly, these practices were reported to be less consistently implemented.

A critical element in students’ success beyond high school is engaging them in their learning during that 4 years, but it is not easy. Students who are engaged in their work at school often are more likely to have plans for after high school and ideas about their future. However, national surveys have shown that as students approach graduation, they are about as likely to be detached or discouraged as they are to be looking forward to next steps. Gaps in engagement, similar to achievement gaps, compound this problem, with white students more likely than students of color to be engaged. Policymakers must invest in—both financially and through policy changes—redesigning high schools to better engage and prepare students for after graduation in order to create stronger local economies and promote community engagement.

Unfortunately, Oregon has taken a different course. The Oregon Department of Education has placed Oregon graduates at a significant disadvantage while substantially lowering the quality of public education.To address learning-loss throughout the pandemic, the Oregon legislature suspended their essential skills proficiency requirement [through the 2023-24 school year](https://www.oregon.gov/ode/educator-resources/essentialskills/pages/default.aspx). But the State Board of Education, deciding that basic reading, writing and math skills are not required for students to graduate with a high school diploma, extended this suspension [through the 2027-28 school year](https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=306489), agreeing with the [Oregon Education Association](https://oregoned.org/about-oea#:~:text=The%20Oregon%20Education%20Association%20(OEA,public%20schools%20and%20community%20colleges.) (OEA) which holds that . “Standardized tests are inaccurate, inequitable, and don’t accurately measure student learning and growth,” and that standardized tests like Oregon’s Statewide Summative Assessment are “instruments of racism and a biased system.” Graduation rates have skyrocketed – the second highest four-year graduation rate ever recorded in the state. But only 43 percent of students in that year’s graduating class were proficient in English, and less than 31 percent were proficient in math.

Rather than only preparing students for college, American high schools should accept the approach of some other countries that differently direct those whose best course is some sort of post-high school academic education versus those whose best course is to learn the skills necessary to be successful in the multitude of job opportunities that do not require a post-high school academic experience – and challenge students appropriately regardless of track.

**Redesign:** After Covid, today schools across the country are focusing efforts not only on academic recovery and acceleration but also on comprehensive and transformative [school *redesign*](https://www.americanprogress.org/article/using-science-learning-redesign-schools/), i.e., restructuring at the system level meant to address longstanding inequities and facilitate stronger teaching and learning. Redesign is a community-based process that involves transforming not only the physical environment but also the policies and procedures that drive classroom instruction and organize the school day. School redesign is challenging—a central question remains: How can policymakers promote and scale innovation in school design? The following are recommendations for actions that state and federal policymakers can take to foster thoughtful, transformative school redesign and pave the way for community-driven innovation.

**Recommendations for state governments**

**Explore mastery- and competency-based educational programs –** Credit systems based solely on hours of instruction, such as the Carnegie unit, do little to address students’ individual needs. Several states are implementing innovative [competency-based models](https://www.americanprogress.org/article/high-schools-future-states-can-accelerate-high-school-redesign/) that center content mastery as the basis for high school graduation..

**Allow for ‘anytime, anywhere’ learning—and provide credit for it –** Schools must recognize that learning can and does take place outside the classroom. Work-based learning opportunities, internships, apprenticeships, part-time jobs, after-school programs, service learning, at-home learning, and community-based projects all provide valuable opportunities for building knowledge and skills.

**Modernize and strengthen data systems –** The drawback of offering more flexibility in learning programs, however, is that some students, particularly those who are already marginalized, may fall through the cracks. Robust data collection and transparency are essential to ensure that all students’ needs are being met in school. Statewide longitudinal data systems that collect students’ information from their entry into early childhood education to their entry into and participation in the workforce—often referred to as “[P-20W](https://dataqualitycampaign.org/resource/what-are-p-20w-data-systems/)” systems—are key for monitoring school redesign initiatives and making evidence-based decisions that meet student needs.

**Recommendations for the federal government**

* **Improve the CGSA program and the IADA –** To ensure that federal funding is available for states seeking to redesign their assessment systems, Congress should maintain and expand investments in the Competitive Grants for State Assessments ([CGSA](https://oese.ed.gov/offices/office-of-formula-grants/school-support-and-accountability/competitive-grants-for-state-assessments/)) program and the Innovative Assessment Demonstration Authority ([IADA](https://www2.ed.gov/admins/lead/account/iada/index.html)). Funding should be prioritized toward states implementing [personalized and competency-based learning approaches](https://knowledgeworks.org/resources/esea-reauthorization-federal-assessment-accountability-reform/). Additionally, Congress should permanently eliminate the original [seven-state cap](https://www2.ed.gov/documents/essa-act-of-1965.pdf) on IADA participation. Most importantly, Congress should authorize the IADA to provide federal funding opportunities to support the startup costs associated with state pilot projects in order to incentivize equitable participation..
* **Invest in state learning networks and professional development**

The U.S. Department of Education should assemble and support peer-to-peer [interstate learning networks](https://knowledgeworks.org/resources/esea-reauthorization-federal-assessment-accountability-reform/) to examine the effectiveness of innovative assessment models in improving student learning outcomes, as well as scale best practices from pilot programs and ongoing redesign efforts.

**Conclusion**

Top-down mandates alone cannot drive the reimagining of public education. Equally necessary is locally driven transformation from the inside out—transformation based on the unique strengths and needs of individual communities. However, state governments still hold an important role in school transformation, including expanding flexibility in scheduling and graduation requirements while holding schools accountable for student outcomes. Further, both state and federal governments can and should fund equitable pilot and seed projects targeted toward schools that have the least capacity and greatest need to restructure their learning environments. This will empower schools to redesign teaching and learning for the generations to come.

There is no one way to redesign high school, but successful models typically include many of these four aspects:

* Focus on engaging students in their education and plans for the future and incorporating those goals into the school day and year.
* Emphasizing college and career readiness through rigorous CTE and dual enrollment opportunities.
* Offering a unique blend of school design elements, often including small learning communities, competency-based education, project-based learning, and/or social-emotional learning and other student supports.
* Keeping an eye on student and institutional success identifying how they intend to track the progress of students and schools on key goals and metrics in high school and beyond.

Approximately 1 million high school students each year fail to earn a diploma or its equivalent. Under federal law, high schools with graduation rates that are less than 67 percent or meeting other criteria for low performance are subject to intensive improvement strategies. This requirement also applies to what the law defines as “alternative education campuses” (AECs), schools that states have established to serve the unique needs of students who are at risk of dropping out or who have re-engaged in school. Without alignment by stakeholders of what they are and what is expected of them, there will never be an accurate national understanding of how well these schools are serving their students.

It is difficult to decide what subjects should be taught in the limited time available in high school. Certainly, graduates should know reading, writing, civics, and math when they leave. For some, course selection will be about preparing for a university and for others it will be getting a job. Social promotion has destructive influence on our country. We are wrong to focus on college for all. It is important to recognize those not best served by a college education and direct their course work to teach them the tools necessary for success in other venues and assist them to enroll and succeed in these also worthwhile opportunities. Our economy needs well trained technical folks to fill jobs that will survive automation such as plumbing, carpentry, sophisticated mfg. equipment, etc. Failure to serve both groups is a disservice to the students, to their future and that of their families and of their general communities. High expectations should follow every student, regardless of track.

1. **Alternative Educational Approaches**

Conventional education reform is failing in this country. It is time for new approaches, such as the Finnish-style public Earth School in New York’s East Village which is some 50% black and Latino children. Half the students qualify for free and reduced priced lunch, and 23% of students receive special education services.

The Earth School is guided by the values of “hands-on exploration, an arts-rich curriculum, responsible stewardship of the Earth’s resources, harmonious resolution of conflict and parent-teacher partnership.” While “working rigorously in literacy and math” the students are encouraged “to explore, experiment, and even sometimes make a mess in the pursuit of learning.” Children at the school are assessed every day by certified, professional childhood educators who provide the ultimate in “personalized instruction”: the flesh-and-blood kind.

They are encouraged to ask challenging questions and think for themselves, to be creative and compassionate, and to make their own decisions. Parents are actually invited into the school and directly into the classrooms for the morning drop-off and given a room in the heart of the school, to relax, chat and plan much-needed school fundraisers.

Four-day school week schedules, typically involving increasing the length of the school day four days per week and “dropping” the fifth day, have been adopted as a way to alleviate budgetary issues, attract teachers, and reduce student absences—issues that the pandemic exacerbated for many districts. Research suggests that most of these aims fail to be realized, as follows:

* **SHORTER WEEKS MAY ATTRACT TEACHERS, BUT DON’T EXPECT MAJOR COST SAVINGS OR ATTENDANCE GAINS –** four-day school weeks may allow school districts greater resource flexibility in the wake of budget shortfalls. The four-day school week may also be used as a form of non-monetary compensation to facilitate instructional cost reductions, as research finds that teachers [generally prefer it](https://files.eric.ed.gov/fulltext/EJ1164595.pdf). In terms of student attendance, the research to date finds [minimal impacts on measures of recorded daily attendance](https://www.edworkingpapers.com/ai21-416).
* **MAINTAINING INSTRUCTIONAL TIME is KEY FOR MITIGATING ACADEMIC HARM –** A key concern surrounding the four-day school week is the impact on students’ academic progress. While the evidence regarding overall student achievement impacts is mixed, recent evidence has found primarily negative achievement impacts of four-day school weeks. [Recent national evidence](https://www.iza.org/publications/dp/14461/only-a-matter-of-time-the-role-of-time-in-school-on-four-day-school-week-achievement-impacts) also suggests that the schools where four-day weeks led to reductions in learning time see the most negative outcomes on student academic progress, with little to no impact on achievement among schools that maintain adequate learning time. Thus, structuring the four-day school week to maintain adequate learning time seems to be the key to avoiding student learning loss and presents a path forward for schools considering this schedule. In practice, most schools are reducing instructional time to facilitate the switch. Few schools with four-day weeks have historically provided any in-school or asynchronous learning opportunities on the off-day. Approximately 50% of schools report being completely closed and only 30% offered any sort of remedial or enrichment activities with any frequency
* **MORE TO WORRY ABOUT THAN JUST ACHIEVEMENT LOSSES –** Lost exposure to the school environment doesn’t only mean missing in-person academic instruction, but also reduced access to school-meal programs, physical activity opportunities, and structured social interactions with peers, teachers, and administrators. Worries about childcare and unsupervised children on the off-day also abound in discussions of four-day school week implementation.

**THE FUTURE OF FOUR-DAY SCHOOL WEEKS –** For better or for worse, four-day school weeks–once dubbed a “[troubling contagion](https://www.brookings.edu/blog/brown-center-chalkboard/2017/03/03/a-troubling-contagion-the-rural-4-day-school-week/)”–appear to be a fixture of the post-pandemic educational landscape. Evidence to date suggests that how schools structure the four-day schedule is a key determinant in this model’s impact on learning outcomes. Minimizing the loss of instructional time appears to be the best chance at avoiding negative results, though more research is needed to understand the full scope of impacts on students, families, and communities. It also remains to be seen whether other educational innovations in the wake of the pandemic–including remote learning opportunities, greater access to meal programs, and off-day childcare–will further the effectiveness of the four-day school week in a post-pandemic world.

**C. Technology**

When young people at all levels were reduced to on-line learning, technology became an important part of our processes. It will never replace teachers but can give them more time for students. Technology has the *least* potential to save teacher time in areas where teachers are directly engaging with students: direct instruction and engagement, coaching and advisement, and behavioral-, social-, and emotional-skill development. Some things are simply not subject to automation: inspiring students, building positive school and class climates, resolving conflicts, creating connection, and belonging, seeing the world from the perspective of individual students, and mentoring and coaching students. But it can decrease time devoted to preparation, administration, evaluation, and feedback (e.g., grading multiple-choice questions or – coming soon – evaluating long-form answers in all subjects). Most of the technologic capability is already available but apply it effectively will require commitment and thoughtful introduction and implementation across all potential stakeholders.

The pandemic caused a realization that technology applications are greater than earlier recognized. Due to its declining cost and increased availability, it can give teachers and scholars more insight into what works and what doesn’t. Algorithms can analyze reams of data and offer recommendations. While there may be hurdles to overcome, such as teachers’ reluctance to constant oversight (and how it might be used by whom) or cost. Oversight and accountability are required, but the potential is substantial.

KnowledgeWorks, a national nonprofit organization committed to providing all students with meaningful personalized learning experiences by delivering innovative education approaches and helping align local, state, and federal policies, believes that the way to best prepare today’s students for the future is by personalizing learning to fit their needs, interests and passions. Personalized learning can thrive in a technology-rich environment, but that technology is insufficient on its own to revolutionize a student’s classroom experience. Teachers are more important than ever.

Technology can deepen the education experience for learners and teachers in a personalized setting when district, school, and classroom leaders prioritize and invest in using technology as a tool to deepen learning and engagement between students and teachers in a dynamic classroom setting, rather than simply developing the capabilities of students to use the technology itself. While KnowledgeWorks’ definition of personalized learning is learner-centric, it recognizes that it is not technology itself, but how technology Is cultivated by creative, empowered teachers in a learning environment bringing personalized learning systems to life that leads to success.

Teachers can use technology platforms to support data-driven learning, personalizing learning and help students engage with learning tools that will enrich and support deeper learning, KnowledgeWorks recommends the following to successfully implement personalized learning.

* **Instruction is aligned**to rigorous college- and career-ready standards as well as the social and emotional skills students need to be successful in college and career.
* **Instruction is customized**, allowing each student to design learning experiences aligned to his or her interests.
* The **pace of instruction is varied**based on individual student needs, allowing students to accelerate or take additional time based on their level of mastery.
* **Use data**from formative assessments and student feedback in real time to differentiate instruction and provide robust supports and interventions so that every student remains on track to graduation.
* **Students and parents have access**to clear, transferable learning objectives and assessment results so they understand what is expected for mastery and advancement.

