CRPE
REINVENTING
PUBLIC EDUCATION

The State of the American Student: Fall 2022

A guide to pandemic recovery and reinvention

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We are particularly indebted to the scholars who participated in our consensus panels and working groups, which united teams of experts to sift through hundreds of studies to assess what the research to date can tell us about what we know, don't know, and need to know about the impacts of the Covid-19 pandemic on students.

None of the evidence we compiled would be possible without the support and confidence of our funders. The Bill & Melinda Gates Foundation, Chan Zuckerberg Initiative, Barr Foundation, Carnegie Corporation of New York, Michael & Susan Dell Foundation, Oak Foundation, NewSchools Venture Fund, The Joyce Foundation, and Walton Family Foundation all supported the research and analysis that allowed us to document and make sense of the educational response to the pandemic. We have tried to be as honest and as rigorous as possible in documenting student needs, system responses, and emerging innovations during this extraordinary time of chaos, crisis, and opportunity in America's education system.

Although we are thankful for the support and contributions of all those mentioned here, any omissions or errors are the authors' alone.

More information about CRPE's work, including more extensive research reports, data, and resources, is available at www.crpe.org.

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Estimated duration of full or partial school closures

Source: UNESCO

62 WEEKS in the US ..... 27 WEEKS in the UK

Projected loss of future US GDP as a result of learning interruptions from March 2020 to January 2021

Source: OECD

$15 TRILLION

Percentage of parents of students with cognitive disabilities who reported schools abandoned their child's legal right to access an equitable education when they moved to remote learning

Source: Understood

44%

Rate of increase over one year in suspected suicide attempts among girls aged 12–17

Source: CDC

51%

Percentage of teachers who reported covering all, or nearly all, the curriculum they would cover in a typical year during the 2020–21 school year

Source: RAND Corporation

21%

Number of children estimated to have lost a parent or caregiver during the pandemic

Source: COVID Collaborative

MORE THAN 1 IN 360

Percentage by which income-based gaps in elementary math achievement widened during the pandemic

Source: Annenberg Brown University

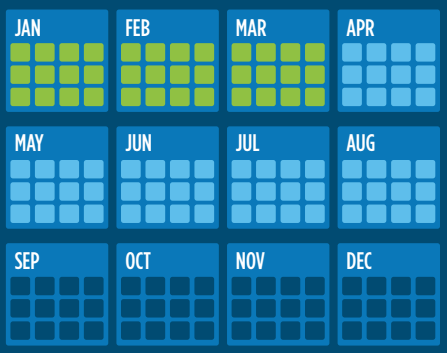
20%

Lost academic instruction in schools operating fully remotely in 2020-21

Source: Harvard University

13 WEEKS in high-income schools

22 WEEKS in high-poverty schools



Overview: Challenges and opportunities

The pandemic was a wrecking ball for U.S. public education, bringing months of school closures, frantic moves to remote instruction, and trauma and isolation. Kids may be back at school after three disrupted school years, but a return to classrooms has not brought a return to normal.

The kids are not all right. The Covid-19 pandemic upended business as usual in public education, with devastating consequences for students' learning and emotional well-being. The state of American students is still coming into focus, but we know the disruptions exacted a greater toll on the students whom schools struggled to serve effectively before the pandemic. The effects were most deleterious where campuses stayed closed longer.

The typical American student lost several months' worth of learning in language arts and more in mathematics. Students suffered crushing increases in anxiety and depression. Hundreds of thousands lost loved ones. Many were forced to mourn in isolation. Students who were poorly served before the pandemic were profoundly left behind during it, including many of those with disabilities who were cut off from essential services critical not only to learning but to daily life, as well. This deeply traumatic period threatens to reverberate for decades, robbing a generation of its potential, exacerbating existing inequities, and undermining the strength of the economy.

> **"Just trying to figure out the student life at school again, I struggled a lot. I stopped going to school, I missed school a lot, I was absent. My guidance counselor tried to encourage me. But the disconnect felt so vast, I stopped going."**
>
> Kesar Gaba, 18
> New York City

At the same time, during the pandemic, vital building blocks began falling into place that could help make seemingly far-off visions of educational transformation a reality. Freed from the routines of a rigid system, some parents, communities, and educators created their own solutions. They found new ways to tailor learning experiences around students, rather than forcing students to fit environments that were never designed for their needs. They discovered learning can happen any time and anywhere. They discovered a wealth of learning opportunities in their communities and troves of untapped talent. These were exceptions to an otherwise miserable rule—but important exceptions to inform the future.

This report draws on data the Center on Reinventing Public Education (CRPE) has collected and synthesized over the course of the pandemic. It outlines the contours of the crisis American students faced during the pandemic and begins to chart a path to recovery and restitution for all students—which includes the essential work of building a new and better approach to public education that ensures an educational crisis of this magnitude cannot happen again.

Here is what we know about the profile of the American student in September 2022.

The average student is suffering. All students have suffered as a result of the pandemic. For some, that suffering was in small but meaningful things, such as increased social isolation and lost opportunities to celebrate milestones, participate in music and sports, or develop friendships. For others, the pandemic experience was one of deep and potentially long-lasting traumatic events. The academic, social, and mental-health needs are real, they are measurable, and they must be addressed quickly in order to avoid long-term consequences to individual students, to the future workforce, and to the economy.

Yet that average masks dire inequity and wide variation of impact. Every student experienced the pandemic differently, and thus, there is tremendous variation from student to student, with certain populations—namely, Black, Hispanic, and low-income students, as well as other vulnerable populations—suffering the most severe impacts.

While many students are catching up to prepandemic levels, many are not. This "K-shaped recovery" is leading to widening achievement gaps. But the disparities extend beyond race and income. At the pace of recovery we are seeing today, too many students of all races and income levels are sure to graduate in this and coming years without the skills and knowledge needed for college and career.

For both the average and most negatively affected students, the situation could be significantly worse than the early data suggest. What we know at this point is incomplete. Although the data and stories we have to date are enough to warrant immediate action, there are serious holes in our understanding of how the pandemic has affected various groups of students, especially those who are typically most likely to fall through the cracks in the American education system. It's also the case that the evidence we have to date may understate inequitable impacts or underestimate the long-term effects on students.

> **"As a system of schools, we need to be more open and have flexible lessons for different students. I like getting the content and working independently. Some students need that hands-on direction."**
>
> Liv Birnstad, 17
> Washington, D.C.

The harms students experienced during this pandemic can be traced to a rigid and inequitable system that put adults, not students, first. Students and families were cut off from essential support, offered radically diminished learning opportunities, and left to their own devices to support learning. Too often, politics, not student needs, drove decision-making, and students with the most complex needs suffered the most, as they always have.

Certain pandemic discoveries offer a path toward a better way. While all students suffered in some way, many thrived outside of the traditional school and classroom setting. Parents and teachers, too, discovered or rediscovered new ways to connect and engage with young people. Whether in informal pandemic pods, via virtual IEP meetings, or through new connections between schools and members of the community, it became clear that a more equitable, joyful, and individualized education system is both necessary and possible.

We must act quickly, but we must also act differently. The pandemic has revealed a U.S. education system that was unprepared to deal with uncertainty, to meet diverse student needs, to respond

quickly in a crisis, to overcome adult-centered political dynamics, or to marshall strong leadership on behalf of student interests. This pandemic was no one's fault, but the response was.

The kids aren't all right now, but many weren't all right before. As we look toward recovery and rebuilding, we must be clear-eyed about what this generation of students is owed, and we must commit to rebuilding in a way that ensures the system is more resilient and prepared for future crises, that builds on positive developments, and that delivers on the potential of future generations of students.

Doing so will require more than tutoring programs and other school-based interventions. It will require an ambitious national vision and goals for rebuilding, as well as a commitment to tracking progress toward attaining that vision. It will require bold and inspiring leadership to build new constituencies for change across the education, health care, business, faith, and civic communities.

This is the first in a series of annual reports CRPE will produce. It provides an initial account of the damage done and debts owed to students, a roadmap for organizing research around the most pressing questions, and a call to act on what the data tell us. We hope every state and community will produce similar accounts for recovery and renewal and begin to define ambitious goals for recovery.

The road to recovery can lead us somewhere new. In five years, we hope to report that out of the ashes of the Covid-19 pandemic, American public education emerged transformed: more resilient, individualized, equitable, and joyful.

More than half a dozen students spoke with the Center on Reinventing Public Education in spring and summer 2022 to discuss what they and their peers need from schools to successfully recover from the pandemic. We thank them for their contributions and wish them well on their academic journeys.

What we do next matters.

In the future, we could look back on this time as the turning point. In five years, an updated version of this report could read as follows:

Vision for the future:
State of the American Student: Fall 2027

In fall 2022, things looked bleak. Adults were coming to grips with mounting mental-health and academic crises facing the nation's students. New waves of disruptions continued to hamper the nation's schools, as they struggled to stay open, hire enough staff, and sustain something approximating normal operations.

That was the moment when leaders in government, business, faith communities, and civic organizations realized a return to normal would not be possible. A new coalition rallied with parents and educators to invest in a massive retooling. It took some time, but in the end, we pushed through old barriers and built a public education system of which we could all be proud.

The community became a source of expertise and support for students. Therapists, counselors, and social workers designed programs to help students reconnect with their friends and recover from the trauma of the pandemic. Students of color had ample opportunities to learn with adults who looked like them, who understood their languages and cultures. No longer confined to classrooms, students were free to draw on the wealth of learning opportunities in local parks, farms, museums, and businesses.

Schools could focus on excellent teaching, and they redefined what it meant to be a teacher. Adults inside and outside schools took on a variety of educator roles—master teacher, learning guide, tutor, mentor, language specialist, counselor—and worked in tightly coordinated teams, like in the medical field. Teachers' unions embraced the opportunity to reinvigorate the profession and to make working in education more rewarding and sustainable.

Parents fully expected to help design and support their children's learning. Those who wouldn't otherwise have had the means received public dollars to take time off work and help students. Some worked as tutors, helping to address academic gaps. Others shared their work or hobbies to offer art, music, and career-connected learning experiences. Still others

worked as navigators who helped other parents understand their children's learning goals and find opportunities to meet them—in or out of school. Some discovered they liked working with students so much they wanted to become professional educators, and they found accessible avenues to turn their passions into new careers.

Transparency helped build trust. Parents knew their children's individual learning goals, as well as content and skills all students would need to master to graduate ready to thrive as adults. They had access to timely and customized reports on their children's progress and had access to the curricula they were using—which allowed them or any other adult who worked with their child to support the learning process. Parents could see their students making progress and knew that if their child were to encounter obstacles, they could collaborate with their child's team of educators on a solution. They embraced assessments as essential tools to monitor progress, identify learning needs, and address them.