While thoughtful technology policy is necessary for developing a personalized learning system, technology is just a tool to support a strong, innovative curriculum and aligned instruction. It also is one with which students are familiar. It does not replace teaching, but rather enhances it by encouraging its creative use for project-based learning, interdisciplinary learning, formative assessments, and reviewing student data, among others. Critical to the application of these policies is trust and support from administration in the form of professional development. Learning can truly thrive when educators are given the agency to help students use these tools in new, creative, customized ways to support their educational experience.

Simply providing access to new types of technology is not synonymous to cultivating transformational change to the traditional, industrial model of teaching and learning that values standardizing inputs and outputs for students. Instead, thoughtfully cultivating the use of technology in the classroom by empowering teachers to utilize the tool in ways that support their learners is critical in the transition to a personalized learning environment. Teachers are empowered by excellent and timely classroom materials. But many do not have access to the most promising materials today. Technology may hold an answer.

[Chiefs for Change](http://chiefsforchange.org/), a bipartisan network of bold, diverse education leaders with student-focused agendas, outlined steps that policymakers, curriculum companies and leaders in higher education can take to advance the field…. funding that was previously reserved for textbooks may now be best spent on accompanying technology, printing needs and high-quality professional learning around the curricula itself. This assumes, of course, that standards-aligned, evidence-based, rigorous, relevant, high-quality materials have been selected at the state, district or school level — whether it’s books, software, web-based open educational resources or another delivery mechanism that is beyond our current laws and imagination.

| As we move back into more traditional approaches, these guidelines to technology use are worth noting.**Do use technology:** | **Don’t use technology:** |
| --- | --- |
| ● To enhance or extend social interactions  ● To provide access to learning environments (like advanced courses, simulations) that otherwise would not be available  ● To facilitate and generate learning experiences that are meaningfully aligned with in-person learning experiences  ● To personalize, individualize, and/or differentiate learning to each student’s pace, path, abilities, and interests  ● To provide students with choice, agency, and ownership of their learning  ● To ensure equitable access to technology and its supporting infrastructure itself, as well as the opportunity to develop skills associated with technology use | ● For many or unlimited hours each day  ● To remove students from learning experiences that their peers have access to  ● To implement, scale, or sustain *in*effective in-person instructional strategies  ● To track or stream students into rigid or long-term, standardized learning groups  ● To automate or make decisions about learning without input from teachers and students  ● With the assumption that students intuitively know how to use it (or have access to it), especially for learning |

These are foremost in the requirements not just for how we teach, but what we teach as well. The quality and relevance of the content that schools and teachers put in front of their students is equally important.

We must not only support private sector AI growth and expansion, we must also integrate AI into the education and training of our youth and prepare them to be not only participants, but the future innovators, administrators, and leaders. and workers essential to our long-term economic and geopolitical success and, indeed, possibly our survival.

1. **Courses**

Curricula and instructional materials are central to academic success. Choosing these materials wisely can be a cost-effective lever for states and districts seeking to improve academic achievement. However, the prevalence of low-quality materials suggests that many districts face financial, process, or capacity barriers to adopting high-quality curricula and instructional materials. Increasing transparency around what is taught in school, and why, and adjusting curriculum adoption processes so that they encourage selection of high-quality options can help incentivize districts to make well-informed choices. In addition, an ongoing process of engaging teachers, supporting them in implementing new curricula, and providing them with the tools to collaborate meaningfully with one another should begin at the same time as the adoption process. Many districts in the country have yet to adopt materials that meet the promise of higher, college-ready standards.

One observation is worth being sure to include in this chapter. Despite the many concerns and issues confronting American education, it important to recognize that our educational system does produce a lot of well-prepared high school and university graduates. Minorities are reducing the gap in test performance. So, progress has occurred and is continuing. The hope is that observations in these chapters will serve to accelerate this progress.

Top-performing school systems can vary significantly in curricula, assessments, teacher behaviors, and even desired outcomes. What unites them is a focus on excellence for every child, regardless of race, gender, income level, or location. That core value should inform the areas to keep in our current systems and where to innovate to create more effective and equitable education for all.

The time to start reimagining the future of education is now. McKinsey suggests that school systems recommit to four basic principles that systems must get right:

1. *Core skills and instruction* – Students need a strong foundation in literacy and numeracy.
2. *High-quality teachers and teaching* –
3. *Performance measurement* – data should be used primarily to inform—to direct support to the students, teachers, and schools that need it most—not to punish.
4. *Performance level and context* – School systems at different levels of performance, from [poor to fair to good to great to excellent](https://www.mckinsey.com/industries/public-and-social-sector/our-insights/how-the-worlds-most-improved-school-systems-keep-getting-better), require different sets of interventions. Poor performers may need central control to build up basic infrastructure and provide motivation, scaffolding, and scripted lesson plans for teachers. Stronger performers may need more decentralized innovation, peer-led learning, and collaborative planning to engage students and staff.

But these basic table stakes aren’t enough. It is important to move beyond existing approaches to embrace more radical innovation. McKinsey offers the following ideas to help that effort.

* Harness technology to scale access – The challenge isn’t just to adopt new technologies, but also to incorporate them in ways that improve access and quality.
* Move toward mastery-based learning –Smart adaptive technology programs can integrate instruction, practice, and feedback to allow students to work at their own pace, only moving on when they have fully grasped the material.
* Support children holistically – Schools need to address the whole child, helping them develop skills and awareness that go beyond what they need simply to find work.
* Help students adapt to the future of work, not replacing traditional learning but complementing it by helping students adapt to rapid [changes in the workplace](https://www.mckinsey.com/featured-insights/future-of-work/jobs-lost-jobs-gained-what-the-future-of-work-will-mean-for-jobs-skills-and-wages) and other impacts of rapid digitization.
* Invest in new models of teacher preparation and development – Create more linkages between teacher training and local schools.
* Unbundle the role of the teacher – Free teachers to spend more time on high-value activities that require deep teaching expertise and relationships.
* Allocate resources equitably to support every student – Ensuring inclusive and equitable quality education and promote lifelong learning opportunities for all will require a significant increase in investment for the students most at risk of falling behind.
* Rethink school structures and policies – It’s increasingly clear that school calendars organized around a long summer break aren’t ideal for learning. Sorting students too early can preclude opportunities for students sorted into different pathways or tracks.

Summer programs for underrepresented minorities have a positive impact on STEM achievement. High-achieving high school students from underrepresented minorities [offered a a spot in one- and six-week STEM summer programs increased the share of students graduating on time from a four-year college with a degree in STEM and increased the overall college graduation rate](https://connect.brookings.edu/e3t/Ctc/DF+113/c1x-m04/VWrPK99ggDNYW4b0Wl98lP82DW2_PQhc4MtV9_N5d8yPy3q2SGV1-WJV7CgV70W4KxYW78pxHMNV1VlR_4BGYHGW65vF193_8-8TW4rVwj18hr8dCW15RVYt1vTbqcW5GpG336d1BL0V501NR4vq1tjW18Zkdh4B_g3dW5YGJ6S4f8dcNW24MH121xlxSKW1vMwqD73zj4RW3R1knh2B8_-cW3kHY5H6cQYtVW3ZsyW_9hKWDzW5q5Pfq5n3dcrW613HBd9gwLSsVf1gwF2jq6tWW6K17pc5G1KPjW5-d24h1V0L_KW784VsM5gRrLL3d3g1). Almost all the gains in graduation rates resulted from students selecting more competitive universities, with rising admission rates to elite universities. Freshmen STEM majors who attended the six-week program graduated with STEM degrees more often than their peers.

It has been estimated that the country needs 5 million more workers with a postsecondary education. Given the urgency of this challenge, many innovators around the country are rethinking fundamental assumptions about the high school experience. While motives may vary, a common goal is to do a better job graduating students who are fully prepared to succeed after high school. The movement to redesign high schools emphasizes bottom-up, locally designed solutions rather than cookie-cutter models or rigid checklists of required reforms. No two redesigned high schools are exactly alike. Even so, most redesigned high schools incorporate at least a few of the following design elements:

* ***Competency-based education, or mastery learning.*** Students must demonstrate that they have mastered specific, clearly defined learning goals in order to progress through the curriculum, moving as quickly as they want or as slowly as they need.
* ***Personalized learning.*** Most redesigned high schools are finding ways to tailor at least some of the learning experience to students’ individual needs, interests, and postsecondary goals.
* ***“Anywhere, anytime” learning*.** At many redesigned high schools, students have significant opportunities to learn outside of traditional school hours and beyond school walls.
* *Emphasis on h****ands-on, project-based learning,*** either inside or outside the school, to engage students; give them opportunities to apply their learning; encourage them to practice problem-solving and design thinking skills; and help them make connections across subject areas.
* ***Focus on in-depth preparation for both college and careers.***  Success today requires a broad mix of academic, social-emotional, and technical competencies—regardless of the path that students pursue after high school. These schools blend rigorous academic learning; greater opportunities and expectations for earning advanced postsecondary credits; and credentials with real-world career preparation, offering students clearly articulated career pathways, or majors.Innovators are focused on rethinking how, where, when, and at what pace high school students learn, demonstrate their learning, and earn credits for graduation. A policy environment built to service more traditional high school models does not prevent them from implementing new approaches, but it can create various forms of friction between what innovators want to do and what policy encourages or allows such as curriculum or textbook adoption policies or by limitations on awarding credit for learning experiences that took place outside the school building or regular school hours.

### State policymakers can encourage high school redesign by:

#### 1. Making room for innovation

##### Clarify and communicate existing kinds of policy flexibility

##### Permit charter schools and, if necessary, raise caps on new charter

##### Establish ‘innovation status’ for non**-**charter schools which provides a streamlined way to obtain a multi-year package of policy waivers necessary to implement innovative strategies and new school designs.

#### 2. Updating graduation, credit, and funding policiestobroaden high school graduation requirements so that they include more than just seat time.

##### Ensure students receive credit for rigorous but nontraditional learning experiences.

### Addressing concerns about whether students who engage in nontraditional learning experiences—such as community-based projects—are actually learning content and skills required by state standards. While traditional seat time policies are no guarantee that students have mastered state learning standards, such policies at least ensure that students are exposed to a minimum amount of instructional time, managed by a teacher whose grading system ostensibly requires students to learn at least some portion of the course material.

##### Provide fair funding for redesigned high schools.

#### Considering redesign in assessment and accountability systemsin ways that reward positive outcomes and present no strong disincentives to innovate.

#### Consider assessment strategies that streamline standardized testing, even though it still may be some time before states can administer technically sound, large-scale assessment systems on demand and in ways aligned with new approaches to learning. This may require a substantial technical and financial investment, and when there is much public concern about the number of standardized assessments, states will need to proceed cautiously.

##### Include accountability measures that focus on the right results.

##### Publish meaningful reports on high school performance.

#### 4. Advancing local efforts to redesign high school

1. take a more proactive approach to fostering high school redesign by incorporating strategies—such as seed grants, pilot programs, and incubator initiatives—that directly solicit and support local innovation efforts.

##### Foster innovative high school designs through pilot and incubator programs

##### Provide seed grants for high school redesign and innovation**.** Small planning or implementation grants can spur local educators to begin to hold conversations about new approaches to how, when, where, and at what pace high school students learn and demonstrate their learning for credit.

##### Leveraging federal resources to support high school redesign**.**

States and school systems interested in fostering innovative high school designs can take advantage of funding available from several ESSA-authorized programs, listed below.

* **Optional reserve of Title I, Part A funds for direct student services.**
* **Title II, Part A funding to improve teaching and school leadership.**
* **Title IV, Part A student support and academic enrichment grants.**
* **Title IV, Part C charter schools program grants.**

 Conclusion

Just as innovators learn and incorporate new ideas into their designs—and reengineer their designs when they encounter unexpected challenges—states must constantly learn and adjust their policy strategies.  As new issues and challenges emerge, states will need to remain vigilant and creative about how to best encourage and enable innovative high school designs.

**Mathematics**

Many of the previous articles expressed concern about math success. However, while studies suggest that US students are falling behind in math, another issue is also of concern. While a typical ambitious high school student takes advanced algebra, trigonometry, pre-calculus and calculus. None of that math may be necessary for the vast majority of undergraduates who don’t intend to major in science or another STEM field.  But those same students don’t have many of the math skills that professors think they actually do need. College professors who oversee majors and undergraduate degree programs at both two-year and four-year public colleges in the humanities, arts, social sciences and some natural sciencesors say they really want their students to be able to analyze data, create charts and spreadsheets and reason mathematically – skills that high school math courses often skip or rush through.

High schools should stress “reasoning and critical thinking skills, decrease the emphasis on specific mathematical topics, and increase the focus on data analysis and statistics.” College professors preferred mathematical “practices,” including the ability to “interpret quantitative information,” “strategically infer, evaluate and reason,” “apply the mathematics they know to solve everyday life, society and the workplace,” and to “look for patterns and relationships and make generalizations.”

An overwhelming majority of professors said students in their programs needed to be familiar with statistics and data analysis, including concepts like correlation, causation and the importance of sample size. They wanted students to be able to “interpret displays of data and statistical analyses to understand the reasonableness of the claims being presented.” Professors say students need to be able to produce bar charts, histograms and line charts. Facility with spreadsheets, such as Excel, is useful too.

The mismatch between what students learn in high school and what they need in college isn’t easy to fix. High school math courses have become bloated with too many topics. However, there is no consensus on which algebra topics to jettison. And encouraging high school students to take statistics classes during their junior and senior years is also fraught. A diversion to data analysis risks putting students at a disadvantage. College admissions officers value calculus, almost as a proxy for intelligence. And college admissions tests tend to emphasize math skills that students will practice more on the algebra-to-calculus track.

The thorniest problem is that revamping high school math could force students to make big choices in school before they know what they want to study in college. But this is helpful in demonstrating how too few students are getting the mathematical foundations they actually need for the future.

In the 2022 The Programme for International Student Assessment (PISA) of the proficiency of 15-year-olds in reading, mathematics, and science worldwide, U.S. students saw a 13-point drop in their math results, "among the lowest ever measured by PISA in mathematics" for the U.S. and lagging their peers in many industrialized countries. They also scored one point below their 2018 reading score and three points below their 2018 science score, but higher than in 2012 and above the OECD average in both.

Ten countries and economies saw their students score proficiently in all three domains and had "high levels of socio-economic fairness." Countries and economies that maintained or improved upon their 2018 math scores shared some common characteristics, including shorter school closures during the pandemic and fewer impediments to remote learning.

**Civics**

The *primary* purpose of public schooling in the founding era was civic education for the express purpose of [creating democratic citizens](https://amzn.to/3tWMLI1). The Founders married religious virtue with modern political science in order to keep and [sustain the republic](https://amzn.to/49eV4PL). For both pillars of the republic—civic virtue and constitutional order—a robust civic education would be required. Nearly all the leading Founders pledged allegiance to robust and widespread education in order to keep the republic,

**The sad state of civic education today –** Civics is hardly taught at all in elementary and middle schools, reduced now in most states to a single course in high school. Only 22 percent of American 8th graders are “proficient” or better in US government and civics, while a shocking 13 percent are proficient or better in US history. This problem is not limited to 8th graders. Only one in three Americans could pass the civics portion of the citizenship test, which immigrants pass at more than a 90 percent rate.

Since the Soviet firing of the first space satellite, and a 1983 alarm that American students were falling behind their international peers, an increased demand for reading and math in schools occurred at the expense of social science and the humanities, including civic education. And this shift away from civics is hardly over, as manifested by the new rage: STEM (science, technology, engineering and math). It is estimated that the federal government now spends $54 per child per year on STEM education and only five cents on civics! National testing on civics and history are given only once, in the 8th grade, whereas more “important” subjects are tested in the 4th and 12th grades as well.

**Impact of too Little civic education:** Grave dangers face liberty and the republic including loss of trust in government, low voter turnout and civic participation, and misunderstanding of how the American system actually works. Too little civics education puts liberty and the republic at risk **–** Americans’ trust in government has been in steady decline, with young people leading the way. The obvious cause is a lack of understanding: how can you trust what you do not understand? Another downstream effect of poor civic education is low voter turnout and reduced civic participation. Beyond the problem of too little civic education is a negative and revisionist history of the US. If American history is all about money and greed, little room is left for an appreciation of liberty and the political order. This risk is shown even more clearly by how poorly young people understand socialism, communism, and the free market systems.

A number of important contributions can and should be made by parents, citizens, educators and political leaders that could secure the future of liberty and the republic. But the time to start is now, before the decline becomes irreversible. And a place to start is civic education.

**What is civic education?** Civic education is an old idea. According to the classical tradition, education involves both the training of the body through disciplined physical exertion and the formation of the mind through study of science and the humanities -- not least the principles of one’s own nation’s political order. For the classical tradition, education *is* civic education.

To a significant extent, the modern tradition of freedom agreed, with the crucial proviso that education’s principal goal was to prepare students for the rights and responsibilities of freedom. Accordingly, liberal education puts study of the principles of a free society at the core of the curriculum. At the same time, liberal education places a good deal more emphasis than did classical education on introducing students to the diversity of views on the great moral, economic, legal, political, philosophical, and religious questions, and on equipping students to think for themselves. Such study -- concentrating on great works of literature, history, philosophy, and theology -- is part and parcel of civic education well understood because it cultivates the virtues of reasoned inquiry, tolerance, and civility, all of which contribute to good citizenship in a liberal democracy.

Deeper principles make up the “unwritten Constitution,” something that even the pedagogically most sophisticated civics classes seldom touch. Any 18-year-old should have encountered the following questions and be able either to explain or dispute the answers to questions like:

* How does denying someone’s freedom of speech put members of the majority at risk?
* Is there any harm in denying some persons or groups the right to vote?
* What’s the reason for the norm that defeated candidates for office accept the results, and not question the legitimacy of the election?
* Is there any reason that presidents and governors shouldn’t be able to tell judges how to decide cases?
* Is there any risk to the general public if elected officials can knowingly profit from policies they adopt while in office?

**Benefits of civic education**

Liberal education in a free society, in the form of civics education, provides the common ground and encourages the habits of mind and heart that enable individuals with diverse backgrounds and perspectives to appreciate the nation’s core principles and fundamental character. Preparing students for citizenship goes beyond just teaching American civics; just as important as formal curriculum are the values, habits, principles, convictions, and patterns of behavior learned in school which not only come from classroom instruction but also from extracurricular activities, how administration punishes and rewards certain types of behavior, examples teachers set through their own personal conduct, and whether the school climate is one of integrity and mutual respect or corner-cutting and suspicion. Nothing matters more in education than properly forming students for their participation in sustaining the vitality of America’s democratic republic. But, with less classroom time available, teachers report focusing more on facts and history narratives and less on activities like debate or simulation practices like panel discussions.

**Civic knowledge deficiency today**

The state of civic education in America is low but nothing is more foundational to keeping the republic than robust civic education. The whole of the republic—its constitutional order and its protection of “life, liberty and the pursuit of happiness”—relies on a virtuous and educated people. Sadly, all of that has been in a steep decline. Civic knowledge is on the decline. Decades of neglect have left students unprepared for civic life. For decades, America dropped the ball on teaching students about democratic governance processes. Less than half of Americans can name all three branches of government. Now civics education is essential to repairing a battered democracy.

It is important that the curriculum addresses the functions of local government. Most people won’t have a chance to have a direct impact on the federal government as individuals, but they can have a direct impact on city and county government. Journalists and public officials should pay attention to the true state of general knowledge when they talk about government or politics and build basic information into their communications.

The neglect of civic education has amplified concerns about [the health](https://now.tufts.edu/2022/10/12/democracy-under-threat) of American democracy. Only [1 in 5](https://www.pewresearch.org/politics/2022/06/06/public-trust-in-government-1958-2022/) Americans say they can trust federal government to do what is right always or most of the time. One in 5 believe [violence may be needed](https://www.prri.org/research/challenges-in-moving-toward-a-more-inclusive-democracy-findings-from-the-2022-american-values-survey/) to save the country, and 1 in 5 [have](https://www.pewresearch.org/fact-tank/2020/11/16/5-facts-about-the-qanon-conspiracy-theories/) said that QAnon conspiracy theories are good for the country.

An article in Forbes suggested that, If the American republic is in trouble, better civic education is the answer. Consider a few compelling data points:

* In the last National Assessment of Educational Progress testing, only 18% of 8th graders were “proficient” or above in history, and only 23% in government.  A mere 1-2% were “advanced.”  And if students learn what is tested, those exams are no longer given in the 4th and 12th grades, only in the 8th.
* One-third of Americans could not pass the civics portion of the American citizenship test, whereas immigrants pass at a 97.5% rate.
* 77% of 18–34-year-olds could not name a senator from their home state.
* Less than a quarter of U.S. students demonstrated proficiency in civics on the National Assessment of Educational Progress. The results also highlighted lingering racial achievement gaps, which represent learning disparities of up to two years in grade level.

A [2022 Constitution Day Survey](https://www.annenbergpublicpolicycenter.org/americans-civics-knowledge-drops-on-first-amendment-and-branches-of-government/) from the Annenberg Public Policy Center (APPC) found that fewer than half of Americans could name all three branches of government. (One in four could not name any.) There were sharp declines in the ability of respondents to name freedoms guaranteed by the First Amendment. And, as noted by the AAPC director, if we don’t increase the civic literacy of the population, we are unlikely to cherish, protect and exercise rights we don’t know we have.

Civic learning and social studies have been marginalized over the past two decades. Today, 13 states have no civics course requirement and only seven require a full year of government or civics instruction. Federal investment has been about 5 cents per student per year, compared to $50 for STEM, suggesting that we potentially have an entire generation of students who may not be adequately prepared for a college career and civic life.

In a critique what he believes to be the Brown Center view that “action civics” matters more than knowledge, understanding, and analysis, Chester Finn of the Fordham Institute asserts that the awful [“C3” ([COLLEGE, CAREER & CIVIC LIFE](https://www.socialstudies.org/sites/default/files/c3/C3-Framework-for-Social-Studies.pdf) ) framework](https://www.socialstudies.org/c3) [of the National Council for the Social Studies](https://www.edweek.org/ew/articles/2013/09/17/05socialstudies.h33.html) is avowedly, even proudly, devoid of all content. Nowhere in its 108 pages will you find Abraham Lincoln, the Declaration of Independence, Martin Luther King (or Martin Luther), a map of the United States, or the concept of supply and demand. You won’t find anything that you might think children should actually learn about history, geography, civics, or economics. Instead, you will something called an ‘Inquiry Arc,’ defined as ‘as set of interlocking and mutually supportive ideas that frame the ways students learn social studies content. This is doing [serious damage](https://edexcellence.net/commentary/education-gadfly-daily/flypaper/2012/social-studies-follies.html) to the entire social studies curriculum, including history and geography, as well as civics.”

**Importance of Civic Education**

While civic ignorance is itself a major problem, its effect is compounded when it is applied to particular issues of the day. Studies suggest widespread ignorance regarding economic systems, and the constitution and its guarantees. Part of the problem is that civics and history are not required by most of our colleges and universities, so those going into the teaching profession are not well prepared themselves.  Moreover, these days the emphasis in colleges and schools is on “civic engagement”—getting involved—rather than civic education or knowledge.

Similarly, only half the people vote (58% in 2016, only 44% in 2018).  The government is virtually shut down by polarization and gridlock by the failure to approve any spending authority. We cannot solve our border and immigration problems. Meanwhile, our airports and roads are decaying, the national debt is out of control, and healthcare is a mess. What is not so obvious, however, is that these are merely manifestations of a more profound problem:  the civic education crisis…. deeper still is the root system, the culture and values that sustain and motivate national life.  *The tap root that feeds the root system in America is the troika of education, family, and faith*. (*Emphasis added*).   As those roots decay, civic education withers.

**What has happened?** Civic education is no longer a priority.  In 2011, the federal government essentially halted its financial support for civic education. State requirements for civic education are low, with most states only mandating a one-semester course in high school.  Over 80% of colleges do not require a course in history or government.  As a result, we have teachers who, themselves, do not know enough about history and civics to be excited and confident about these subjects and to teach them well.  Textbooks are, at best, boring and at their worst biased.

In 2018, the Brown Center On Education at Brookings found significant math and civics gaps between white students and those of color. While math gaps, though still “distressingly wide” have narrowed, they have widened in civics. This detracts from civic participation which affords the political power and broad participation essential for a healthy, inclusive democracy.

Teaching basic civics has fallen victim to the emphasis on math and science, and pervasive political correctness.  Both instructional time and testing of government and history are down. In one national study, only 18% of students were proficient in history, 23% in government.  And these are the future leaders of our republic.

**Why this deficiency?**

Differences across subjects could be an indirect consequence of test-based accountability pressures differing across subjects: Teachers in accountability subjects may be compelled to work more intensively in their specialties, leaving teachers in non-accountability subjects like social studies to compensate by extending the reach of their duties beyond their subject specialty.

Also, *(civics)* educators differ from other subject-specialized teachers, *(suggesting that)* schools may often be looking for candidates that can fill multiple roles beyond the classroom when hiring social studies teachers, which seems less the case for vacancies in other subjects. Secondary social studies teachers are disproportionately male, are more likely to coach a school sport, make more money, and are more traditionally certified - these teacher qualifications are not strongly predictive of classroom performance. Many students of color have access to less experienced and more alternatively certified teachers.

**Implications of the current political environment**

American politics has become highly polarized, even nasty. Discussing controversial subjects respectfully is a learned skill, one which should be a basic goal of the nation’s schools. “This must be developed not only theoretically and intellectually by understanding the democratic values of tolerance, pluralism, and respect for different views, it must be nurtured practically and routinely. The urgent need for K-12 classrooms to inculcate this habit of civil disagreement is only accelerating, as higher education seems to be retreating from open debates about controversial subjects.”

Millions of Americans, on both left and right, either don’t understand or don’t buy key democratic principles. It is clear that civics classes focused on nuts and bolts (the three branches of government, how a bill becomes a law, how the president, senators, and representatives are elected, etc.) do little to illuminate the deeper principles behind those arrangements meant to ensure: that current policies are made legitimately; that even those on the losing side in an election or policy dispute can realistically hope not to be abused by the majority; and to be in a position to compete successfully in the future. These principles are simple but not obvious.

**Benefits of Civics Education**

The chief policy and advocacy officer for Generation Citizen says, “Civics is where you learn how to build difficult, fragile consensus, where you learn to communicate through and comprehend bedeviling, really hard issues.” The soft skills that students develop in civics classes are necessary for workplace success, says Janice Brunner, group general counsel and head of civic engagement at Travelers. “Learning about our democracy and values as a nation teaches students to participate in decisions – electoral or otherwise – and inspires them to step up in their communities to help solve challenges in ways that are constructive and neighborly.”

**Teaching Civics**

The basic role of education is to teach the fundamentals regarding how to navigate American life (this is the reading, writing, arithmetic, how to read a map and a contract etc.), but it is also to assist them in being effective, contributing members of the total American family. This includes teaching a fealty to the fundamental principles of democracy and democratic institutions.

The importance of civics education has become increasingly clear with the recognition of fake news online and continued voter suppression efforts. When schools turn civics education into civic action, students will see the importance of becoming effective citizens and active participants in their democracy.