Schools became joyful and challenging. Students with disabilities no longer had to choose between class time and essential therapies, because every aspect of schools, including schedules, was designed to prioritize students with the most complex needs. Older students could participate in internships, community service projects, or work during the day and take classes online or at night. They could sleep later if they needed to or focus on classes in the morning and exploring their interests in the afternoon.

High schools became talent-development centers, where, after mastering basic graduation requirements, every student had access to career and college courses.

Realizing the lasting harm that learning interruptions could have on a generation of students, we had no choice but to ensure that evidence drove instructional decisions. Like medical providers, school systems were required to meet a basic "standard of care" that included evidence-based curriculum and proven interventions, such as high-dosage tutoring.

Choices, options, and diverse providers became core characteristics of a resilient system and necessary tools to achieve true equity. We recognized that students have diverse needs that require diverse solutions, and we designed an education system to deliver them.

If a child has a disability, comes from a challenged or unique background, or just thinks differently, we see that child as a source of untapped potential. We guarantee ways to build their unique skills and perspectives to become our country's next leaders, innovators, and entrepreneurs.

As of fall 2027, we can say with confidence that we are ready for the next pandemic, natural disaster, or civic uprising, because our schools are built to respond, adapt, and innovate.

Like a phoenix rising from its own ashes, we rebuilt public education so all kids can become successful in America. In the aftermath of a pandemic, we have done something truly remarkable.

I. The impact of the pandemic on American students: The kids are (still) not all right

Beginning in February 2020, the Covid-19 pandemic disrupted schooling nationwide—cutting off millions of students from academic instruction, social connections, and legally mandated support. Now, at the start of a new school year, about two and a half years after the start of the pandemic, it is a critically important time to take stock.

To understand how K–12 students have been affected by pandemic-related disruptions and build a roadmap to recovery, we commissioned three expert panels of education researchers to provide a baseline assessment.

The three initial papers feature three of the many critical topics that inform this report: academic impact, students' social and emotional well-being, and students with disabilities. They all took a structured approach to summarizing the research to date and to discussing, via the panel of experts, what the research implies going forward. The papers offer unique contributions to the field, and we are committed to updating and adding topics of inquiry over time. An update to the report on academic impact was published in August 2022, and updates to the others will be published throughout the year.

This report does not attempt to summarize all of the findings; rather, it seeks to distill these and other facts amassed by CRPE and other researchers into an emerging portrait of the American student as we near the end of 2022 and begin the fourth academic year affected by the Covid-19 pandemic.

The emerging evidence on academic impact, social-emotional well-being, and students with disabilities underscores a hard truth: the pandemic and its disruptions to schooling have caused the typical student significant harm.

What is clear from the research is the following:

- The academic consequences are serious for some and catastrophic for many.
- The pandemic caused widespread harm to students' mental health and social and emotional well-being.

Learning losses slowed in the 2021–22 school year, once students started spending more time back in school. However, a significant number of students have continued to fall further behind grade-level expectations.

> **"As a parent, I feel like I've lost time and I have to gain ground."**
>
> Sherell Johnson, parent of a struggling reader, Mattapan, MA (*Boston Globe*)

The academic consequences to date are serious for some and grave for many.

Students at all grade levels missed months of instruction and suffered significant delays in learning during the pandemic. With few exceptions, the impact was greater in mathematics than in reading.

One report estimates that over a million fourth graders nationwide are more than two years behind in early literacy skills.

By one national estimate, the pandemic left students an average of five months behind in math and four months behind in reading by the end of the 2020–21 school year.

Those estimates presaged the first nationally representative measures of student learning, which were released on Sept. 1. The National Assessment of Educational Progress showed that between 2020 and 2022, nine-year-olds' math achievement fell for the first time in the assessment's history.

> **"School districts are currently planning a number of catch-up activities, but [I fear] they're going to discover in the summer of '23 when state test results are released that what they did was not enough, that there'll still be large gaps, especially in math, especially in high-poverty schools."**
>
> Thomas Kane, economist,
> Harvard Graduate School of Education

Worse, the NAEP showed an alarming trend that started before the pandemic had accelerated during it: The gaps between high-achieving students and those with low test scores were growing wider.

The drop in scores among students scoring in the bottom ten percent of scores was five times as large in reading, and four times as large in math, as the drop among students scoring in the top ten percent.

How much academic progress any given student missed during the pandemic varied depending on who they were and where they lived, by subject and by age group. But the experts we convened in the summer of 2022 agreed that a variety of measures supported these broad themes:

- Learning delays occurred at every grade level, but it's unclear which age group has been most negatively affected.
- Learning delays were greatest in 2019–20, but many students also lost ground in 2021–22.
- Learning delays are closely related to the amount of time students spent out of school or in remote instruction.
- Low-income students and students of color, who on average spent the most time in remote instruction, experienced the greatest learning delays and fell even farther behind their white, advantaged peers.
- Inconsistent school attendance continued to limit recovery of learning delays even when schools were open.
- Despite widespread learning loss, some students thrived.

Gaps between students grew wider.

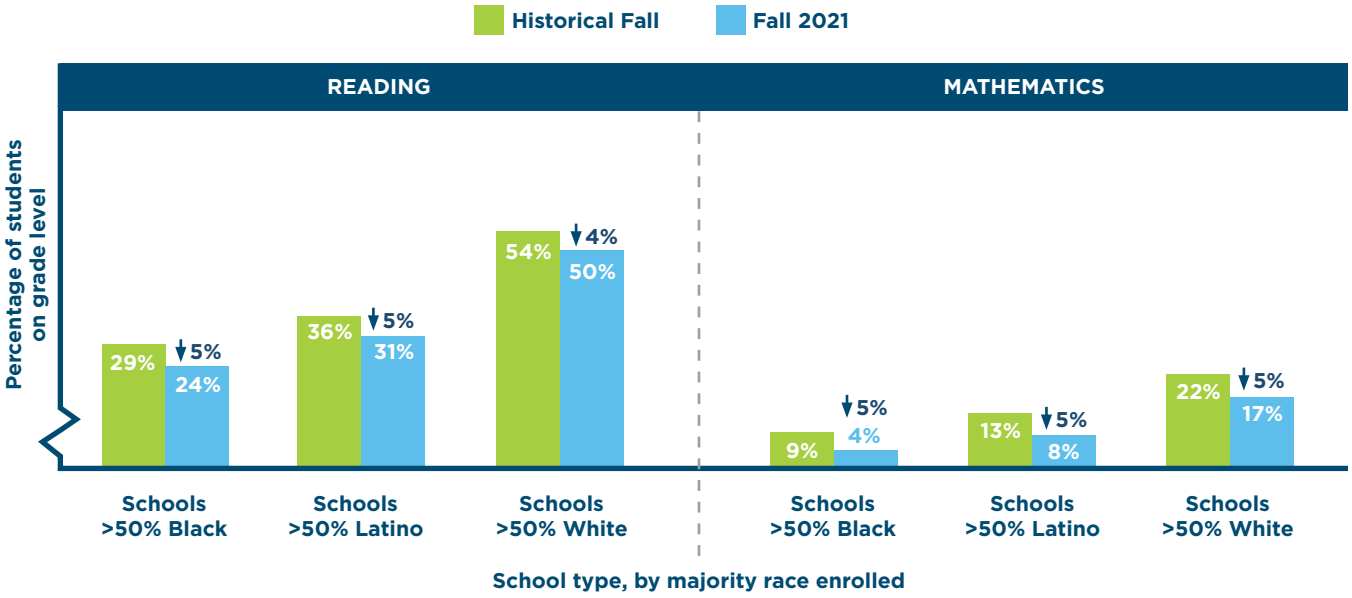
Learning losses were smaller in 2021–22, when most schools were open at least some of the time, than in 2020–21. But substantial numbers of students have continued to fall further behind normal levels of learning for their ages and grades.

A study from Ohio found that students with test scores in the top 25 percent learned about as much during the pandemic as they would have under normal circumstances. But declines in third graders' academic growth in English were twice as large for Black and Hispanic students as for white students and were larger for Asian students, too. Declines were greater for students scoring below grade level before the pandemic, especially in English language arts (ELA).

Black, Hispanic, economically disadvantaged, homeless, and disabled students and English learners saw their ELA test scores decrease two to three times more than typical white students in most grades.

Similarly vast differences could be seen in other studies. In iReady's fall 2021 report (based on interim assessments taken by more than one-quarter of American students in grades 1–8), researchers isolated the learning differences among schools serving primarily students of color versus primarily white students.

Third-grade U.S. students performing on grade level in reading and math, by race

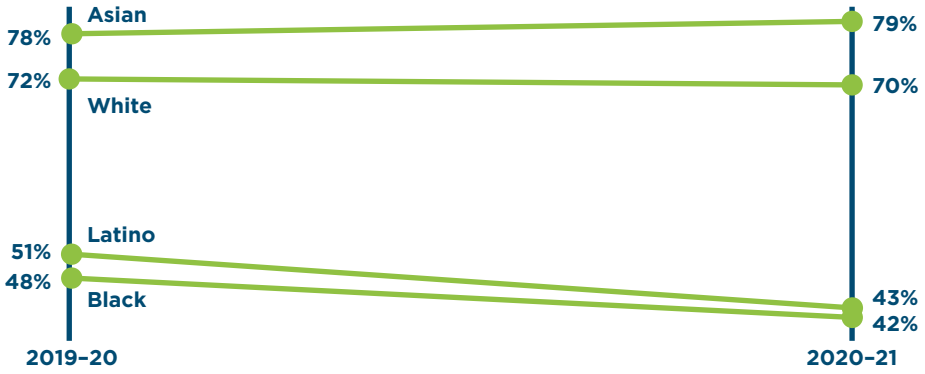


Source: Curriculum Associates.

Schools serving majority Black and Latino students saw almost double the amount of unfinished learning in third-grade reading and math as schools serving majority white students. Unfinished learning was greater for students in lower-income communities than for students in higher-income communities.

In Los Angeles, fewer Black and Latino elementary students met their reading goals during the pandemic, according to the *Los Angeles Times*. This is concerning on its own but is fundamentally alarming given how far behind in those literacy goals those students were prepandemic.