The idea that schools should be “above politics” has historically served to curb political discussions in classrooms. But study suggests this is not necessarily appropriate. Many social studies teachers are also talking with their students about economic inequality. A teachers’ level of civic and political engagement (whether they follow the news, are engaged in community groups, are generally aware of political debates), but *not* their political ideology, predicts whether and how often they teach about economic inequality. This underscores the importance of creating work environments where teachers are free to engage civically and politically without fear of sanctions or reprisals. Teacher education programs and school districts alike should seek to nourish teachers’ civic identities, not hinder them.

Effective teacher preparation requires practice and constructive feedback, but many novice educators don't get the time or opportunities necessary to excel in schools. Recent research finds that digital classroom simulations—which offer teachers-in-training the ability to develop essential skills in a lifelike yet low-stakes environment—can help ensure that educators are ready to provide equitable and effective instruction from day one.

Requiring civics courses and teaching via discussions, simulations, and service-learning experiences out of school implies, but doesn’t make explicit, the importance of teaching about democratic norms. And in the absence of clear guidance, teachers can find it a lot easier to focus on government structure and preach love and harmony than to acknowledge that some conflicts among citizens are real, and to demonstrate the importance of institutions that protect today’s losers’ chances of winning in the future.

How we prepare teachers of civics is also important. The best practice is to teach US history and civics using primary documents: the Constitution and Declaration, certainly, but also speeches and essays of the period. Students need to leave their 21st century lenses behind and travel back to key moments in American history to understand why our republic works as it does, and how it could be maintained and strengthened. This is both less boring than textbooks and less politically controversial, allowing students to study history and civics on their own terms and draw their own conclusions.

But civics, per se, is not the total answer. We’ve built an education system that treats the purpose of schooling almost exclusively as college and career preparation, i.e., preparing students for the 21st-century *economy*, but failing to prepare them for our 21st-century *democracy*.

**Beyond Civics**

The emergence of social media, like talk radio and cable news before it, have reshaped how we learn about the world and one another. How do we act with civility in a digital environment where we know people only by the antagonizing views they espouse? How do we distinguish fact from fiction?

The need for adequate education goes beyond academics. Schools are, in addition to providing curriculum, an excellent place in which students may learn some of the basics of a democratic society, i.e., how to deal with others, how to be effective in group settings and coming to mutually agreed upon conclusions when addressing difficult subjects. Active participation in extracurricular activities, such as student government but others as well, is correlated with significant increase in voting among the young.

In addition to a rigorous academic requirement and greater learning about our country’s underlying principles and institutions, there is a need to rethink our educational institutions’ obligation to develop a foundation of values in future citizens. What seems to be missing too often in society today is a respect for others and a self-awareness leading to integrity. The long popular *Seven Habits of Highly Effective People* by Stephen [Covey](https://www.bing.com/search?q=stephen+covey&filters=ufn%3a%22stephen+covey%22+sid%3a%22112fe169-f6dd-0606-fba2-9c4538ab6f6f%22+gsexp%3a%220d12553e-7c00-a98b-6a9c-4fcf62034394_bXNvL2Jvb2sud3JpdHRlbl93b3JrLmF1dGhvcnxUcnVl%22&FORM=SNAPST) could easily be used as a textbook, but however addressed, the responsibility of primary schools to support this part of child development is clear. Chester Finn of the Fordham Institute noted:

The moral and ethical renewal that American society needs, and that our schools have an obligation to do their best to infuse into their pupils, is the Aristotelian kind, [nicely defined by Washington Post columnist Michael Gerson](https://www.washingtonpost.com/opinions/trumps-authenticity-is-merely-moral-laziness-and-cruelty/2019/01/07/b01f098a-12a9-11e9-b6ad-9cfd62dbb0a8_story.html?noredirect=on) as human beings “exercising their reason and habituating certain virtues, such as courage, temperance, honor, equanimity, truthfulness, justice and friendship – not so much because of troubles with private morality (teenage pregnancy rates are down, etc.) but because of manifest failures in the public and semi-public squares: with honesty, integrity, and trustworthiness, both on the part of elected officials and in the small venues where we observe an excess of selfishness, cheating, laziness, and willingness to be a burden on others.

It has been shown that an open classroom climate relates positively with long-term civic participation, but young people are not engaging with substantive economic and diplomatic issues or comparing the very policies that will affect their lives in the future—much less learning to disagree, even strongly, and with civility. Parents and teachers need to create, and then support, open, respectful classroom dialogue surrounding controversial subjects in order to discern the difference between slogan-slinging and serious, well-informed, respectful argument.

One thoughtful contributor suggests it is time to refocus on character building, that we must teach character and grit to produce well trained students who are excellent citizens as proposed by two articles. In Gambrills, Maryland, a new required Community Citizenship class for all Arundel High School freshmen engages all students in five modules: self; community; culture and race; citizenship; and change making. Each class opens with a question or task to spur discussion. The goal is to help students learn to be open to different views and to communicate with each other in a way that isn’t hurtful or degrading. “Schools, while politically non-partisan spaces, shouldn’t be neutral in the fundamental principles of democracy. “Human rights and equal protection are starting points for discussion,” she said. “While you want a lively political conversation, you also have to send the message that the idea of white supremacy, for example, is not a legitimate point of view.”   “We’re giving the students strategies to seek to understand, to communicate appropriately, and to foster relationships so they’re successful here at school and later in life.”

Compulsory-attendance public schools are pretty much obligated to seek a broadly acceptable “common denominator” when it comes to values, ethics, character, even civic education. They can do a fine job (though few do) of teaching the Declaration of Independence, the Bill of Rights, and such universal values as tolerance. But they don’t dare fly too close to the sun of “habituating certain virtues” lest they offend some part of their constituency, get their wax melted, and fall into the sea.

Schools of choice (e.g., parochial and charter) are different. Because nobody is forced to attend them, their curricula and pedagogy can be distinctive, even idiosyncratic, and specially designed to appeal to particular constituencies. So long as they’re careful about the church-state barrier, public schools of choice can also engage in character education, values-centric education, civic education, and more. The founders’ conviction that education in morality and virtue are indispensable elements of a proper curriculum, underscores the urgency in today’s America of developing citizens who take virtue seriously.

“A society that abandons moral education…will be a debased and untrustworthy one.” Moral training begins with parents, but should continue in schools, requiring “inserting moral education into the training of teachers at all grade levels. This would help promote ideas traditionally covered by religion in a society in which religious exposure has diminished.”

It is through all of this education that people acquire the critical skills needed to live and thrive in a diverse socio, economic, cultural, and ethnic world and the trust to connect to others different from them, i.e., an understanding and the ability to manage fundamental aspects of life in community.

At an even more fundamental level, educational and religious institutions, in addition to other forces of influence, have failed to inculcate adequately the fundamental tenets of morality and ethics and the essential bedrock principles of democracy. The power and practice of religion and its various institutions in the earlier days has an enormously diluted impact today. Our moral education is grounded in many sources besides education: family, school, religion, TV, movies and other popular entertainment, heroes, sports, role models, authority figures, friends, popular culture, and on, and each interacts in a gestalt with all the others.  A new and important factor may be the explosive proliferation and reach of the means of communication and “social media”, which is the only explanation that transcends all other factors.

**Moving forward**

Our appalling collective ignorance of the fundamental principles of democracy and democratic institutions requires that we re-institute a robust civics education curriculum in our schools, to at least bring or students to a level of knowledge not unlike what a new citizen would be expected to learn.

An October 2022 [poll](https://www.prnewswire.com/news-releases/new-poll-shows-strong-support-for-civic-education-across-party-lines-301660642.html) found overwhelming bipartisan support for more civics education, with almost 7 in 10 saying that it is more important today than five years ago. However, civic education has emerged as a major front in the bitter clash spilling over into many domains between left and right in America.  Legislators across the United States have been voicing the need to shield children from complexity, controversy, and differing perspectives in schools. But a recent nationwide survey found that Americans across the political spectrum believe that high school students should be learning a broad range of civics-related concepts and skills, including most controversial subjects.

CivXNow, a [cross-party coalition](https://civxnow.org/who-we-are/coalition/) with more than 280 members, has developed a “[state policy menu](https://civxnow.org/our-work/state-policy/state-policy-menu/)” that outlines goals for improving the quality of K-12 civic education. In the past two years, 16 states passed 17 laws that align with its recommendations. And bills designed to advance civic education are under consideration in many other states.

Navigating today’s landscape requires skills and dispositions that would help anyone to navigate a complex, changing world but are genuinely apolitical, not reflecting or promoting any particular ideology. A partial list of steps schools could take could include:

* **Media literacy**. Some states have written [media-literacy education into state law](https://medialiteracynow.org/wp-content/uploads/2020/01/U.S.-Media-Literacy-Policy-Report-2020.pdf) in recent years, but many others haven’t.
* **Digital citizenship and empathy**. Most of our social-emotional learning, at school and beyond, comes from face-to-face interactions. How can we develop empathy toward people we only see as caricatured political opponents? Programs to combat cyberbullying could be a start to thinking about digital citizenship more broadly.
  + **Intellectual humility**. It’s easy to lose track of our fallibility and the value in seeking out conflicting perspectives. How do we instill [intellectual humility](https://www.psychologytoday.com/us/blog/dont-believe-everything-you-think/202008/what-does-it-mean-be-intellectually-humble) in this context? These types of skills and dispositions need to be taught.

In 2023, boards of education and state administrators in nine states were either revising or taking a close look at their social studies standards. Arguments around what should be taught, and the way lessons about American democracy should be framed, are being played out even at grass-roots levels such as PTA meetings, he says, and the research and practice embodied in the Civic Learning Week have special importance at such a time.

Parents must take the lead in teaching “what it means to be an American.” Then schools must do their part and this starts with state legislatures and boards of education requiring more civics to be taught. The gold standard should be some teaching of civics in age-appropriate ways every year beginning in kindergarten. Then students are ready for a full year—not just a semester as is common now—of civics in high school. The federal government, which oversees the NAEP test, should require it be given in government and history in grades 4 and 12 as well as 8. All of this carries the clear message that civics are important

David Davenport offers a number of smaller, achievable steps that could make a real improvement in civic education

1. *States need to make civic education a priority* beginning in elementary schools and continue through the grades.
2. *Acknowledge that the content of civic education is important.* The use of primary documents to teach history and civics creates a path through the politicized thicket of history and government since students simply read and discuss primary documents, drawing their own conclusions.
3. *Consider further testing of civic education e*.g., passing the same citizenship test administered to immigrants in order to graduate.

In an earnest attempt to do *something* about the civic illiteracy that besets the overwhelming majority of Americans, a number of people started wondering why we don’t expect kids, as a condition of high school graduation, to pass the same test that the U.S. requires of immigrants seeking citizenship. It’s not a high bar…. if a seventh grader, much less a high school student, can’t already answer six out of ten questions chosen at random from a set of one hundred questions—that’s what candidates for naturalization must do—it’s an indication that something has gone quite awry….To date, [some seventeen states](http://blogs.edweek.org/edweek/curriculum/2018/04/citizenship_exam_unintended_consequences.html) have adopted some version of this recommendation.

We have a long way to go to strengthen our grip on liberty and the future of the republic with better civic education. This is at least as big an educational crisis as Sputnik or STEM, and we will need all hands-on deck to promote better civic education

**Science**

Equally concerning in education is an amazingly common ignorance of the true essence and importance of science and the application of the scientific method in decisions affecting every facet of our lives.

The essence of the scientific method is that what we know results from rigorously obtained, empirical, and data-driven observations. If any of those characteristics is missing, the investigations—from lab experiments to clinical and environmental studies—are unlikely to be reliable or reproducible. In practice, however, it’s anything but straightforward, especially when politics and other special interests intrude.

According to a [survey](http://www.nature.com/news/1-500-scientists-lift-the-lid-on-reproducibility-1.19970) of 1,576 researchers conducted last year by the journal *Nature*, more than “70% of researchers have tried and failed to reproduce another scientist’s experiments, and more than half have failed to reproduce their own experiments.” … That figure is alarming, and the problem is likely to become worse with the proliferation of “predatory publishers.” … that the papers are published without genuine peer review. To date, there are thousands of such scientific journals, publishing tens of thousands of papers a year.

Another equally worrisome trend is the increasing frequency of publishing of flawed advocacy research that is *designed* to give a false result to support a certain cause or position and can be cited by activists long after the findings have been discredited.

Adding to the confusion, non-scientists frequently conflate *association* and *causation*. Even if there is causation, it may be unclear which is the cause and which the effect. When a study finds an association, that means that two events or findings are merely correlated, while causation means that one event actually leads to another.

A related confounding phenomenon called “data dredging” or “data mining” is when an investigator looks at a large number of variables for statistically significant associations and formulates a hypothesis *after* the analysis is done. That’s how we end up with spurious headlines ….

Non-scientists are likely to be fooled or manipulated by such claims because scientific illiteracy runs deep which has an impact on policy. It is imperative that policy-makers, the media, and the general public are able to distinguish the facts from mere interpretations of a biased constituency. Decision-makers and those who inform them must be able to judge the quality of the science and reasoning that supports a position and must know whether a set of scientific findings is really meaningful to a decision.

The beauty of the scientific method, when done right, is that it protects us from ideology and bias, and helps us understand what is true and what really works. At its best, science can inform sound public policy. But when we ignore or misinterpret science, we move backwards toward a time when irrationality and superstition prevailed.

The true transformative power of education technology is most evident when it comes to basic education research. The declining cost and easy availability of substantial computing power may enable us finally to unlock the black box of the classroom, giving scholars and teachers much more insight into what is and isn’t working. Technology can do more than just keep students engaged; it can equip teachers, school and district leaders, and policymakers with the sort of insights and analytics that can help them make better decisions for students.

The most respected approach involves putting lots of trained observers in the back of classroom where they typically watch closely and code various aspects of teaching and learning, or collect video, take it back to the lab, and spend innumerable hours coding it by hand. Alternatives to observational studies have much less satisfying. However, the research base on the real stuff of education—instructional practices, homework assignments, the curriculum as it is actually taught—is remarkably thin.

So, researchers decided to teach a computer how to do the coding itself. They start by capturing high-quality audio with a noise-canceling wireless headset microphone worn by the teacher. Another mike is propped on the teacher’s desk or blackboard, where it records students’ speech, plus ambient noise of the classroom. They take the audio files and run them through several speech-recognition programs, producing a transcript. Then their algorithm goes to work, looking at both the transcript and the audio files (which have markers for intonation, tempo, and more) to match codes provided by human observers.

The computer program has gotten quite good at detecting different types of activities—lectures vs. group discussion vs. seatwork, for example—and is starting to be able to also differentiate between good questions and bad. To be sure, humans are still more reliable coders, especially for ambiguous cases. But the computers are getting better and better, and good enough that, with sufficient data, they can already produce some very reliable findings at a fraction of the cost of a people-powered study.

Such research has already borne fruit. A computer program has shown that more students become bored, then disengaged, when the material is too hard than when it is too easy. Short periods of confusion and frustration are good; long periods indicate that the student has given up. And some “off task” time—as long as a minute or two—is OK, as students tend to come back refreshed and ready to tackle whatever they are working on. Thus, teachers should allow kids some breathing room rather than cracking the whip the second they see students get distracted.

This is incredibly useful information, the kind that can help teachers improve their practice and boost the efficiency and effectiveness of students’ time in class. Imagine if such studies—both of traditional classroom practices and the digital variety—became much more common. Large national studies like NAEP could complement teacher surveys with the collection of audio, every day, all day, in a big sample of schools. Plus, they could capture the digital activity of students, and ask teachers to scan student assignments and tests so those could be analyzed as well. We would finally have an accurate picture of what’s actually being taught in U.S. schools. And if we combine that with state administrative and achievement data, and put it in the hands of competent analysts, we’d have a better way to examine which teacher practices, curricula, use of time, and on and on, are related to improved student learning.

Big hurdles remain, to be sure. The biggest aren’t technological, but political: Chronicling classrooms in minute detail will not go over well with all teachers, even if researchers promise that the data will be used for research purposes only. Nor will privacy-minded parents be thrilled; security protocols will need to be established that give everyone involved confidence that the audio recordings won’t fall into the wrong hands. And scholars will need to be careful not to make causal claims based on data sets that aren’t subject to experimental designs; the sheer quantity of data can’t make up for the lack of controls and random assignment. Big data alone can be a boon to “hypothesis generation,” but we’ll still need traditional studies in which teachers are asked to adopt new practices to learn whether the practices work.

Still, the power duo of big data and machine learning will enable us to build a research enterprise that actually improves classroom instruction, regardless of how traditional or technology-infused the instruction might be.

The Williams Learning Solutions is disrupting education by providing children — some of whom might not have considered college — the tools they need to pursue high-paying science, technology, engineering and math (STEM) careers. The technology is tailored to the individual student, and the algorithm changes along the way. The first product, focused on ecology, tracks each child’s learning and redirects the student immediately if he or she is failing rather than waiting until the end of the project. This approach could help put America back on the map in STEM education.

**The Arts**

Whether schooling occurs in traditional formats, or increasingly takes advantage of newer technologies, the content remains important. Due to cost constraints, a manifestation of which is teacher compensation, curriculum has also been curtailed. One casualty has been arts programming. The Brookings Institution has found that the arts have a generally positive impact not only on the quality, but also on the academic, social and outcomes of education.

1. **Purpose Education**

Encouraging students to discover a purpose early is gaining interest. About 20 percent of high school kids report being purposeful and dedicated to something besides themselves. The majority are either adrift, frenetic with work but purposeless, or full of big dreams but lacking a deliberate plan.” This lack of purpose can be a cause of poor performance and failure to graduate from both high school and college. Educational tracks are too often the design of adults while students feel little personal ownership. Students have been sorted by age, not aptitude; learning governed by bells, not mastery; teaching is to the test, not to their interests.

“Purpose education” incorporates ideas from the mindfulness movement and social-emotional learning and goes further. It aims not only to help young people figure out which college to attend or what kind of career to pursue but also helps them understand that they have control over their choices, how to ask for help and how to figure out what’s important to them. Then, it helps them develop tools to get there. “Having a sense of purpose is ‘the long-term, number one motivator in life,’ said William Damon, author of [*The Path to Purpose*](https://medium.com/r/?url=https%3A%2F%2Fsmile.amazon.com%2FPath-Purpose-Young-People-Calling%2Fdp%2F1416537244%2Fref%3Dsmi_www_rco2_go_smi_g2609328962%3F_encoding%3DUTF8%26%252AVersion%252A%3D1%26%252Aentries%252A%3D0%26ie%3DUTF8). To have purpose is to be engaged in something larger than the self, he said. It’s often sparked by the observation that something’s missing in the world that you might provide.

Purpose is not something we can give students, but it is something we can help them find. When students are given voice and choice in their learning, when teachers are given flexibility to respond to these needs and interests, the school setting becomes more meaningful for both of them. This flexibility opens the door for teachers to align better school experiences with the students’ own sense of purpose.Where student and teacher agency is respected, supported, and rewarded, engagement skyrockets.

The curriculum seeks to create a “greater sense of community, compassion and tolerance” among students by combating the feelings of pointlessness that can distract them. It changes the relationship between the student and the teacher…by asking …both to share personal stories related to their values and encourage students to think about the kind of people they want to become. An interesting aspect is that this approach may be useful in combating problems of disruptive students.

IDEO, a global design company, has established its  [Purpose Project](https://medium.com/r/?url=https%3A%2F%2Fthepurposeproject.org%2F) that provides an app paired with a set of collaborative, small group activities that high school and early college students can use to start discovering and building intention and purpose into their lives. It empowers students to design exploratory experiences that relate directly to their interests. Through this process, students become more reflective and intentional about their own interests and motivations both inside and outside of the classroom. And by approaching learning and life through the lens of what matters the most to them, they can bridge their learning in school with their lives outside of school.

Others working to open up pathways for purpose include [The Future Project](https://medium.com/r/?url=http%3A%2F%2Fwww.thefutureproject.org%2F) that places “Dream Directors” in schools to “unlock the limitless potential” of students by coaching them through a journey of self-discovery that leads to student-led, purpose-driven action that positively impacts the student’s school and community, the [GripTape Learning Challenge](https://medium.com/r/?url=http%3A%2F%2Fwww.griptape.org%2F) that provides youth with an adult “champion” and a small budget to support them in intensively learning about something they are passionate about outside of school, and [RoadTrip Nation](https://medium.com/r/?url=https%3A%2F%2Froadtripnation.org%2F) that provides learners with thousands of career stories that “illuminate diverse pathways and careers” and an interactive tool to help them explore their own unique combination of interests and relate those to career possibilities.

Developing a strong sense of self, an understanding of personal strengths and acting on what a person finds most meaningful may be better at determining whether or not a student graduates at all. By allowing students to lead their own learning and exploration, we are teaching them to be intentional. This helps them develop long-term capacity to shape their environment to better align to their needs and goals.

Matching students with mentors [reduced truancy among middle-schoolers by over 20%](https://connect.brookings.edu/e2t/tc/VWsQqj4DLYGFW188-mY83b8sBW1k1H6J4jRQM-N26s60p3p-FJV1-WJV7CgXsQVGYRXS6Yp8YgW71_m7x41Hgz9W1Kn6f08m-x0YV3-nV65wP4KvW3RnhcP1GTGSgVNp3x38DRQPPW2-mrCF914fBXW8D5xwf3BVFX8DMSB--3ld2W4FMnf78KP6mNW8xnB2K93vd2FN6KHrXgV-q-pW3W1hkw7rZ2zXW6l0qnh3XDWZDW5NbpqW1brGlqVTtKTd5lKVz7W5BkHmq5dHRryVXmVP74xJs77Vw1J9m6yGwV2W7gtqhR673cTHW2-wRP85h8K9tW7Slt872jhg53N5yvGHWjLQHLW4wNNCF90WKSC37jM1) in Chicago, but in a costlier program than the norm.

1. **Measuring progress, Tracking, and Remedial education**

**Measuring Progress**

Despite flat performance levels, weakened core requirements and lower standards for passing grades in some states have resulted in inflated graduation rates and diluted the diploma’s significance. States that are making a diploma easier by lowering or eliminating the proficiency level needed to pass courses, pass tests, or demonstrate capability in a craft or trade. Evidence also suggests that far too many students are not provided access to courses and pathways that develop the necessary knowledge and capacities to succeed after high school. The problem is especially acute in the area of career and technical education. If students are to graduate from high school well prepared for further study or the labor force, then states must implement policies and strategies that address this challenge directly. The Hoover Institution recommends the following:

**The Diploma Dilemma**:

* Reduce the gap between high school graduation requirements and entry requirements for state university systems.
* Ensure that students’ default pathway to graduation consists of the most rigorous college-ready courses.
* Establish mastery-based certifications to ensure students are college and career ready.
* Re-evaluate the weight of classes that are “approved” for credit but that cover less substantial material than the most rigorous courses.
* Critically review the accuracy and cultural sensitivity of assessment criteria for student performance.

**Improvements to Career and Technical Education (CTE**)

* Consider short-term demand and wages for CTE options, drawing on available labor intelligence and insights from regional firms.
* Support CTE pathways that deliver substantive knowledge and skills by the end of high school.
* Prioritize equal access to high-quality CTE offerings, with particular emphasis on creating opportunities for underserved students.
* Ensure that CTE pathways provide rigor and preparation equivalent to that of traditional curricula to maintain students’ future options for study or training.

**Improvements to College and Career Readiness (CCR)**

* Define clear and common standards and metrics for college and career readiness.
* Improve communication about graduation requirements—courses, pacing, and credit accumulation—to aid families in careful course selection.
* Gather and report detailed data on student pathways, performance, and demographics to measure outcomes and equivalencies among different groups of students.

2023’s high school students average ACT test score last year was the sixth consecutive drop and the worst in [more than three decades](https://www.nytimes.com/2023/10/11/us/act-scores-college-admissions.html).  New data show Black students scored 3.5 points below this year’s average, continuing the growing trend of historically marginalized students being unprepared for college-level courses. ACT chief executive officer Janet Godwin said, “The hard truth is that we are not doing enough to ensure that graduates are truly ready for postsecondary success in college and career.”

Here are four key takeaways from the [ACT test score report](https://www.act.org/content/dam/act/unsecured/documents/2023-National-ACT-Profile-Report.pdf):

**1. Black students had the lowest ACT test scores in nearly every category.**

American Indian and Alaska Native, Native Hawaiian and Pacific Islander and Latino students also scored below average in every category. These scores point to the systemic barriers minority and first-generation students face as they apply to college. There isn’t the generational support or knowledge to push kids and prepare them to take these tests.

**2. Native Hawaiian and Pacific Islander students experienced the greatest ACT test score declines in the last five years** followed by Latino and white students. “What you don’t see in these numbers are all of the environmental challenges that are stacked on,” Barker said, adding how students, often women, are caretaking for families or working multiple jobs. “We’re just throwing tests at kids and are surprised when it comes time to enroll them and they aren’t ready,” he said.

**3. Male students scored higher in math and science compared to females.**

**4. Fewer students have taken the ACT test in the last five years** a decrease of about 400,000 from the nearly 1.8 million students who took the test in 2019 as several universities have made standardized admissions tests optional, including the [University of California system](https://apnews.com/article/act-college-admission-test-score-optional-99f80b26696a92c78e2680873a3df68c) that doesn’t even consider ACT or SAT scores. “It’s more about time management skills, having resilience, support systems and mental fortitude rather than solely whether you have a high ACT score,” a student said. Such thinking is not surprising as the ACT and SAT tests experience a “brand crisis,” with the number of students taking standardized tests declining.

Brookings has suggested reforms to address these issues.

* Investing in programs aimed at improving the admission chances of students from under-served groups without changing the entrance requirements.
* Require *all*, students, regardless of racial and socioeconomic status, to take the entrance exams for selective high schools.
* Replace the unique tests schools with scores on state or national tests. Many selective high school entrance exams test students on curriculum that has not yet been taught in school.
* Provide parents and students with better and more accessible information about schools and the admissions processes. Increasing school resources to provide on-demand preparation and coaching by school administrators could help increase diversity by incorporating students into the process who otherwise may not have applied to selective programs at all.
* Increase access to advanced academic offerings.
* Provide extra learning opportunities for less advantaged students to get more children from less advantaged backgrounds above the admissions bar. The more radical approach is to change the admissions criteria to give greater weight to socioeconomic background.
* One advantage of restructuring the requirements is that it retains the high-stakes entrance examination but takes inequality into account by having students with similar backgrounds compete against each other rather than pooling students from all backgrounds into one group.

In some school districts, the ACT or SAT is now given in school, for free, on a school day during school hours and, in most cases, replaces standardized testing that students might otherwise take. If sitting for the test is also *required*, students can’t opt out because of low expectations – whether theirs or those of the adults around them. Where done, additional high scorers have been revealed, particularly among low-income students. This can serve as a universal test to open the door to more effective, targeted efforts to draw talented, disadvantaged, low-income students to attend and graduate from four-year colleges. It has been suggested that such a universal testing program is one of the least costly ways to increase college attendance rates.

Students having a tough teacher, i.e., someone with high expectations about what students can accomplish and rigorous grading standards – but also well-versed to guide and support students along the way – are likely to gain more knowledge regardless of race, geography or economic status. Such teachers are likely to be able to withstand pressures for higher grades, which have become a more important consideration not only for extra-curricular activities in high school but also more important for college admission as fewer colleges are requiring or relying on ACT or SAT scores. “Easy A’s” can be damaging. The most frequent grade awarded in US high schools is an “A”. One school of 470 students made 177 of them valedictorians. The plate is way too wide and getting wider. Yet SAT scores have dropped.