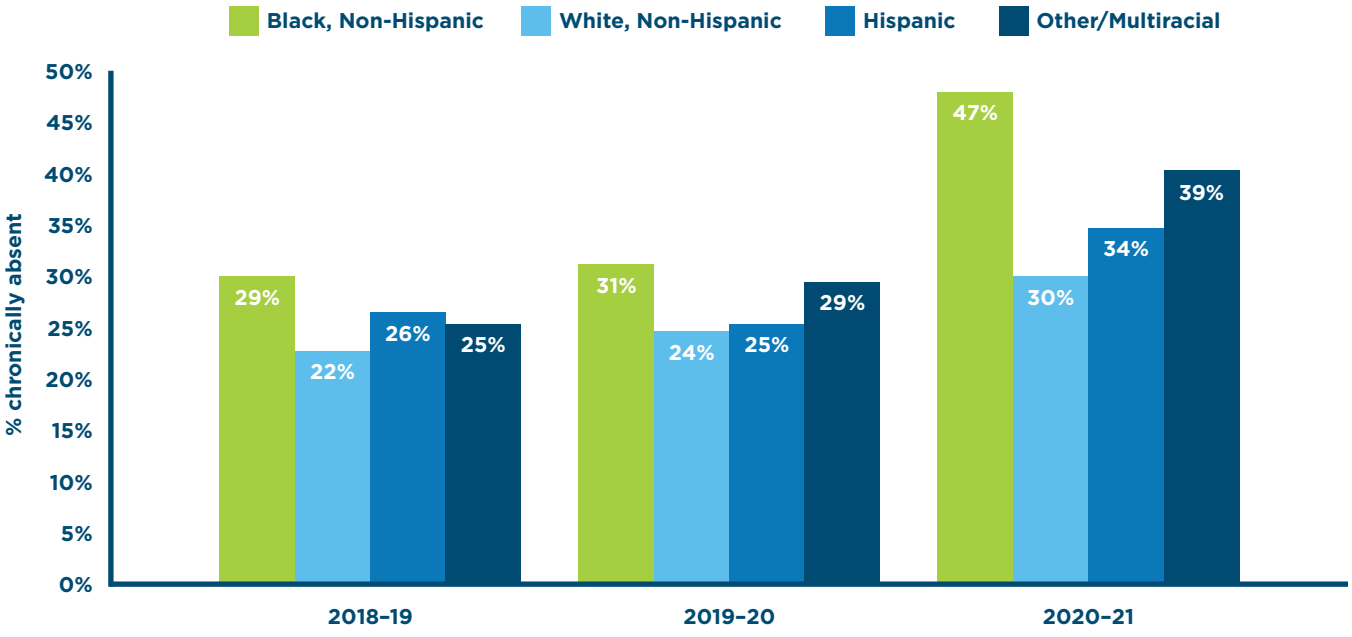
Percentage of elementary students meeting reading goals: Number of LAUSD elementary school students meeting reading benchmarks fell in 2020-21 academic year



Source: Los Angeles Times.

Differences go beyond test scores. Nationwide, educators reported that absenteeism more than doubled during the pandemic. According to Proving Ground, a Harvard University program that works to improve attendance and student learning in Ohio and other states, rates of chronic absenteeism (when students miss more than 10 percent of the school year) rose much more for Black students than other students, going from 29 percent two years ago to 47 percent in the 2020–21 school year.

Among Proving Ground partners, gaps in chronic absenteeism increased in 2020–21



Source: Ohio Department of Education.

The problem was still very serious in the 2021–22 academic year. In the Los Angeles Unified School District, the second-largest in the nation, nearly half of all students—more than 200,000 children—were chronically absent during the 2021–22 school year. Broward County Public Schools reported 11,500 students who were "unaccounted for."

According to many local news reports, during school closures, grades fell at an especially concerning rate for low-income, Black, and brown students. In Los Angeles Unified School District, about 79 percent of grades granted to Latino students in the semester before the pandemic were A's, B's, and C's, compared to 68 percent in spring 2021. The share of good grades for English learners fell from 70 percent to 58 percent.

All of these trends threaten to exacerbate another trend that predates the pandemic but accelerated in its midst: a decline in the number of students enrolling in college—which, due to a lack of alternatives, remains an essential gateway to the middle class. Students have a tendency to persist in high school until it becomes clear that they will not graduate, which means the pandemic could have a lagging effect on students' long-term prospects.

Cause for special alarm: Students with disabilities and complex learners.

Students with disabilities have also suffered disproportionate academic impact. In April 2021, a nationally representative survey of parents of students with cognitive disabilities found that 44 percent believed their child's legal right to access an equitable education had been abandoned since the move to remote instruction.

There are worrying signs these lapses hurt student learning. In a nationally representative survey of more than 1,500 teachers in October 2020, only 29 percent of remote teachers and 32 percent of hybrid teachers said students with disabilities completed "nearly all" of their assignments, compared to 51 percent of teachers working in person.

And an analysis of the Renaissance Star Reading and Math assessments in spring 2021, which were given to 3.3 million students nationwide, found that, on average, all students nationwide performed below prepandemic expectations and that students with disabilities lagged even further behind other students in math.

> **"I was punching walls again. I was not happy. Basically, my 21-year-old self was put back into a five-year-old's mindset."**
>
> Thomas McHale, a student with a developmental disability and autism in Westchester County, NY, on the impact of losing access to daily school-based therapy (*Chalkbeat*)

Few studies have examined the disparities in outcomes for different subpopulations of students with disabilities. Those that have raised more cause for alarm, suggesting challenges in special education were exacerbated by other inequities. Teachers from nonwhite and higher-poverty schools expressed greater concerns about lack of materials or guidance and support. Similarly, district personnel in high-poverty areas reported greater difficulty complying with IDEA than before the pandemic.

In too many cases, special education was an afterthought—at best, an add-on or adjustment to the default system, rather than a considered approach to recognizing the talent and potential of every child and designing an individualized program to realize their potential.

Emerging evidence suggested broad differences in learning losses among students with disabilities. Students most likely to have been affected by instructional disruptions include those who, due to the complexity of their disability, require more significant accommodations, modifications, and specialized therapies. In addition, students in the early grades—especially kindergarten—as well as those nearing the end of their education and requiring transition supports appear to have experienced the largest negative effects.

Though little data or research exists, there is reason to believe other learners with complex needs, such as English language learners and students experiencing homelessness, experienced similar setbacks during the pandemic and require specialized attention and support.

There are obvious moral and legal reasons to care whether these students' needs are being met by their schools. There is also a pragmatic one: students with unique needs also have unique assets. In the coming years and decades, America cannot afford to ignore the untapped potential of students with distinct experiences and perspectives. What's more, the principles of universal design suggest that a system built to meet the needs of the most complex learners will serve all learners more effectively. A system that leaves students with disabilities behind is likely failing others, too.

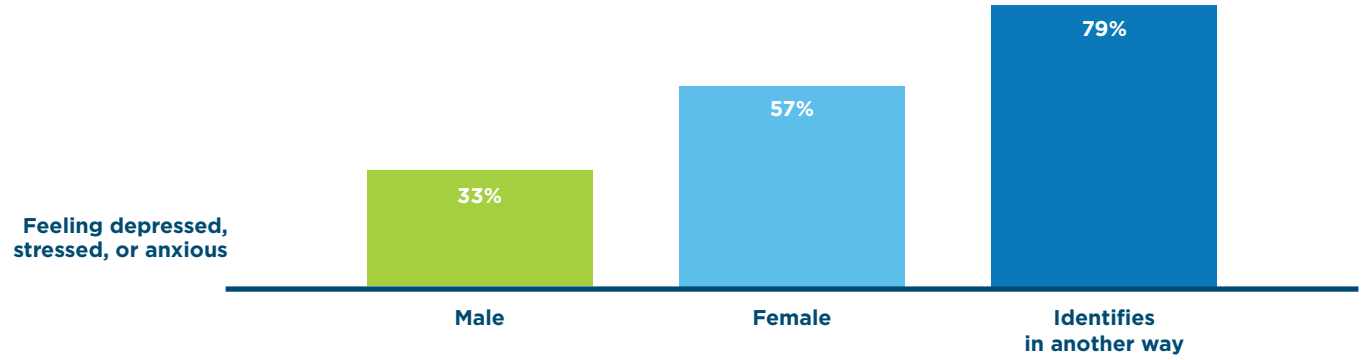
The pandemic caused widespread harm to students' mental health and social and emotional well-being.

In the first few months of the pandemic, the picture of student mental health was unclear, but the situation grew worse as the pandemic wore on. In June 2020, 14 percent of caregivers reported "worsening behavioral health" for their children. That fall, students reported that anxiety and depression had become their top barriers to learning. Students said that they struggled with motivation and engagement. District leaders reported small conflicts escalating quickly into general brawls in classrooms and school grounds.

> **"I've never seen anything like the demand we've seen for mental-health services at Children's in the last 15 months, but most acutely in the last three to four months. Our kids have run out of resilience. Their tank is empty."**
>
> David Brumbaugh, chief medical officer, Children's Hospital Colorado, May 2021 (*Chalkbeat Colorado*)

Mental-health indicators show variation, particularly by gender. In a survey by Youth Truth, an organization that partners with school districts around the country, gender differences were clearly associated with reports of emotional strain during the pandemic. Girls and nonbinary students were more likely to report that feeling depressed, stressed, or anxious interfered with their learning.

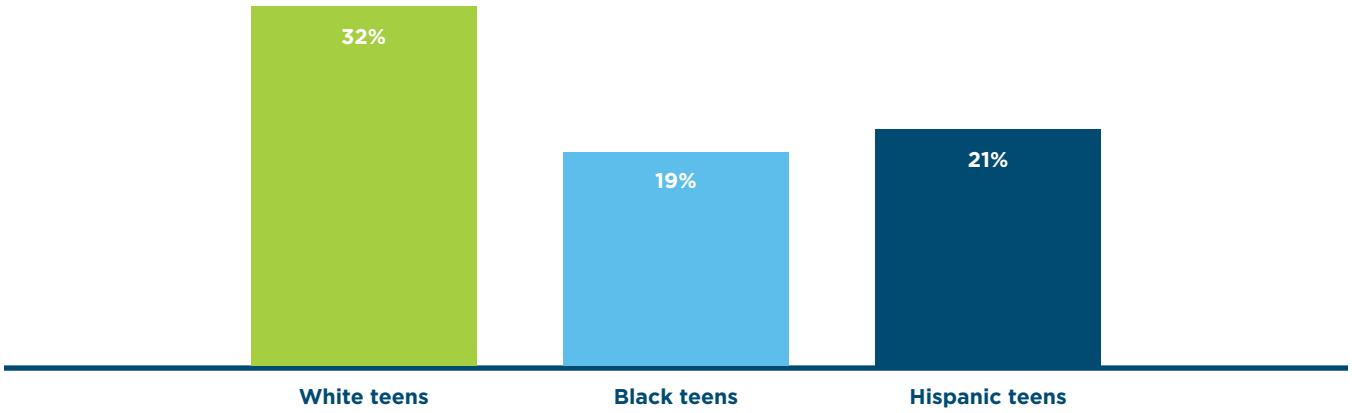
Male students report fewer mental-health challenges than their peers: Do any of the following make it hard for you to do your best in school?



Source: Youth Truth.