Retaking the SAT boosts scores, especially for those who score below the median. Retaking also has higher score payoffs for low-income and minority students compared to their peers, so making it easier and cheaper to retake the SAT could help to close the college-going gap.

Student achievement and merit are losing prospects in the era of “everybody wins”. Grade inflation makes hard work undervalued. And grade inflation can also be grade *conflation.*As high grades get easier and easier to achieve, the highest grades can only go up so far. A ranking of students would help, but the practice may be seen as too competitive. Taking harder classes is often not factored into grade-point-average calculations. And the degree of grade inflation. within the school may be wildly inconsistent. One district’s elementary schools replaced “traditional grading”—As and Bs—with a system of “standards-based grading.” Students received grades on each of about 30 skills.

The idea that grades should not be used to reveal which students have achieved more or worked harder is heartily endorsed by many teachers, but does it provide merely the illusion of data? A parent who can’t really detect the signal is less likely to make waves or ask questions. And, of course, only some parents want there to be a signal. Making everyone look equally successful makes a lot of people happy. When almost everyone gets what they want, the school becomes easier to run. Teachers are happy because no one calls them to argue about grades, and kids aren’t competitive and pushy. And the administrators are happy too. It is no surprise that national data from the ACT show high school students’ grades rising—a majority of college test-takers now report receiving an A in each subject—even as their achievement scores have stagnated or declined.

**n Defense of Stress – T**he common belief that stress is necessarily harmful is wrong; people who are healthiest, happiest, and live longest are not those who have the least stress but rather those who are able to view stress as part and parcel of doing consequential things in life. What matters is your mindset toward stress, and ironically, the development of healthy thinking about stress requires exposure to it. This is not to say we should maximize stress but rather that its relationship to wellbeing isn’t linear. “Excessive stress is bad, but moderate stress is beneficial, normal, and often better than no stress. “

**Everybody Wins –** Elite colleges too are oddly dismissive of academic distinction. The key becomes extracurriculars. Getting into the schools becomes in part a lottery—everyone is qualified, with high grades and no obligation to submit test scores—and in part a competition to curate a compelling array of enrichments and interests.

In a larger ecosystem in which the desire for distinction, knowledge, and a drive to excel are mostly irrelevant, everybody wins—a system that guides and shapes the mindset of most American students—except a small number of kids who lose out in their quest to distinguish themselves.

Meanwhile**,** schools are, among other things, the supply chain for the principal resource on which a modern democracy depends: knowledge, understanding, and, just maybe, belief in shared principles like meritocracy that unite a society.

Though the United States has perhaps the best universities in the world, the science and engineering programs that churn out the ideas and expertise that culminate in microprocessors and HIMARS are stocked heavily with students from abroad, and especially with students from the nations whose allegiance is now most tenuous. To put it in economic terms, we rely on imports. The domestic supply of college graduates with advanced scientific expertise is insufficient to fill the seats in our own elite programs. The two most common nations of origin for STEM were China—now an explicit geopolitical rival—and India—currently wavering between allegiance to the West and alignment with China and Russia.

Immigrants—that is, people educated by school systems other than our own—“account for about 40% of highly skilled workers in America’s semiconductor industry,” By 2030, the broader high-tech economy, including fields critical to national security, will face a shortage of 1.4 million qualified workers. Most of the builders of tomorrow’s cutting-edge technology will probably not come from our own school systems; and those American students who do reach this pinnacle will do so because they hear some other music than what our schools’ sound systems are playing.

**So, what to do about it?** How do we reinvigorate the culture of meritocracy and achievement in our schools?

* **Restore the SAT and ACT.***People prepare for tests by studying.* This reinforces the purpose of the endeavor and produces benefits even before the test is taken.
* More important, though not perfect, the SAT and ACT remain our most objective measures of academic achievement. They are far more objective than classroom grades—and far less open to gaming, privilege, and perverse incentives.
* **But also expand and broaden the assessments.** One critique of college admissions tests is that their scores don’t correlate well with college success because what they measure is too narrow—mostly math and English in the case of the SAT. Compare that to England where students take assessments at the culmination of their pre-university years in a variety of subjects they choose. A system like England’s would help immensely by better measuring achievement and more of it.
* **Data can also help.** Parents should know the average grade in each class and the 25th- and 75th-percentile grades. Data provide not only knowledge for parents but also a degree of accountability for schools that allow rampant and asymmetrical grade inflation. Rampant grade inflation at the university level doesn’t help either. The average grade at elite colleges in America is an A. Everybody wins once again!
* **Combat the idea that lower standards are an equity win.**Eliminating advanced courses and putting caps on achievement is a catastrophe for and insult to any group on whose behalf we suggest eliminating challenging work and rigorous standards.
* **Overcome our fear that competition and stress will hurt young people.**While we don’t want to create a pressure cooker for our youth, being able to handle stress, challenge, and competition is a valuable skill for creating a life of meaning. To remain competitive and secure as a nation, we must expect our young people to strive to reach their full potential and give them every chance to do so.

**Tracking**

Tracking is a controversial educational area. Tracking is the traditional approach to mathematics of putting children into the classes in which they are most likely to do well. Tracking takes many different forms, but all of them involve matching students, based on test scores or previous coursework, to curriculum as embodied in courses. Success or failure up the ladder leads to further differentiation as students either pass (thereby moving on) or fail (thereby repeating) particular courses.

Tracking’s critics charge that tracking simply reflects extant inequities. Because school performance is highly correlated with socioeconomic status (SES), both initial placement and progress in a hierarchy of differentiated coursework may produce class rosters correlated with SES, a pattern that carries over to race and ethnicity. Critics argue that tracking exacerbates inequities by allocating high-status knowledge to some students while denying it to others. The solution, they believe, is to delay tracking for as long as possible, offering the same math courses to all students in classes composed of students who are heterogeneous in ability.

Defenders of tracking, conversely, argue that a one-size-fits-all approach serves neither low-achieving students, who may benefit from interventions that alter curriculum and instruction to address weaknesses, nor high-achieving students, who may benefit from acceleration into above-grade level curriculum.

Hundreds studies over a century have not settled the debate. Research is more plentiful on tracking as a problem, as a source of inequality, rather than de-tracking as a solution.

A century of research has not quelled the controversy surrounding the use of tracking in schools. Most high schools in the U.S. continue to provide differentiated courses in mathematics despite critics who claim that tracking exacerbates educational inequality. Case studies indicate that de-tracking may work under certain conditions, but there is less persuasive evidence that abolishing tracking in favor of classes with students heterogeneous in ability, all studying the same curriculum, will work everywhere or even in most schools. One analysis found that students from disadvantaged backgrounds appeared to benefit from tracking and that de-tracking may instead harm the very students it is intended to help.

A prudent approach is to accept the existence of both tracked and untracked schools and then build a menu of effective ways for educators to address the weaknesses of either system. More empirical research is needed on how untracked schools can meet the needs of high-achieving math students. For tracked schools, the objectives should be twofold: to employ strategies that will identify high-achieving mathematics students from historically underserved populations, and to ensure that low-track students receive the high-quality instruction that they need to become better math students.

**Remedial education**

One view suggests that, while remedial education to upgrade skills for better employment opportunity will always be necessary, it should not be used for high school graduation. It is time to switch to measures that work such as the implementation of multiple measures to assess student readiness for college-level work and the use of a corequisite model, allowing students who qualify for remedial course work to take credit-bearing courses instead, but with additional supports.

In 2018, a paper from the National Bureau of Economic Research reported that an Israeli remedial education program for underperforming high school students (10th to 12th grade) [boosted enrollment in post-secondary education by 13.6 percentage points and earnings at age 33 by 4 percent, with larger impacts for students from poorer families](https://connect.brookings.edu/e2t/c/*W2lfPw61gMSTKN1hDYPJMsxMN0/*W9gvzCw2kNrSpW3Jfncm2hPJqg0/5/f18dQhb0Sjvk93BmR-W8SMVYk2qwv1SVqtcPZ2M6XsNVf5v-H5mbMf4W1BQYgz8Tm-C4W61cWdy9dtj1hW4P0QZK5YpKkdW1hJRLX1j_YdPW83_Pyq834DLzW8XWrm17JtV4jW7tZTzk1h4MpqW6W3Rzq1ZJ4fwW4DqHqz6dgmw3W4yv2r03MlV4BW6tNb422KQ2YYW6lD20d49qcV7W3sxGzC9ffkshVcWbVf4Wpz-0Vg9f-j57rLQqW8GcYZ58hb5KxW5LMnCH12KgnnVGxg4924RqJ8W55XyY_5LsKcXN7zGJFt7DKhJW6mg1v56f-nVxW8nycn28x21xRW1MX6Ld1MKdbrdCwhp101). The authors estimate that over time the program more than paid for itself.

However, remedial education, originally assisting unprepared students to become ready for college enrollment, now more often deters them from ever enrolling in college courses or completing a degree. The process is costly and ineffective. Placement in remedial learning is often done by two tests on a single day that have little relevance to learning standards, don’t measure the intangibles necessary for college success, and may block an otherwise qualified student from advancing. The result is a call to replace it as follows:

1. Adopt and continuously improve rigorous learning and testing standards in both reading and math—aligned, high-quality tests that measure higher-order thinking skills.

2. Increase coordination between high school and college and take advantage of tests the students already take which are aligned to college expectations in reading and math

3. Improve all aspects of remedial education, from placement to course design to a system of supports

1. **End of School**

Mr. Petrilli, president of the Thomas B. Fordham Institute, feels that “the typical American high school is … failing” as measured by the [college-completion crisis](https://nscresearchcenter.org/signaturereport14/). Consider:

* One-third of high school graduates who matriculate to four-year universities do not complete a degree or credential of any kind within six years;
* Almost two-thirds of high school students who matriculate to two-year colleges do not complete a degree or credential of any kind within six years;
* Sixty percent of black high school graduates who matriculate to college (either two-year or four-year) do not complete a degree or credential of any kind within six years; and
* An astounding 90 percent of low-income students who start college in remedial course do not complete a degree or credential of any kind within six years.

In the past, a high school diploma was a ticket to a middle-class job. Employment, though, might require post-high school education and it might not. Today, however, high schools must offer either better preparation for college admission (and, even more important, the preparation for success there) *or* improved identification and preparation for subsequent training for other opportunities. In the first instance, however, in too many states today earning a high school diploma might not even mean that students are eligible for college—let alone ready to succeed. For those college bound, the Center for American Progress has found that “only two states—Louisiana and Tennessee—both align the coursework required to receive a high school diploma with public university admission standards and require a 15-credit college-ready course sequence that includes high-level math, science, English composition, U.S. and world history, and a foreign language.” For those headed toward college,

It has become increasingly acknowledged that college, as traditionally defined, is not going to be for everyone, and that career and technical programs and [trade schools](https://hechingerreport.org/long-disparaged-education-for-the-skilled-trades-is-slowly-coming-into-fashion/) can provide sturdy on-ramps to the middle class. Yet so far, our commitment to “multiple pathways” to opportunity is almost all talk and very little action. Those around K–12 education continue to behave as if virtually every student is expected to go off to a four-year university. That’s especially the case when it comes to:

* **High school course requirements –** remain heavily weighted toward years of academic pursuits, not to mention requirements for health, physical education, and fine arts. How are students supposed to take career and technical programs, do on-the-job training, or tackle apprenticeships when their schedules are already full of mandatory academic courses?
* **High school course-taking –** virtually all students are in fact in a college-prep program, maybe with a little Career and technical education, or CTE, on the side.
* **High school testing and accountability systems** – “about” twenty-two states use a college entrance exam as their high school accountability test (either the ACT, SAT, or PSAT)—exams that are of little use to students heading into the trades. State accountability metrics tend to focus heavily on high school graduation rates—themselves tied to those academically-oriented course requirements—as well as college-and-career-ready indicators that strongly emphasize student success in various forms of post-secondary education rather than the labor market. In many states, for example, high schools get credit for sending their students on to college, but no credit for helping graduates earn a living wage.

These policies reflect the reality that our education system—and education reformers—remain uncomfortable with separate high school tracks for students with different goals, skill sets, and academic backgrounds. Thus, we promote college *and* career instead of college *or* career.

We should stop telling our young people that college is the only goal worth shooting for, that college is a great option for *people who like school and are good at it*. But for people who aren’t academic superstars but have other strengths and interests, a trade or the like might be a better fit. Individuals only benefit from the “college wage premium” if they actually complete college, and that is unlikely for people who leave high school without college-ready skills in reading, writing, and mathematics.

**For the non-college bound:** Today, thanks to state high school graduation requirements and school accountability systems, we only give kids time to take a few CTE courses as electives. Instead, we might allow students to choose to finish their core academic courses after their sophomore year and spend junior and senior years getting ready for the real world. We talk a good game on career and technical education, but graduates who leave high school and go straight into the workforce face [dismal prospects for decent wages](https://www.bls.gov/opub/ted/2017/high-school-graduates-who-work-full-time-had-median-weekly-earnings-of-718-in-second-quarter.htm), given today’s knowledge economy  — if they can find a full-time job – 40 percent less than similar workers with a college degree. Meanwhile, just 24 percent of twelfth graders have a “proficient” grasp of [civics knowledge](https://www.nationsreportcard.gov/civics_2010/g12_national.aspx?tab_id=tab2&subtab_id=Tab_1#chart).

1. Virtually any student can matriculate from middle school to high school.
2. Ninth graders at a typical high school are many grade levels apart in terms of their reading, writing, and mathematics skills, not to mention their content knowledge.
3. Only 20 percent “concentrate” in career and technical education pathways.
4. 35 to 40 percent trudge through so-called college-prep courses, even though they are reading, writing, and doing math several grade levels behind. Most end up in remedial education and drop out with nothing but debt and regret.