The Child Mind Institute finds that nonwhite teens reported more mental-health concerns than their white peers during the pandemic and its disruptions after returning to in-person learning, including negative impact on focus and academic progress, coping with loss and grief, economic struggles or food insecurity, and mental-health challenges related to the pandemic. Black and Hispanic teens were also far less likely to say they have access to all the counseling and mental-health supports they need or want.

White teens were more likely than Black and Hispanic teens to say that they have access to all the mental-health resources they need or want



Source: Child Mind Institute.

The Institute recommends that in order to be effective, efforts to support young people's mental health moving forward must address the specific stressors consistently reported by vulnerable groups.

The isolation and dislocation of the pandemic may have fallen disproportionately onto students with disabilities. Emerging evidence suggested broad differences in learning losses among students with disabilities. Students most likely to have been affected by instructional disruptions include those who, due to the complexity of their disability, require more significant accommodations, modifications, and specialized therapies.

The pandemic may have accelerated mounting mental health challenges for teenage girls. In some cases, the toll grew tragic. In March 2021, a year into the pandemic, the Centers for Disease Control reported that suspected suicide attempts among girls aged 12–17 had jumped 51 percent.

The New York Times reported a wave of painful deaths prompted soul-searching among school leaders and mental-health professionals. Parents of young people lost to suicide said that while adolescence can feel alienating and stressful during the best of times, it became unbearable for teens who were cut off from peers and caring adults. One father poignantly declared in a viral video that his son died of the coronavirus—but "not in the way you think." Mounting tragedies prompted school-system leaders in cities like Las Vegas to overcome public-health fears and rush students back to campuses.

But tragedy was not ubiquitous. Even amid personal hardship, young people can, and often do, grow, learn, and become stronger. Some students thrived and discovered a new sense of self-efficacy. They were isolated from friends but also from bullies, racism, inequitable discipline practices, and mundane distractions that got in the way of their learning.

The challenge for our education system now is to develop a deeper and more complex understanding of the variety and complexity of students' emotional needs. Failure to do so could have long-term consequences. One parent warned in an interview with CRPE researchers that her daughter reported feeling depressed and anxious. Her symptoms escalated as the period of social distancing and disrupted schooling dragged on. "I think that the long-term effects of this on kids' perception of school and the kinds of skills they will learn will far outlive [the pandemic]," she said.

Some students are likely to rebound quickly, but others are not.

Different students experienced the pandemic in different ways, and for that reason, there is no one state of the American student. The situation is, to use a term coined by Todd Rose, author of *The End of Average*, "jagged." Some students are rebounding quickly, while others are in very serious need of help in one or many areas. Some students thrived when they were out of the traditional school system, perhaps pointing a way to a better future for public education.

However, we still do not know exactly how jagged the situation is. We know the pandemic exacerbated existing inequities across race, class, language background, and disability—and the disadvantages students faced before the pandemic compounded the crisis. But we also know that averages obscure more complex realities. For any individual student, the pandemic's impact could be far better, or far worse, than average data show.

> **"With patients during the pandemic, I've seen the good and the bad and the ugly in terms of what people have had to go through. I've seen people be resilient and at the same time very fragile."**
>
> Jill Emanuele, senior director of the Mood Disorders Center at the Child Mind Institute

On average, families with wealth and privilege were relatively insulated from systemic failure. White and affluent families were less likely to die or be hospitalized with Covid-19, less likely to lose their jobs during the pandemic, and more likely to see schools in their communities stay open. If their schools closed, their children were more likely to have access to the technology for online learning and more likely to have remote jobs that allowed them to stay home and support their kids. If remote learning didn't meet their needs, affluent families could purchase online courses or tutoring, send their children to in-person private schools, or spend money to create learning pods in their living rooms. Black, Hispanic, and low-income Americans were more likely to die or be hospitalized due to Covid-19. More than other families, their schools closed and their kids had limited access to computers, the Internet, and quiet places to study. These parents often had jobs that precluded them from staying home and supporting remote learning. Their students were more likely to have to care for relatives or work for pay. And if the arrangements that local schools provided didn't meet their needs, they often lacked viable alternatives.

> **"I was panicking. I thought, 'If we don't do something quick, he's going to be in trouble.' Regardless of the world shutting down, time was still passing, and he was still going to have to go to second grade next year."**
>
> Kanisha Aikin, parent of a first grader with suspected dyslexia (*Education Week*)

This kaleidoscope of inequity was the product of a system that was never designed to meet the needs of every student. The pandemic exposed and exacerbated inequities hardwired into the operating system of public education.

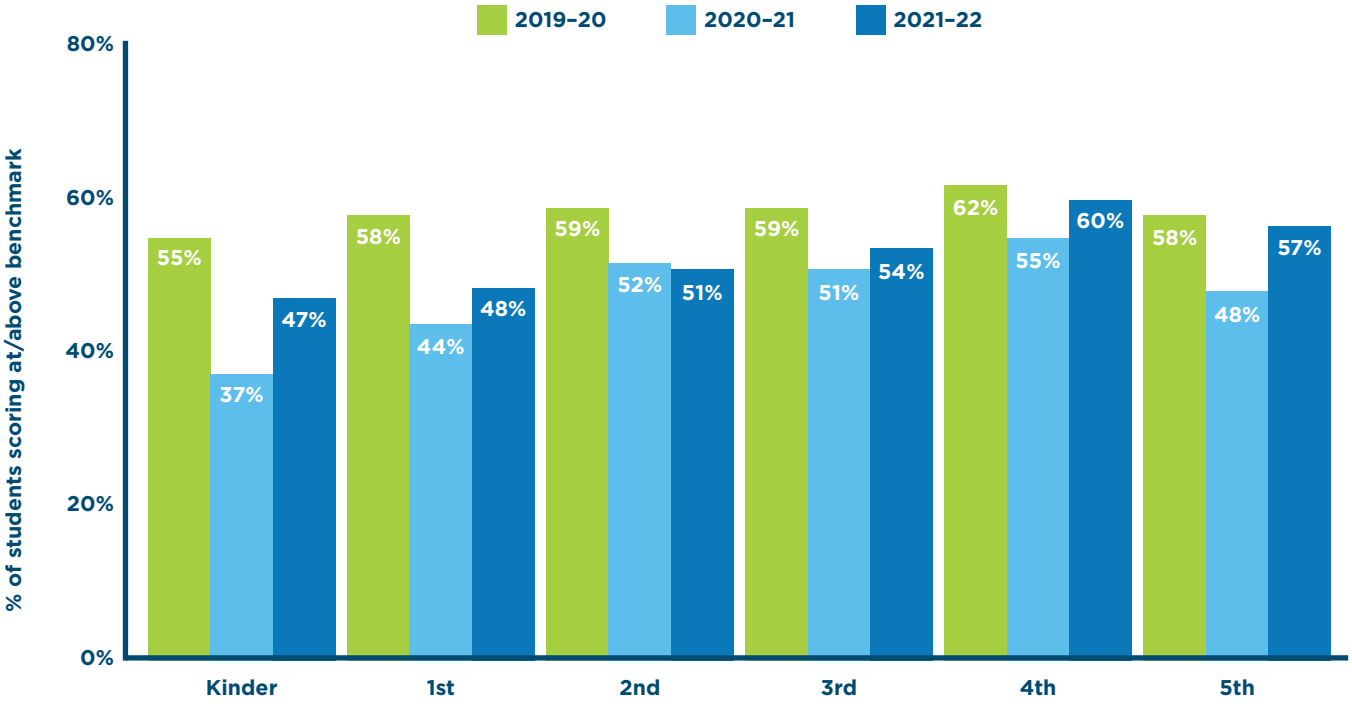
One study found that children with autism spectrum disorder (ASD) and their families suffered especially significant disruption to schooling and to services such as occupational, speech, or applied behavioral therapies. In the survey of 3,502 caregivers of children with ASD, 64 percent reported that the lack of services had "severely or moderately" impacted their child's symptoms or behavior. Of those with preschool-aged children on the autism spectrum, 80 percent said the disruption caused those children "extreme to moderate stress." Though many therapeutic services were continuing via telehealth, most survey respondents were not taking advantage of them after a month, and those that were "reported minimal benefit."

Some students are catching up, but time is running out for others.

At the beginning of the 2022–23 school year, we still know too little about how quickly students are bouncing back from school closures and other disruptions to learning. Children are resilient, and being back in school is clearly having a positive effect on their academic recovery, social-skills development, and mental health, especially when schools double down on interventions and supports.

Yet we know from the latest research that the recovery patterns are fundamentally uneven. One research study showed that while older elementary-age students (fourth and fifth grade) showed literacy skills at near-prepandemic levels in 2021–22, the same was not true for younger students, especially those who were Black or Hispanic.

Percent of students on track (ready for core instruction)



Source: Amplify's mCLASS:DIBELS 8th Edition data.

Another analysis showed that income-based disparities in the elementary grades grew during the pandemic by 15 percent in reading and 20 percent in math.

This "K-shaped recovery" is leading to widening achievement gaps. But the disparities extend beyond race and income. Students who fell far behind in early literacy or math skills could see long-lasting effects if those holes in knowledge are not addressed quickly with evidence-based interventions such as high-dosage tutoring. Unfortunately, recent surveys via the American School District Panel show that only one in ten school districts have added significant tutoring programs in the past two years.

At the pace of recovery we are seeing today, too many students of all races and income levels are sure to graduate in this and coming years without the skills and knowledge needed for college and career. The long-term tolls on mental health and social skills remain unknown. Continued monitoring and more serious solutions to identify and address student needs are urgently needed.

> **"It's been hard to see that the families whose children have had the least degree of disruptions in their services are the ones who have the most resources to advocate for in-person services, live in neighborhoods that have had more availability of therapists and teachers who will provide in-person services, and/or have the financial means to receive all their services privately."**
>
> Cynthia Martin, senior director of the Autism Center at the Child Mind Institute

What will be the pandemic's long-term impact on future learning?

A critical question is how interruptions to schooling during the crisis will affect students' future learning.

In a best-case scenario, the impact proves transitory. Students are resilient—they bounce back quickly, recovering socially and emotionally. Their learning can accelerate, allowing them to quickly make up for instruction they missed.

In a middle-of-the-road scenario, the impact proves persistent. Students don't accelerate their learning, but they resume their progress at a prepandemic pace. They will have learned less, and acquired fewer skills, by the time they graduate than students who are a little younger or a little older.

In a worst-case scenario, the impact proves cumulative. That is, the learning students missed during the pandemic also hurts their future learning, causing them to make less progress, or acquire fewer skills, than they otherwise would have. As with past crises and disruptions, this could lead to a lost generation of students—or, as may be more likely, a lost generation of *some* students.

What we do next matters.

II. Failure by design: It didn't have to be this way

It should have been entirely predictable that a rigid public education system would fail precisely those students most in need of help. The kids are not all right now, and they were not all right before. Flatlining achievement, growing gaps between the haves and have-nots, mounting mental-health concerns, and increasing numbers of disengaged students were the reality before the pandemic. These facts point to a public education system ill-equipped to prepare students to thrive as adults in the 21st century, much less to prepare the next generation of entrepreneurs, scientists, and civic leaders to lead and address increasingly complex challenges in a fast-changing world.

> **"Parents are frustrated and concerned their children aren't getting anything right now, and I don't have to leave my street to see inequity. . . . We know that most of our kids were already behind before the pandemic, and we know they're even farther behind now, not having no instruction, and parents aren't teachers."**
>
> Sarah Carpenter, parent advocate in Memphis, TN (Fox 13)

Before the pandemic, international PISA exams showed that America has the largest academic performance gap between rich and poor students in the industrialized world. In the decade before the pandemic, the National Assessment of Educational Progress showed declining scores among students with disabilities on five of the six national exams for fourth and eighth graders. Gaps with their peers were growing wider.

Rising suicides and youth mental-health challenges—especially among girls—were growing prepandemic. Students reported in surveys that they grew more bored and more disengaged the longer they progressed through school.

About half of the estimated 7.7 million children in the United States who had a treatable mental-health disorder in 2016 did not receive adequate treatment, according to a University of Michigan study. In almost every state, there is a serious lack of accredited professionals, including child psychiatrists, therapists, and social workers.

Something was wrong, and people knew it. Prepandemic, Americans reported different values for "success" than is mirrored in typical education preparation and expectations, expressing a desire for their children to have fulfilling lives, not necessarily high-achieving lives. While families know that academic skills matter, they define a successful educational experience as one that contributes to a more joyful and fulfilling life.

A brittle public education system failed to meet many students' needs and exacerbated preexisting inequalities.

Schools began closing in late February 2020. By late March, every campus in the nation was shuttered. Few students had access to summer school, and by July, rising Covid-19 case counts threw reopening plans into chaos, forcing a lurch back to remote instruction in fall 2020. Then, in the winter, the worst wave of the virus forced another round of school closures. Reopening resumed in the spring—though reopening campuses did not necessarily assure all students could return.

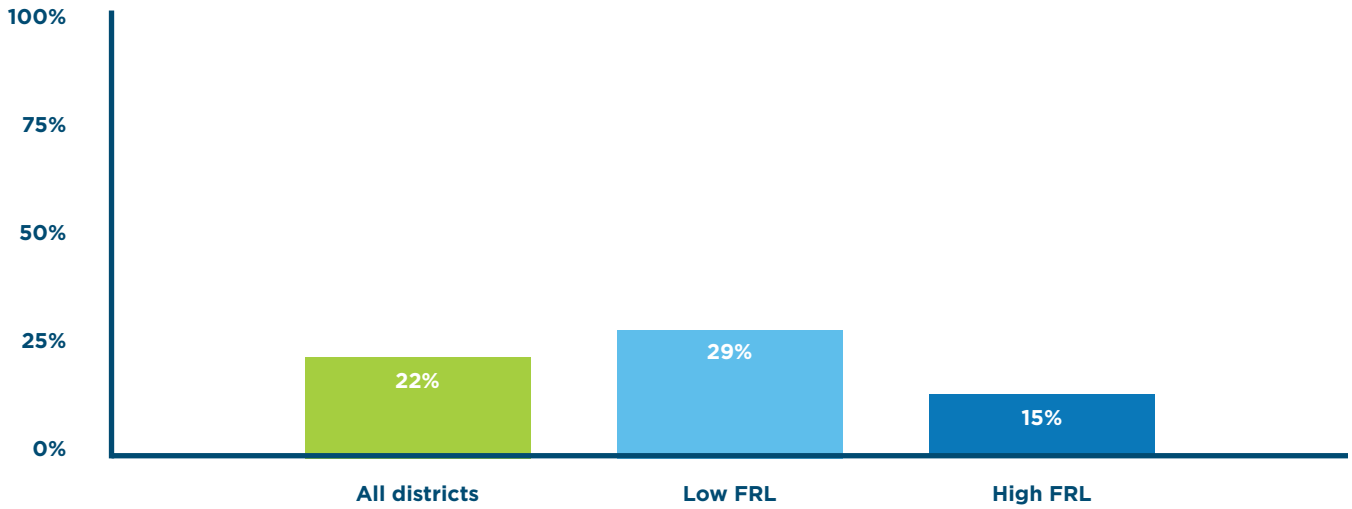
Through all this, what schooling meant varied widely from community to community.

In-person learning mostly resumed by the 2021–22 school year. However, most school leaders reported high rates of student illness and quarantines, unruly student behavior, teacher burnout, and ongoing staffing shortages. Many districts' plans to teach all students at grade level and provide just-in-time help on missed materials were impossible to implement due to frequent student and teacher absences. The Omicron variant caused yet another round of closures. Layered on all of this were ongoing local political tensions over mask and vaccine mandates and other controversies over cultural issues. Most system leaders reported in casual conversation that the second year of the pandemic was much harder than the first.

A study by RAND found that just 15 percent of teachers whose schools were operating remotely said they covered a typical year's worth of material in 2020–21, compared to 35 percent of those teaching in person. Another analysis found that less than half of parents nationally reported having received key instructional resources, such as video lessons and regular access to teachers, during the spring.

Anemic district and school system responses hit lower-income students and other vulnerable populations the hardest. Affluent districts were twice as likely as high-poverty districts to require live instruction.

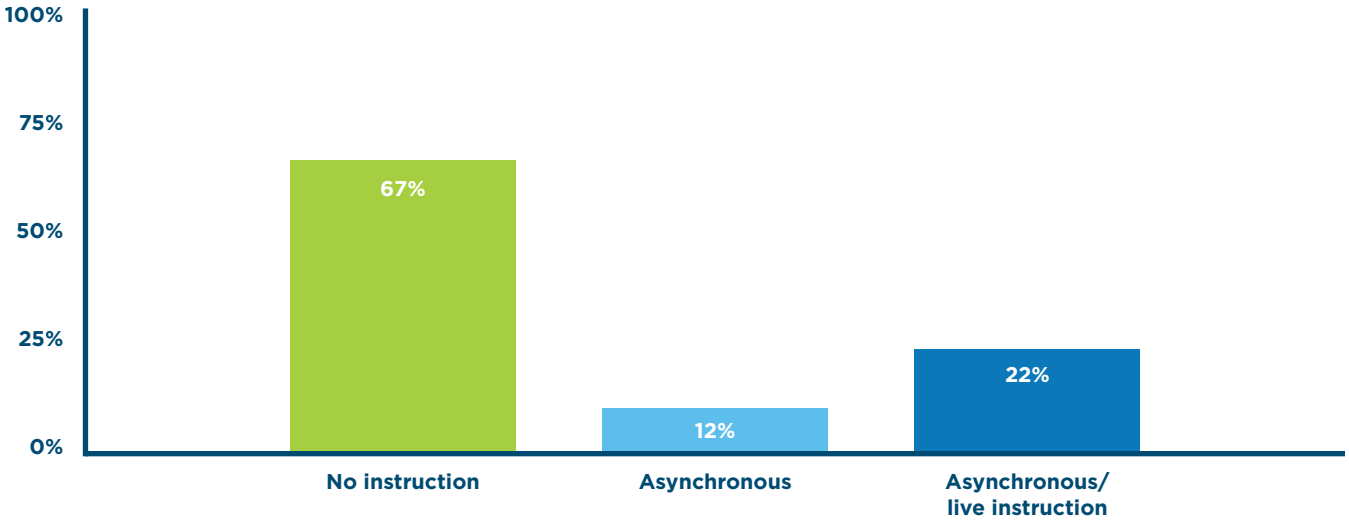
Affluent districts were twice as likely as high-poverty districts to require live instruction: Districts that expected synchronous instruction for some or all students in spring 2020



Source: CRPE.

By the end of the 2019–20 academic year and four months into the pandemic, CRPE's analyses showed that only one out of three school districts nationwide required teachers to provide remote instruction. Only 22 percent offered live instruction (with teachers engaging in real time with students over the Internet via Zoom, Teams, or another platform). Those that did provide live instruction did so in a very limited way. In one national survey, teachers reported spending more time on review and about half as much time as usual on instruction. Teachers estimated their students were spending, on average, just three hours a day learning, half the time they spent previously.

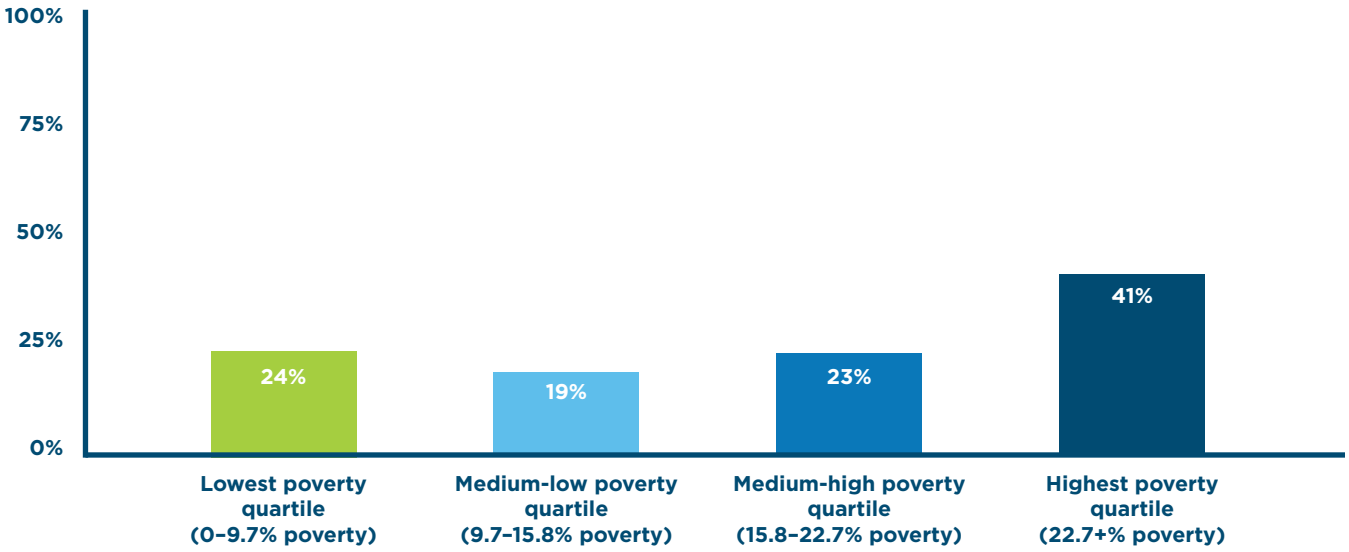
Nationally, the majority of districts did not provide any instruction in spring 2020



Source: CRPE.