Very few of our students — maybe 5 percent — spend any time in high school doing real career training. Policymakers and educators resist keeping unprepared students out of high schoolBy [**Michael Petrilli**](https://www.the74million.org/contributor/michael-petrilli/) | *September 24, 2017*

Proposals:

**Before graduation:**

* In ninth or tenth grade (maybe earlier for advanced kids), all students should sit for a set of gateway exams in reading, writing, math, science, history, and civics.
* Students who pass the exams would then choose among several programs for the remainder of their high school years: traditional “college-prep,” with lots of Advanced Placement, International Baccalaureate (IB), or dual-enrollment courses. Others would be high quality career and technical education offerings connected to degree or certificate programs at a technical college. All programs could set entrance requirements to ensure students are ready to succeed.
* Students who don’t pass the exams would enter developmental programs specifically designed to help them catch up and pass the tests on their second or third (or fourth or fifth) tries. Those who catch up quickly can join their peers in the college-prep or CTE programs.

The sports teams, the theater programs, the debate clubs could continue, as well they should. But what students actually do between 8:00 a.m. and 3:00 p.m. (or later) would change dramatically. The following is his proposed reform agenda for our high schools.

**For State Policymakers:**

* Create high quality “gateway exams,” tied to tenth grade courses in ELA, math, science, history, geography, and citizenship. Also develop a career-exploration tool.
* Revise high school graduation requirements to focus on earning passing scores on these gateway end-of-course exams, with special designations for students who earn Advanced Placement or dual-enrollment credits, or an industry-certified credential.
* Provide extra funding for tutoring and other support for students who don’t pass the exams on their first try.
* Fund AP/IB-fee-waiver programs for low-income students who have passed gateway exams, and cash-bonus initiatives (for students and teachers) for passing scores on AP/IB exams.
* Develop and fund dual-enrollment and/or early-college policies with a particular focus on high quality technical postsecondary routes. Allow these programs to set entrance requirements for participating high school students. The goal is for students to seamlessly move from K–12 to higher education without any interruption, and to finish with a one-year certificate or two-year degree, valuable workplace experience, and a job.

**For Local Practitioners:**

* Partner with local technical (or community) colleges to enable high school students to apply for admission into high quality technical-training pathways via dual enrollment or early-college initiatives. Ideally the technical college in partnership with local employers would develop these pathways, offer the coursework at the students’ home high school and at the college, and provide participants with workplace experience.
* Develop a range of alternatives to comprehensive high schools, possibly in partnership with other school districts, including selective regional CTE high schools (modeled after those in Massachusetts), STEM schools, and early college programs.
* Experiment with intensive efforts to help underprepared ninth graders catch up, either at their regular high school or in alternative settings.

By making eleventh and twelfth grade experiences rigorous and selective, students will be capable of switching pathways if and when they decide they have changed their minds. And the tenth grade level gateway exams will ensure that nobody graduates from high school without the basic level of knowledge and skills needed for informed and engaged citizenship in a democracy.

Failure of the United States to prepare all students for college, their careers and civic life has led to inequitable educational, economic, and civic opportunities that are disproportionately borne by Black, Latinx, and Indigenous students and workers. These students’ and workers’ rates of dropout, remediation, under- and unemployment eclipse those of their white counterparts—not to mention the ever-widening wealth gap between whites and communities of color. The U.S. education and career training systems should produce better outcomes than they are currently producing.

The remedy lies in addressing three systemic gaps in education: 1) local communities must measure and be held accountable for instilling a wide range of skills and abilities that students will need to secure good of the future. Some of these skills come from early and regular exposure to different industries, occupations, and working professionals. 2) Students must be exposed to a rich set of career preparation activities. Education and training should also prepare students to engage civically. 3) Measuring students’ abilities oriented toward successful career and civic outcomes should be a part of local accountability systems.

Ensuring that these critical elements are thoroughly addressed requires formal and sustained collaboration among schools, colleges, and local employers, with federal and state governments leading the way. There are critical changes to education and training laws and resources which, as integrating these elements, will help to sustain these collaborations. And there are issues related to policies, budgets, and curricula that are governed independently but must be interwoven and aligned to ensure that seamless pathways are developed for students. For many, this type of collaboration will present an entirely new way of working together—but if carried out with intentionality, it will result in a brighter future for all students.

When students are prepared across a broad range of knowledge, skills, and abilities, they not only get better jobs, but they also engage more actively as citizens. However, schools by themselves cannot instill the complex set of skills and abilities that adequately prepare students for their careers and civic life. It will take resources and knowledge that come from broader parts of the community.

Without consensus on the skills needed to secure good jobs and become good citizens, schools and their local partners will not develop structured pathways for students to progress from education to training and, ultimately, careers. Collaborations must center on preparing students for the kind of jobs that afford economic security and participation in civic life. Defining characteristics of good preparation, good jobs, and good citizenship is a critical first step. While most states have definitions of college and career readiness, these definitions often focus on college readiness, lack sufficient detail to guide daily interactions with students, and are not connected to good future jobs.

Most schools lack the strategies and resources to expose students to careers and industries, especially in early grades. The effects of this gap are enormous. Most students enroll in high school course pathways that lead to a dead end and leave students ineligible for their desired postsecondary options. Moreover, factors outside of school—such as students’ socioeconomic status—end up playing a greater role in student choices when they are not sufficiently informed and guided in school.

There are increasing numbers of jobs only available to those with specific training but not finding sufficient numbers of applicants. A helpful element for those students might be apprenticeships. Not to be confused with internships, apprenticeships are usually long-lasting, hands-on training programs where the expectation is that they will turn into a full-time position. One example of showing students an alternative to college is a partnership between the Alamo Community College which partners with local industry, colleges and high schools to offer technical training and paid internships. To be effective such programs must complement, not compete with, high schools’ commitment to educate all students to their potential.

In Indiana, to get more Hoosier students graduating high school with nationally recognized credentials in-hand, ready to start their manufacturing careers immediately, Conexus Indiana negotiated an agreement with the Manufacturing Skills Standards Council (MSSC), a national advanced manufacturing certification body, to allow, through a single point of entry, access to national credentials for every student in the state of Indiana. MSSC will provide its exam preparation material, via proprietary software, to Conexus’ Hire Tech high schools, a two-year high school curriculum that prepares students to earn national industry credentials, as well as credits toward a degree at Ivy Tech Community College after high school graduation. The material is designed to help students pass the MSSC Safety and MSSC Quality Practices and Measurement exams. Students who earn both credentials will be prepared to begin a middle-skill career in the advanced manufacturing industry immediately after high school.

For an objective evaluation and plan for the future, it will be important to apply solid, across the spectrum comparable, school accountability measures. Beyond test scores evaluation must include social and emotional skills. In other words, the national debate should revolve more around facts than fixed beliefs.

An interesting question that might be asked is whether school and district consolidation, while economically very appropriate, may have contributed to the one-size-fits-all approach. That is, would smaller schools and classes with many more teachers, each with fewer students (and thus more expensive), actually be better for children? Clearly, the question is academic, and probably politically a non-starter, since the high-quality teacher supply is limited and not likely to grow until we put more resources behind them, starting with their compensation.

In all of this, it is important to understand that real education is not just getting a job and/or acquiring skills but retaining our earlier accent on more traditional liberal arts that introduced us to the wider world of thought and ideas. This is what it should mean when we talk about an “educated” as opposed to “trained”. Losing this emphasis can leave us with diminished perspectives with which to address the challenges of our increasingly tribal and silo-shaped world.

The current STEM focus is valid, but the risk is that it will create a large group who know the price of everything and the value of nothing. Those who carried papers in the 1950s knew that reading their papers would give them news of the local, state, nation, and world.  That reading was an important part of education, more clearly realized now.  How to we educate young people, and adults, about the world they live in today?   Anyone who has traveled even a little bit soon realizes that being born in the US is a great advantage over being born almost anywhere else in the world.  That knowledge is worth much, but is it appreciated by our young today?

Students’ life circumstances—including income level, gender, and immigrant status—have a stronger influence than their academic performance on their career aspirations and workforce outcomes. Educators and students in low-income communities lack opportunities to learn about jobs in the future workforce. The reasons vary by community, however, as many low-income communities lack a diverse pool of employers, and many low-income schools lack relationships with employers. This long-standing inequity creates an imperative for local employers to engage with schools to create a variety of high-quality education and career preparation opportunities beginning in early grades. These can include advising on curricula to reflect industry needs, hands-on learning, student advising or mentoring, excursions to job sites, and career talks. Because parental values and expectations also greatly influence students’ career choices, parents must be included in this effort.

Improving the quality of education in American high schools is not simply about requiring additional subjects for high school graduation; states must ensure that all students have access to rigorous coursework and the supports they need to be successful. States will also need to prepare the teaching workforce to meet these demands. To achieve this goal, states can adopt the course sequence required by most public universities for admission, investigate and address high school course quality, and do a better job tracking and reporting disaggregated data on high school course-taking patterns. Finally, states can encourage more innovation at the local level so that high schools can be designed around the needs of the 21st century.

One innovative idea not only helps young people learn a language but offers a benefit to some of our newest arrivals. Every year, OZY gives 10 college students the opportunity to pursue their outstanding ideas and envisioned innovations with grants of up to $10,000. In 2016, one of the honorees was Elise Shea, whose genius idea was Speak to Me, a digital language-learning platform that lets refugee tutors teach foreign language skills to college students and receive a payout of about $5 per 30 minutes for each session. In the year following her OZY Genius Award her system helped match 17 forcibly displaced tutors with college students.

A less often considered approach to improving academic performance is the Pathways to Education program in Toronto which offers low-income high school students in public housing free public transportation and college financial aid in exchange for a commitment to attend academic advising, tutoring, and character-building events. The Hutchins Center reported that the study found that students assigned to live in public housing developments with Pathways programs had significantly higher college attendance, employment, and earnings outcomes than did students in non-Pathways housing. They estimate that [living in a Pathways housing development increased earnings at age 28 by 19 percent and the likelihood of being employed by 10 percent](https://connect.brookings.edu/e2t/c/*W1wG37Z82rp2-W2zhRP471mkPZ0/*W4Gtg7g4P_q75W8DkfH365gCbD0/5/f18dQhb0SbTH93BlP4W8SMVYk2qwv31V6Qx3N32xFgkVf5xnx5mbMf4W1BQYgz8Tm-C4W61cWdy9dtj1hW4P0QZK5YpKkdN1hJMxm7nwHCW1YycPY83_PyqW834DLz8XWrm1W7JtV4j7tZTzkW1h4Mpq6W3RzqW1ZJ4fw4DqHqzW6dgmw34yv2r0W3LmS2W2r40NnW3M3KvX3WvC2HW2PS3Sg3z6lxSW3yhChy1zW062VzD-dg1tttYtW7NnlYC83WMJzW4-64K08YFG36W78Z2Dq7MrkmsW1wRS6N5cv68KW1LcPyr8CK5xCV4nfSb8J3w2BW8XlQBW51GDr1W2X92HF1NwBMqF1MVsRjcQGTd9zw0n03), indicating that comprehensive student support programs have the potential to improve outcomes for years after leaving the program.

**Career placement**

The United States can build its middle class and raise academic outcomes, lower youth unemployment, and strengthen its economy through an effective system that connects high-quality K-12 education with career training that leads to good jobs by following the leads of Germany, Singapore, and Switzerland in training their youth for in-demand jobs that offer wages that contribute to a good standard of living, promote labor market security, and provide workers with sufficient access to necessary resources. Yet the plethora of low-wage, low-quality jobs available in the United States perpetuate the growing wealth gap. Meanwhile, a shortage of workers is pushing wages higher in skilled trades that do not require a college degree but do require some training after high school.

Career and technical education, or CTE, i.e., federally supported courses and programs taught at high schools or community colleges to help students develop the skills and knowledge for specific occupational fields has a poor reputation, as Black and Latinx students as well as students from low-income families have disproportionately been assigned to programs that lead to low-wage jobs with limited opportunities for advancement.

**Section V – Summary and Conclusion**

**Non-academic considerations**

Great schools —public, private, and charter— supplemented with smart anti-poverty efforts can help young people overcome an impoverished childhood by identifying and seeking to furnish the out-of-school “social supports” to help their kids and families thrive, while preparing them academically for postsecondary learning and beyond. There are still plenty of tested strategies that can help low-income and working-class kids climb the ladder to the middle class. Here are three of them.

**1.** *Postsecondary education as a path to the workforce—and the middle class* – Despite strategies to prepare students for college, only a small percent of children from the bottom third of the income distribution will complete four-year degrees. The great majority need another path. Thankfully, there is such a route: High-quality career and technical education, culminating in [industry-recognized post-secondary credentials](http://www.theatlantic.com/education/archive/2015/01/getting-credit-for-what-you-know/384919/) developed through pathways, beginning in high school, into authentic technical education options at the post-secondary level. By age twenty, graduates of such programs have academic credentials, technical credentials, and work experience—and, usually, well-paying jobs.

**2.** *Remember the strivers* – More recent efforts for [high-achieving, low-income students](http://www.bloomberg.org/press/releases/bloomberg-philanthropies-launches-new-initiative-help-high-achieving-low-moderate-income-students-apply-enroll-top-colleges-universities/) must be complemented by efforts to help them much earlier in their academic careers. Low-income high achievers’ urban school systems don’t offer (or greatly restrict) gifted-and-talented programs and don’t let high achievers move faster than their peers, even though an advanced academic track would help to reduce inequalities in opportunity between rich and poor (and suburban and urban) students who show great academic promise.

**3.** *Teach the “Success Sequence”* – Even young people with just a high school diploma can make it into the middle class if they work full-time and delay parenthood until they are at least twenty-one and married. Programs that advance this include “Career academies”—a high quality form of CTE – and an excellent suite of extracurricular offerings.