Come fall 2021, after a full summer to plan, most districts started the year late, scrambling to adjust to the fact that the virus was still raging. Eventually, most offered at least some live instruction and more sophisticated remote instruction. However, inequities persisted. Nationally, students in the highest-poverty districts were the most likely to start the year in remote learning. State departments of education largely deferred to districts and local decision-making.

Nationally, students in the highest-poverty districts were most likely to start 2021–22 in remote learning



Source: CRPE.

Unprepared and left to their own devices (literally), districts, schools, and families had to cope.

The majority of parents, then, were left to fend for themselves. Some received paper packets in the mail and did their best to help their child complete them. Others found curriculum online. Surveys showed that parents homeschooled in historically large numbers. Some hired teachers to teach a small group of students in what came to be known as "pods".

Communities rose up. YMCAs, after-school programs, Boys and Girls Clubs, cities, counties, and many local community-based organizations offered "learning hubs" to provide students access to Wi-Fi and a place to study and socialize while their parents were at work. One third of U.S. cities reviewed by CRPE offered some form of these hubs.

Despite these supports and innovative solutions, some were so frustrated with their local public schools that they enrolled in private schools or held their child back a year. Public school enrollment declined by 3 percent nationally in the 2020–21 school year, compared to the 2019–20 school year. Pre-K and Kindergarten enrollment fell by a full 13 percent during the same period.

This constant churn of disruptions created an impossible situation for families and educators. The longer school buildings were closed, the greater the harm to students' learning and well-being. But even those students whose schools managed to stay open were unlikely to receive a year's worth of instruction.

Regardless of their learning mode, more students were chronically absent, failing courses, and struggling to complete assignments.

According to one national survey, more than 40 percent of lower-income parents said their child had to use a cell phone or public Wi-Fi to do their schoolwork. Only 10 percent or less of upper-income families reported that was the case for their child.

Politics, not science, drove too many school closure and reopening decisions.

Whereas other countries made national proclamations to keep schools open or close them *en masse*, thereby insulating students from local political preferences, U.S. schools were subject to a hodgepodge of decisions based on local politics. Teachers' unions fought against reopening until teachers were fully vaccinated. Right-leaning governors forced schools to be open even when national guidance suggested they should not be.

Each state had its own criteria for reopening metrics, and they varied dramatically. A CRPE analysis showed that this highly varied approach to reopening led many districts, mostly in Republican-led states, to open despite local health conditions that warranted closure, while others, mostly Democrat-led states, stayed closed despite conditions that warranted opening.

Another analysis showed a strong relationship between school openings and support for then-President Donald Trump. Yet another analysis found school districts with lengthier collective-bargaining agreements were less likely to start the fall 2020 semester with in-person instruction, were less likely to ever open for in-person instruction during the fall semester, and spent more weeks overall in distance learning.

Wildly varied system responses meant every student had a different pandemic education experience.

As a result of local policy and political realities, there was no typical pandemic educational experience. Every student experienced their own unique circumstances. But it was not entirely random. As might have been predicted, the students most likely to experience disruption were those already least likely to stay on grade level, graduate, and attend college.

The state of American students at this stage of the pandemic depends in part on the circumstances of their home lives and in part on how nimble or moribund their district was.

Family realities were, for many, overwhelming barriers to learning. Students were working, shouldering daily responsibilities such as caring for younger siblings, and dealing with food and housing insecurity. The pain and anger of unjust police brutality and resulting uprisings only exacerbated such challenges. Low-income, Black, Latino, and multiracial students tended to report more barriers to learning during the pandemic than their peers from other backgrounds.

But unfortunately, the two sets of factors—challenges at home and at school—too often overlapped, with the students with the most unstable family lives falling victim to educational bureaucracies, paralyzed by the crisis and unable to meet their needs, while some school districts and surrounding communities turned on a dime and found ways to innovate to meet the diverse needs of students and families.

Some countries marshaled the will to institute national reopening standards, to provide technology and supports to all those who needed them, and to protect school children from politics. Meanwhile, the U.S. response was slow, chaotic, and driven by politics.

An inability to adapt, to meet individual needs, and to leverage all available community and academic resources should be an embarrassment to every citizen. A public education system built for rigidity and sameness collapsed in the face of uncertainty and highly varied needs.

A public education system built for rigidity and sameness collapsed in the face of uncertainty and highly varied needs.

If we are to address this generation's achievement gaps that are now becoming chasms and prepare the next generation for the future, we must attend to the underlying systemic dysfunctions and rigidities and reimagine the goals and structures for what public education can be.

III. A path forward: New discoveries guide the way

The pandemic and school closures, no doubt, caused harm to students.

But by upending normal operations of public education and forcing schools to operate differently, it also created space for innovation, experimentation, and discovery. Families and communities built their own solutions to fill gaps in the support. Students explored new dimensions of their own interests and identities that were often underplayed in traditional schools.

Their discoveries may offer a breadcrumb trail to a better future—if our systems are prepared to accept them.

A void of formal instruction created new space for exploration.

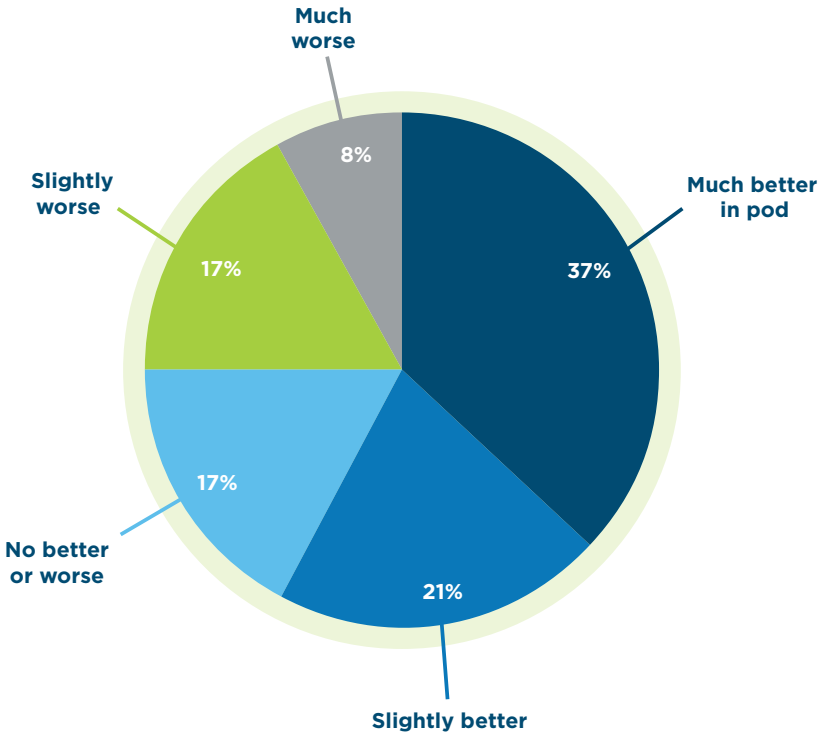
In the void left by school closures, students found new space to explore their interests, affirm their identities, or tailor learning experiences to their needs—opportunities they'd never had before. School closures also prompted some families to construct learning environments all their own—either to supplement the remote learning they received from their schools or to replace their schools with something new and different.

A group of researchers who interviewed students in Denver Public Schools described the story of Lucinda, who, during free time that emerged as the result of the pandemic's disruptions, took time to learn about her Chicana heritage. She reported that the book she had read to understand the history of her heritage was never assigned in class and that she didn't have time to pick it up until the pandemic disrupted school and shut down other activities.

Other students interviewed by the researchers took up interests in stock trading, languages, skateboarding, cooking and baking, gardening, hair dyeing, and visual art. Still others had rare daytime opportunities to explore their own communities and came to see them in a new light.

In *ad hoc* learning communities launched by families and communities, these stories of greater efficacy and affirmation were common. Two-thirds of families surveyed by CRPE as part of the first national study of pandemic learning pods found advantages from the experience relative to their prior experience in conventional schools. The most commonly cited benefit: their students were more likely to be known, heard, and valued.

Parents' views on their child's overall experience in a pod, compared to prepandemic school



Source: CRPE.

The benefits of affirming learning environments were especially salient among Black parents, the CRPE study showed. One Black parent said the following in an interview:

In the Black Hills of South Dakota, a learning pod operated by a Lakota homeschool co-op built an entire curriculum around its students' culture. Previously, Lakota traditions had been relegated to a one-day-per-week elective.

In Colorado, the Ute Mountain Ute tribe crafted a plan to integrate Ute arts, language, and culture into all of the curriculum and provide students with a web of social support. Describing the benefits of the plan, Manuel Heart, the tribe's chairman, drew a contrast with generations of schools that stamped out or marginalized indigenous cultures: "In the past, generations of our grandfathers and our parents, a lot of our students were taken away from our homes and they were taught to assimilate into the system," he said, according

> **"We got to choose the books that they're reading and the projects that they're doing. And we got to have say-so in voting on their curriculum. And that level of empowerment to parents is something that we do not see in many areas where you have to fight for [representation], or you still might feel marginalized in larger settings. . . . It's been amazing to be able to prioritize what we felt was important."**
>
> Black parent on the experience of designing a pandemic learning pod

to the Keystone Policy Center. "I think while each one of us are also looking to streamline education to meet the needs of our future, we also want to include the past."

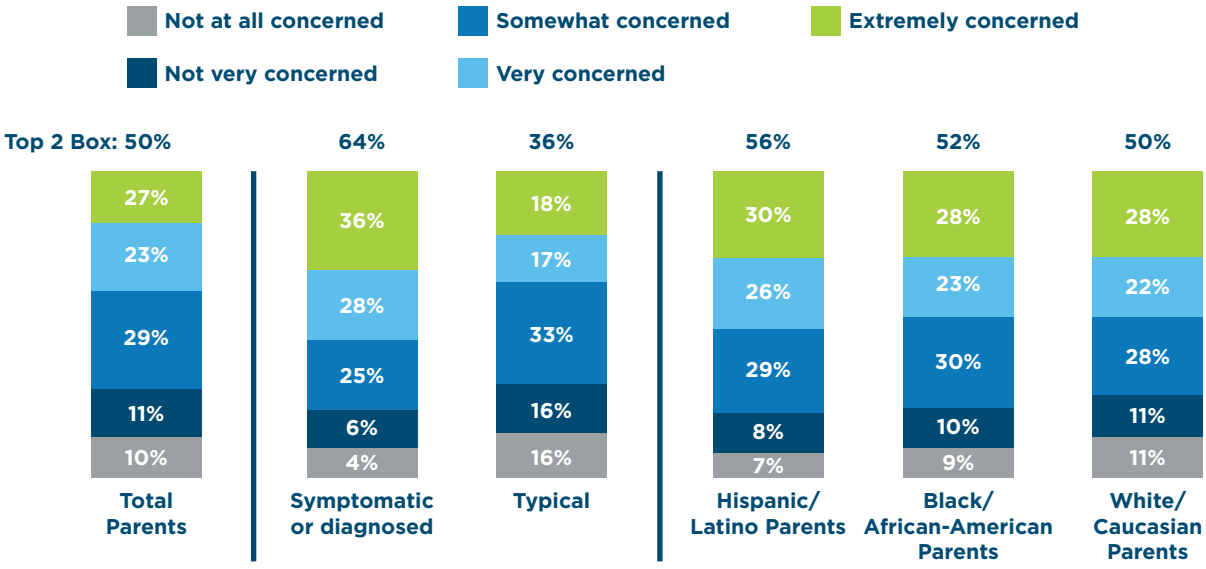
Individualized solutions helped meet the needs of complex learners.