**Moving Forward**

It is clear that all too often, a high school diploma does not indicate that the graduate is adequately prepared for life after graduation. States must assure that graduation implies adequate preparation for further education or training necessary for academic and/career success. This is particularly true of preparation for post-high school education. Graduation requirements are not aligned with post-secondary eligibility requirements.

One key solution is to ensure that there are meaningful pathways from high school to further training that leads to a high-quality job, as well as a supply of workers who have mastered the skills necessary to succeed in—and who have access to lifelong learning opportunities to stay current in—their trades.

Fortunately, there are lessons to be learned from the vocational education training (VET) systems in Germany, Singapore, and Switzerland which enjoy strong academic outcomes, low youth unemployment rates, and high worker productivity and standards of living. These VET systems studied have five components in common.

1. *Align student learning with local and national workforce needs* – closely matching what students study, the competencies and skills they build, and the work that they perform at a job.
2. *Require mastery of academics, lifelong learning, and technical skills through integrated learning* – i.e., the practice of combining text-based learning with applied learning that occurs inside and outside of the classroom, such as through projects or work-based learning experiences. Integrated learning helps students make connections across subjects, from the classroom to real life.
3. *Use authentic assessments to evaluate student learning and mastery* – Authentic assessments of student learning and mastery would closely mimic on-the-job tasks and be of high quality. Experts define high-quality, authentic assessments in career and technical education by six criteria:
   1. appropriately scaled for rigor and relevance
   2. measure what students know and can do as well as their behaviors and dispositions toward the work environment.
   3. scoring should effectively capture a range of student mastery and rarely be exclusively paper- and pencil-based.
   4. graded in ways that promote skill improvement over time and provide feedback that allows students to grow in their skills and abilities.
   5. conducted throughout students’ learning experiences.
4. *Offer paid apprenticeships* – On-the-job training alongside classroom instruction.
5. *Lead students to employer-valued certifications that also allow for further training and certification* – Understanding what employers value will require meaningful, ongoing engagement with them to design certificate programs that are validated in the labor market and associated with good jobs that would allow workers to earn enough in wages to live and pay back any student loans used to acquire the certificates.

Surveys of long-standing vocational education programs in Europe reveal eight characteristics of high-quality certificates:[43](https://www.americanprogress.org/issues/education-k-12/reports/2020/05/18/485130/building-strong-middle-class-career-pathways-programs/?utm_medium=email&utm_source=amprog_elq&utm_campaign=27&utm_content=42336#fn-485130-43)

1. Standardization of final exams across all certificate programs
2. Verification and approval of final exam assignments by a group of assessors
3. Variation in examination methods
4. Authenticity of assessments
5. Verification of grading by independent committees
6. Use of grading scales
7. Grading by multiple assessors
8. Substantiated rationale for grading

Moreover, those getting a certificate in a particular occupation should also receive credit that can be applied toward additional certificates, diplomas, or degrees. Certificates should not preclude learners from continuing on their desired career pathways.

Three key foundations of strong VET programs in Germany, Singapore, and Switzerland:

Each country

1. has adopted a long-term outlook for education reform.
2. addresses the quality of its compulsory education system so that it adequately prepares students for rigorous VET programs by ensuring nationwide use of high-quality curricula, rigorous academic standards, and national tests to ensure the portability of compulsory education and certifications across state and regional lines.
3. gives an equal role to employers and labor unions in designing the VET system and providing some aspect of VET education.

Any significant or meaningful reform of career education at the national level in the United States will require a vision, and sufficient funding from federal, state, and local government to make that vision come to life. The following are recommendations to develop a high-quality career education program.

1. *Developing a national and state vision for career education* – to ensure that all students participate in meaningful pathways to good jobs that allow them to be productive citizens.
2. *Providing funding* – High-quality systems are expensive and will require shared governance and funding from the federal and state governments as well as employers to bring these systems to scale. High-quality apprenticeships must be paid for, in significant part, by employers, who must see the value of allocating resources to the young workforce in order to continue investing.
3. *Ensuring equity* – Federal and state governments have a responsibility to ensure that career education policies benefit all students and do not disadvantage those who have fewer resources.
4. *Ensuring portability of credentials* – Federal and state governments, in partnership with employers and labor unions or third-party employer organizations, should audit credentials to identify those that carry value and establish a process to phase out those that do not.
5. *Matching availability of training programs and labor market needs* – Labor unions and other third-party employer organizations have a critical role to play in training and certifying student skills and abilities. This is not a separate question from credentials of value, but rather should be considered simultaneously.

The Center for American Progress has proposed seven progressive education policies to ensure that all Americans are afforded the education needed to meet these challenges and revitalize the American dream.

1. *Provide a tutor for every child performing below grade level* – Providing access to tutoring to improve students’ grades before they are at risk for dropping out could help them to complete further schooling, which, in turn, increases their likelihood of finding employment and earning a family-sustaining salary in adulthood. A newer other way to contain costs of tutoring would be through appropriate use of computer-based tutoring. While these programs cannot replace the need for human interaction and relationships, they may be effective for some students and allow for greater targeting of resources toward students who most need traditional one-on-one tutoring.

2. *Offer free breakfast and lunch for all students, regardless of income* – to ensure that all students experiencing food insecurity have access to healthy, nutritious meals; end the stigma surrounding school lunch; and eliminate administrative barriers to accessing the program.

3. *Ensure opportunities to combine college preparatory academics with technical training and workplace experience* - Many high schools are not preparing students for the major international changes that will have enormous impact on America’s increasingly global economy or for professional experiences that could help them get jobs upon graduation. Many other schools are redesigning the high school experience by implementing various models, such as career and technical education (CTE); personalized learning, apprenticeships; early college and dual enrollment; and language immersion programs—all of which can work for students’ individual needs. To increase the number of schools willing to experiment with such programs, states should:

* incentivize school districts by creating or expanding grant programs that offer flexibility for students to learn outside of traditional school hours and beyond school buildings.
* provide additional funding for apprenticeships and use grant programs to incentivize districts to form partnerships with local employers to offer summer internships or a semester of credit.
* Study and authorize charter schools that promote innovative high school designs with quality control systems in place or establish what is termed “innovation status” for traditional public schools.

4. *Transition to a 9-to-5 school day to better fit parents’ needs*

5. *Support, train, and pay teachers like professionals* –

6. *Create a safe and healthy environment in every school* – Hire additional specialized instructional support personnel (SISP)—school counselors, school social workers, and school psychologists—to ensure that all students have access to academic, career, mental health and social-emotional support.

7. *Eliminate crumbling school buildings* –

Chester E. Finn, Jr., President Emeritus of Fordham and now Distinguished Senior Fellow at Stanford's Hoover Institution says Georgetown University’s FutureEd project paper, [*Unfinished Agenda: The Future of Standards-Based School Reform*](https://www.future-ed.org/unfinished-agenda-the-future-of-standards-based-school-reform/) is squarely in the tradition of “systemic reform,” an honorable, perceptive, and ambitious approach that says, in essence, that making any major gains in America’s K–12 results requires a holistic understanding of how the system works and a strategy for overhauling its many key elements in synchronous fashion. It is summarized as “a design for a systemic state structure that supports school-site improvement efforts and is based on clear, challenging standards for student learning. Policy components would be tied to these standards and reinforce one another in providing instructional guidance to schools and teachers.”

Those “policy components” are legion, ranging from “a coherent [statewide] system of instructional guidance” to major changes in the structures and governance of schooling. Included, of course, are academic standards and assessments, but also aligned teacher preparation, professional development, a perhaps-surprising injection of school-level autonomy—and considerable financial investment. With everything synchronized, of course. That’s a very heavy lift, which is why no state, to my knowledge, has given it a full test. Some have moved a fair distance toward it, but there have been generally disappointing results of all this effort: “Millions of students—particularly Black and Latino children and those from low-income families—continue to be taught to low expectations. And that lack of rigor remains a major barrier to economic mobility and social justice.”

This new paper restates the centrality of standards , that a “systemic reform” thesis based on a standards-driven system needs its many moving parts to mesh. But they see it as the part of that system that has been widely neglected but that, they say, may be the most necessary: “the instructional core,” particularly an “adequate supply of standards-aligned curricula” and the “related professional learning” that would equip teachers to deliver such curricula effectively. Most state officials were loath to influence districts’ curriculum decisions and publishers, meanwhile, were quick to assure districts that their materials were aligned to standards, despite evidence to the contrary.”

But what to do? Cohen and Slover seek a rededication to standards-based reform centered on an aggressive statewide approach to the “instructional core.” They see this as having four vital components:

* High-quality, standards-aligned curriculum.
* Professional learning connected to the curriculum.
* Curriculum-aligned assessment.
* Accountability focused on instructional coherence.

Yet the very first step of their action plan for states is “a fundamental shift in state accountability systems,” beginning with states adopting “policies requiring every district to demonstrate that its curriculum, instructional materials, professional learning, and local assessments are aligned with each other and with state standards.”

But obstacles loom, perhaps insurmountable. Truly doing what Cohen and Slover recommend amounts to a statewide curriculum or its virtual equivalent, as well as ensuring that many other currently-local instructional decisions conform to state norms if not actually replaced by state decisions and actions.

Their plan also entails a subtle but important shift from school accountability centered on student achievement and gap closing to something more like schools’ successful fealty to an instructional strategy.

## There are a host of barriers to achieving maximal achievement for all students, but one community has made a major commitment to doing just that. In Raleigh County, West Virginia, a promising approach is connecting students and families to essential services – and improving student outcomes.

#### **Summary**

* In Raleigh County extensive economic and social challenges were negatively affecting children's development. Schools in the county performed poorly on academic, behavioral, and attendance metrics.
* In 2019, Raleigh County launched the Communities in Schools (CIS) program in five schools. The CIS model aims to connect students and families with resources supporting their academic, behavioral, health, safety, and other needs. Central to that goal are site coordinators at each school, who act as the link between students and the community’s existing support services. Site coordinators implement school-wide supports, interventions targeted at groups, and intensive interventions for individuals with acute challenges.
* Keys to the program’s success included high level champions, like the state’s First Lady, Cathy Justice, who successfully advocated for funding for the program; a rigorous recruitment and hiring process for site coordinators; a gradual rollout across the district; buy-in from school and district leaders, who built students and families’ familiarity with the program; multiple levels of support for coordinators to ensure they have proper resources; and data-driven evaluation, which demonstrated the program’s effectiveness.
* The biggest challenges the program faced included cultivating buy-in from teachers, countering skepticism toward an “outsider” program, creating a sustainable funding plan, and adapting the model to virtual learning.

**In Closing**

In closing, we turn to an article entitled ‘Lessons for Educators’ for the [Pearson Foundation’s ‘The Five Things I’ve Learned‘ website](http://www.thefivethings.org/category/everyone/) by Andreas Schleicher, Special Advisor on Education Policy to the OECD's Secretary-General and Deputy Director for Education which offered the following five excellent perspectives for policy decisions going forward.

1. In the global economy, the benchmark for educational success is no longer merely improvement by local or national standards, but the best performing education systems   
   internationally…. all work that can be automated or digitized can now be done by the most effective and competitive individuals or enterprises, wherever on the globe they are located. Knowledge and skills have become the global currency in the 21st century.
2. The skills that are easiest to teach and test are also the skills that are easiest to digitize, automate and outsource. When you could still assume that what you learned in school will last for a lifetime, teaching content and routine cognitive skills was at the center of education. Today, where you can access content on Google, where routine cognitive skills are being digitized or outsourced, and where jobs are changing rapidly, the focus is on enabling people to become lifelong learners, to manage complex ways of thinking and complex ways of working and to live in a multi-faceted world as active and responsible citizens.
3. Deprivation need not be destiny. Equity in education is also the key to social mobility and democratizing knowledge. Some of the world’s most advanced education systems have far greater levels of income inequality and social heterogeneity than, for example, the United States. Their education systems are able to moderate inequalities because they attract the most talented teachers to the most challenging classrooms and the most capable school leaders to the most disadvantaged schools, thus challenging all students with high standards and excellent teaching. They foster new forms of educational provision that take learning to the learner in ways that allow students from all backgrounds to learn in the ways that are most conducive to their progress. The goal of the past was standardization and conformity; now it’s about being ingenious, about personalizing educational experiences.
4. Modern education is about enabling professional autonomy within a collaborative culture. The best performing education systems set ambitious goals, are clear about what students should be able to do, and then provide teachers with the tools to establish what content and instruction they need to provide to their individual students. In the past, the policy focus was on the provision of education; today it’s on outcomes…. The past emphasized school management. Now it is about leadership, with a focus on supporting, evaluating and developing teacher quality as its core, which includes coordinating the curriculum and teaching program, monitoring and evaluating teacher practice, promoting teacher professional development and supporting collaborative work cultures.
5. There is no future without investment in education. Without sufficient investment in skills people languish on the margins of society, technological progress does not translate into productivity growth, and countries can no longer compete in an increasingly knowledge-based global economy. In the long term, there is no way to stimulate our way out or to print money our way out of an economic crisis. The only sustainable way is to grow our way out, and that requires giving more people the skills to compete, collaborate and connect in ways that drive our economies and societies forward….

Placing a high value on education may be an underlying condition for building a world-class education system and a world class economy, and it may be that most countries that have not had to live by their wits in the past will not succeed economically and socially unless their political leaders explain why they must live by their wits now even though they might not have had to do so in the past.

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**The following Appendices are found at the conclusion of the Source Book on K-12 Education**

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* Appendix C – A Mississippi Approach to Education Improvement
* Appendix D – U. S. Education is in Trouble, Let’s Fix It
* Appendix E – State inflation of graduation rates
* Appendix F – New evidence of the benefits of arts education

### Appendix G – The Raleigh County, West Virginia response to extensive economic and social challenges

* Appendix H – The Science of Reading

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