Another group of students—those with learning differences, disabilities, or other complex needs—had a lot to gain. Anecdotal reports abound about how these students benefited from opportunities to adjust the pace of their learning, participate in virtual classes free from stigma, or collaborate with teachers in ways that would not have been possible in a traditional classroom. One parent described how her student, who has a disability, thrived academically during remote learning, despite missing friends:

> **"There was a huge change in his stress levels, and he was able to concentrate on his schoolwork. He enjoyed learning again. Before, school was kind of tedious for him."**
>
> Alex, parent of a seventh-grader with ADHD and a language disorder, Boston, MA (*Washington Post*)

To be sure, these positive experiences were likely far from the norm, as students and families weathered interruptions of essential special-education services, with potentially devastating consequences. Back-to-school surveys taken by the learning disabilities advocacy group Understood and the Latino civil-rights organization UnidosUS, found parents of students with learning disabilities were more than 50 percent more likely than parents of typically developing students to worry that their child would fall irreparably behind, both academically and emotionally. Parents of students with learning differences were almost twice as likely to report that their children dealt with greater inability to concentrate, difficulty paying attention in school, or struggles with anxiety since the pandemic began.

Concern level about children facing challenges in 2021–22



Source: Understood and UnidosUS.

But while the interruptions of schools hurt many students, they also upended the norms of a system that too often had failed to serve these students well and created opportunities to experiment with new approaches.

A mother from the Dallas–Fort Worth metropolitan area interviewed by CRPE researchers formed a learning pod for her third-grade son and four other students. Her son had been receiving services for learning disabilities before the pandemic. His experience learning in a small group in his family's living room went so well that his mom was looking for ways to keep her learning pod going in future years or, failing that, to ensure he could attend a school with small classes that would allow him to receive the same level of individualized attention.

Constructing new and better learning environments on the fly was, in many cases, a luxury experience, available disproportionately to parents whose wealth and privilege allowed them to hire private instructors or who possessed the wherewithal to make great sacrifices, such as quitting their jobs to take on a greater role supporting their children's education. But their stories—and their new self-reliance—reveal the potential for broader change that could benefit all students with learning differences.

Even families who continued to rely on traditional public schools saw benefits that could make education systems more responsive. For example, virtual IEP meetings were more accessible to parents and helped even out power dynamics that often skew negotiations over special-education accommodations.

When learning can happen anywhere, parents and communities took on new roles.

When learning shifted online, parents gained an unprecedented, up-front glimpse into teaching and learning. Some said they had their eyes opened about bias against students of color or boring, desultory teaching—deficiencies they feared but had never observed directly.

Close contact with instruction could also deepen some parents' appreciation for educators' skill and dedication and encourage them to work more closely with teachers. As one school system administrator said, "It melts your heart to see these stories of resilience, and parents that were like, 'I never was interested in my kid's school learning, and now I'm doing it right there with them, and we've got a system, and I'm really proud of what I've done.'"

> **"His behavior is better. He's a much happier kid. I can honestly say we'd love to keep it going indefinitely, just because of the benefits that we've seen from the small environment and the more individualized learning."**
>
> Mother of a third-grader in Texas who hosted a learning pod for her son, who has a learning disability (CRPE)

Students with learning differences especially benefited from closer links between parents and teachers. When parents, who knew these students best, were able to directly support learning, children thrived.

"To be able to sit there and watch my kid count money, that he knew a quarter is 25 cents, that he knew how to tell time, it was amazing," said Patty Leitz of Columbus, OH, who felt newly empowered to support the learning of her seven-year-old son who has autism, according to the *Christian Science Monitor*.

Remote instruction also revealed the potential for increased access to diverse learning experiences. "We're going to be able to grow and expand on [learning outside the school building] more than we would have been able to do before the pandemic," Tulsa Public Schools Superintendent Deborah Gist said, according to the *Hechinger Report*. "Our students need the ability to learn outside of their school through internships, through apprenticeships, through concurrent learning with higher education and technical schools."

When teaching and learning were no longer confined to the four walls of school, parks, museums, and community centers became indispensable learning locations. Students found new opportunities to learn in places that affirmed their identities or offered more engaging or playful learning opportunities. Many schools worked in partnership with organizations that previously offered after-school or summer programs but in the pandemic era began offering learning support during the school day.

The prospect of anytime-anywhere learning also helped overcome barriers to internships, apprenticeships, or other career-connected learning opportunities. These rewarding experiences often are difficult for many students to arrange, given traditional school schedules and bus routes. As one district leader put it, pandemic-era remote learning "has shown our parents and teachers that our kids can do some classes online or virtually, which then frees up opportunities for them to do more and longer internships."

Educators saw new possibilities—but can the system support them?

Schools deployed teachers in new ways—tapping their best instructors to deliver online lectures to larger-than-usual groups of students, for example, while other educators who excelled at building strong student relationships provided support.

> **"The strategies that we often reserved for 'gifted and talented kids' are great strategies that work for every student."**
>
> Robin Totten, the principal of Gregory Heights Elementary, Burien, WA (*Seattle Times*)

Before the pandemic, teacher training and professional development were often divorced from the work teachers actually did in their classroom. But during the pandemic, the National Summer School Initiative hatched a promising alternative: nationwide networks of mentor teachers. Master teachers would teach model lessons, and then recordings of those sessions would be shared with teams of educators working in the same grade and subjects, often in other cities and states. Mentor teachers would also talk local teachers through what went well and what could have gone better in their own local lessons—connecting teacher professional development and coaching directly, in real time, to the work educators were doing in the classroom.

Where remote learning enabled new methods of deploying staff and supporting educators, the pandemic's impact on student learning made these efforts more urgent. School system leaders discovered that providing learning acceleration, in which teachers provide real-time support so students can master grade-level material (rather than pulling them out into lower-level remediation classes), or large-scale tutoring efforts, would be essential to helping their students recover.

But making either of those efforts a reality, at a time when they were struggling to simply provide adequate staff or keep schools open five days a week, would require schools to rethink who counted as an educator, what it meant for educators to work together, and in what new ways they could partner effectively with organizations in their communities. During the pandemic, school districts in cities such as Indianapolis, Cleveland, and Oakland partnered with after-school providers, social-service agencies, and family advocacy groups to support students with tutoring, mental-health supports, and summer school. As we have argued, these "helpers" could play a critical role supporting students when the crisis subsides.

Fresh collaborations created new opportunities for students and teachers.

The pandemic brought new urgency to questions America's public education system was already struggling to confront: How can communities better weave together schools and other organizations that are essential to supporting student learning? How should we rethink who counts as a teacher and what their jobs look like? What kinds of learning experiences will ensure all students develop the skills—such as creativity and collaboration—that are essential to thriving in the 21st century? Why don't schools focus first on their learners with the most complex needs, who have typically fallen through the cracks—since a system designed for these students will ultimately do right by *all* students?

The positive experiences of students outside the system revealed the promise of new answers to those questions. But good new ideas won't be adopted automatically.

> **Diverse needs will require diverse solutions, delivered by a diverse cast of community actors far beyond the bounds of our current public education system.**

The K–12 system is struggling to fulfill its basic functions, much less find the space and time to change. Educator burnout and leadership turnover bring paralysis. Political divisions and fears of new and unpredictable Covid-19 variants threaten further instability. And some parents who discovered new possibilities outside the school system have left—possibly for good, taking per-pupil funding with them. As one principal told us, there is a "self-sealing inertia," where the system takes care of itself first, at play. As schools struggle with ongoing pandemic realities and quickly allocate federal dollars, the opportunity window for change is closing fast.

Are we serious about a better path forward for public education? If so, states and communities need to come together to try out new approaches and adopt those that work.

This will require state and federal investments in research and development. It will require school districts to create structures that allow them to test and refine new learning arrangements that challenge current definitions of what we currently call school. It will require a new, diverse

mobilization of all those who saw deficiencies in the American education system during the pandemic that shocked them—mental-health providers, church leaders, after-school providers, community activists, suburban parents, and parents of students with disabilities, as well as many others.

This new coalition must be anchored in the core belief that the needs of students are so varied, so profound, and so multifaceted that the one best system can't possibly meet them all. Diverse needs will require diverse solutions, delivered by a diverse cast of community actors far beyond the bounds of our current public education system.

IV. Roadmap to recovery: The critical next five years

To people working within America's education system in the fall of 2022, pausing to contemplate a vision of a better world may feel like an impossible luxury. Many are exhausted by two years of pandemic-fueled chaos, overwhelmed by the daily realities of keeping students safe and in school, and besieged by increasingly heated politics.

But crises have always summoned the best in American resilience and ingenuity. Recall Abraham Lincoln's message to Congress in 1962: "The occasion is piled high with difficulty and we must rise with the occasion. As our case is new, we must think anew and act anew." Or Franklin Roosevelt's exhortation for a nation weary from a world war strive for "new and better days.

In the future, we could look back on this time as the turning point in American education, when new coalitions and partnerships set us on the path to actually achieving a reborn system. We want to write that "State of the American Student: Fall 2027" narrative as reality, not speculative fiction.

Immediate and sustained action is required.

Many questions—and potential risks—exist in committing to rethinking our most fundamental assumptions to try to make this vision a reality. But the recovery we envision will not come about without a national movement to ensure students are made whole for what they have lost and to chart a path to something far better.

Every day of the 2022–23 school year will be critical, followed by years of patient work restoring students' mental health, finishing their interrupted learning, and rebuilding trust and relationships torn by months of isolation and disruption. But an education system that allowed these needs to emerge in the first place will not ensure the full and just recovery that every student deserves. The pandemic amplified existing systemic flaws and injustices, but it did not create them.

We must overcome the inequities and rigidities hardwired into public education and ensure that what happened during this pandemic—near-complete systemic breakdowns, failed political leadership, a lack of creative problem solving at the system level, and a lack of individualized supports for students and educators. To address the root causes of the current crisis facing our country's children, we have no choice but to imagine a new education system—and start building it immediately. Doing so will take investment, experimentation, monitoring, and debate, as well as shifts in policy, practice, and power.

> **"Make no little plans. They have no magic to stir men's blood and probably will not themselves be realized. Make big plans, aim high in hope and work, remembering that a noble, logical diagram once recorded will never die, but long after we are gone will be a living thing, asserting itself with ever-growing insistency."**
>
> Daniel Burnham, American architect

The situation calls for "big plans."

There could not be a more urgent time for our education system to be at its best and most innovative, but it is far from that. The need for change was apparent before the pandemic, as schools struggled to nurture the creativity and collaboration students need to thrive as adults in the future economy, pathways to rewarding careers became too narrow and rigid, and the potential of countless students with disabilities, rare talents, or other complex needs went unrealized by a system incapable of flexing to meet their needs.

Federal dollars provide a temporary backstop against financial stress, but they don't guarantee that school systems will meet students' immediate needs or address public education's longer-term structural challenges. When that influx of funds ends in two years, untold numbers of school systems will face financial crises and will be forced to lay off teachers based on seniority, not quality.

If we enter an economic downturn, students could face bleak future employment and earning prospects. In a darker scenario, America could face growing instability, inequality, and civic unrest.

More optimistically, the U.S. public education—or, at least, public education in select states—could create urgent solutions for those most in need and, in the process, chart a path toward a more customized, joyful, equitable, and responsive system that prepares every student for the future and is equipped to handle future crises.

All of these scenarios call for radically different approaches to public education and a clear-eyed understanding of the difficulty of overcoming what one urban district superintendent called our "addiction to the *status quo*" in a system built to resist change, not embrace it.

There are many important steps educators can and should take immediately, such as tutoring, using an evidence-based literacy and math curriculum, and doing regular assessments to quickly identify and effectively address learning and other needs.

But the urgency and complexity of the situation require an ambitious term recovery plan that ensures every student gets what they need before they graduate, no matter what. That will require big, creative plans, clear metrics defining success, serious metrics for tracking progress, and deep investment in testing and scaling innovations.

1. Individualized, boundary-spanning solutions for every student

Diverse needs demand diverse solutions. As we have seen from this report, averages hide critical individual realities. Teachers, parents, and other potential community "helpers" need to be informed about each child's specific needs and progress so they can coordinate individualized solutions.

Every student and their family should have a full account of what they are owed, what it will take to meet their future aspirations, and how their education system will deliver it. They should be able to follow their child's progress and have access to funds that allow them to pay for tutoring, mental-health services, and supplemental learning opportunities that ensure they stay on track. Idaho's Empowering Parents grant program and Texas' Supplemental Special Education Services grants are two examples.

And every student should have access to a diverse array of resources, programs, and schools to meet their unique needs. Public funds should flow flexibly to allow families to craft, in partnership with experts, the best possible combination of tutoring, coursework, and nonacademic services to meet their needs.

Now is the time to put student interests over institutional interests and turf wars. It should not matter whether a school is called a charter or district school or whether students are tutored by after-school providers or school employees.

The challenges ahead are too daunting for schools to take on alone. Community partners will be necessary to build and sustain these individualized solutions. CRPE has been studying promising models for coordinated community action to support student learning that emerged during the pandemic. In cities such as Indianapolis, Cleveland, and Oakland, California, parents, churches, after-school providers, and other community groups became powerful partners during the pandemic, operating learning centers and supporting students.

Indianapolis was one of the first cities in the nation to launch a citywide network of learning hubs that provided in-person support to students while school campuses were closed—thanks in part to a strong partnership between the school district and The Mind Trust, a local nonprofit focused on improving education opportunities. Most of its learning hubs were operated by churches and community organizations, which have cultivated high levels of trust with neighborhoods they serve around the city.

The Oakland REACH has operated a virtual hub to provide intensive support to students and families, with an emphasis on literacy. The nonprofit parent advocacy organization formed a partnership with the Oakland Unified School District to support students during the pandemic. The Oakland REACH will continue to use its hubs to deliver literacy instruction consistent with the latest research on reading, and their partnership with the district will expand these practices to more district schools.

During the recovery, such collaborations should continue and expand, not recede.

If communities can marshall resources during a crisis, imagine what they can do with time to plan, strategize, and invest federal COVID relief dollars. Some districts are doing that now by building long-term partnerships that can support tutoring, mental health, mentoring, and job training—or provide students with more flexible learning experiences.

For some students, the future of schooling could be a variety of "hub-and-spoke" learning networks that connect educators, community organizations, and specialists to design individualized learning and support programs for each student.

Such new models are not only possible; they are here. But the key will be for the children most in need to have equal access to them. That will take sustained policy changes, including support for school districts to adopt such models and flexible public funding and public school choice policies to allow families to opt out of districts that do not offer them.

2. Ambitious national goals for recovery— and state and local strategies for reporting progress

If we are to know, years from now, whether students are getting recompense for all they missed when schools closed and whether profound inequalities are diminishing, we need to begin measuring students' recovery and reporting the progress they make.

The federal government has unleashed an unprecedented flood of resources, $130 billion dollars, to help schools recover from the pandemic, but it has almost no control over how those dollars are spent or the ability to directly influence what happens in school systems. Philanthropists can fund improvement initiatives, but they hold little power over whether the changes they seek will endure after their grants expire. However, these organizations do have the power to call attention to student needs, set ambitious goals for meeting those needs, and support a large-scale effort to track progress.

This, in turn, would help rally states and communities to come together to set postpandemic priorities for their local education systems. These localized efforts should be informed or led by students, who have the highest stake in recovery and restitution. There could be variation from state to state. Different localities may set different priorities. But the current void in data we've seen in our research shows that we need to get serious about measuring things we say we care about. For example, we currently have no solid national data on the following:

- How many students are still missing or have dropped out of school during the pandemic?
- How are students with disabilities faring?
- How many high school graduates this year and in future years will exit the system unprepared for college and careers?

In the coming years, it will be critical for all 50 states to track and transparently report on progress toward restitution and recovery. This reporting should not be focused on test scores alone. As much as possible, states should focus on a set of key indicators of student welfare and progress toward college and career readiness.

In future editions, we hope to be able to report much more comprehensive national data on essential indicators of progress about the state of the American student. But that will require coordinated investments in a common research agenda and coordinated reporting on results. This is something the national Institute for Educational Science (IES) and national education philanthropies should come together to support.

3. National, large-scale research and development on innovation in education

Before the pandemic, a growing number of voices were calling for new approaches to teaching and learning that were designed to ensure all students graduate prepared not only to read, write, and compute but also to collaborate on diverse teams, devise creative solutions to new problems, and think critically in a democratic society.

The "one classroom, 30 kids" model, in which a teacher marches forward with material and hopes that students catch on, has aged poorly and should be left behind in recovery.

Instead, our education system should support diverse teams of educators who collaborate in and outside of school to design rich learning experiences, deliver tutoring and extra support to students who need it, and give students space to take risks and explore their interests. With this approach, the need to create a more sustainable workload for overburdened classroom teachers and design richer learning experiences for students need not be in conflict. Mesa Public Schools, for example, is establishing teams of educators who share rosters of students. The models put a premium on adapting instruction to meet the needs of individual students and are designed to leverage different areas of pedagogical and content expertise among teachers.

Other building blocks for new learning systems began to fall into place during the pandemic. Families flocked to microschools that provided more individualized student experiences. The Southern Nevada Urban Microschool is an example of civic and education leaders innovating on the fly to meet individual student needs.

Innovative programs, partnerships, and school designs specifically geared toward racially diverse students, such as the African Leadership Group, deserve more targeted research to learn more about the effectiveness of these models in addressing student welfare and academic outcomes.

Innovative programs like the National Summer School Initiative revolutionized professional coaching and collaboration for educators. And programs like ASU Digital Prep stepped in to provide targeted instruction to students during quarantine, in partnership with their regular teachers.

The United States also has much to learn from other countries that have dealt with disrupted learning from war or natural disasters, teacher shortages, trauma, and other challenges for decades.

We need a national research and development effort that identifies promising initiatives, rigorously tests their efficacy, reports results to policymakers and philanthropists, and identifies other systemic gaps that further innovations should address.

Now is the time to look to other countries for new tools that can teach kids to learn content as fast or faster than teachers can, so professional educators can focus on the most important and rewarding aspects of their work: developing deeper skills, designing customized programs for each child, and supporting students to take control of their own learning wherever possible. These kinds of efforts require large-scale investment in intentional experimentation and research.

What we do in the next five years matters.

Before the pandemic, stagnant debates over issues that have long been the focus of education reformers—funding, parental choice, school accountability—demanded an injection of fresh thinking to awaken new political coalitions and close long-standing divides. These structural reforms are more relevant than ever, but they must be reimagined in light of the need for fundamentally new models for delivering education and defining success.

The pandemic forced a reset, as families, educators, students, and community actors uncovered new possibilities. They realized learning can happen any time and anywhere. They discovered new helpers in their communities who can lend their time and talent to supporting students. They had no choice but to treat parents as essential partners in teaching and learning. They have emerged hungry for a new and better public education system.

Yet if we only focus on repaying what they have lost, we will fail the next generation of students. We owe them not only recovery and restitution but also a new and better system that prepares every student to thrive in an increasingly interconnected and turbulent world. The work to build that system must begin now.

Our challenge is to channel that hunger into immediate action. Otherwise, students will pay the price for what they've lost over the past two years. They lost instructional time due to school closures, disruptions, health fears, and inadequate access to remote learning. They lost critical building blocks of literacy and numeracy, which teachers typically assemble for the youngest students in grades K–2. They lost essential support—including legally mandated special-education services that allow 14 percent of America's K–12 students to sustain their educational progress. They lost social connections, as public health fears cut them off from their friends and caring adults. They lost countless ordinary rituals of growing up.

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How CRPE will help

The Center on Reinventing Public Education is committed to tracking and reporting data on pandemic recovery as well as tracking and reporting examples of reimaging teaching and learning. This report is the first of a series of annual reports we will produce each fall through 2027.

The Evidence Project, our collection of pandemic-related data on schools and families, will soon begin highlighting the latest nationwide research on academic and social recovery. Keep up by subscribing to the free newsletter, or use key words to search our research tracker. To establish a common base of knowledge, we'll continue to ask leading education experts to agree on what the best available research says about a variety of pandemic-related educational topics. The initial set of consensus papers — on academic impacts, student wellbeing, and the state of affairs for students with disabilities — will soon grow.

CRPE has also collected and analyzed an extensive set of data on school district policies and actions during the pandemic. Only a small portion of those data are referenced in this report; readers can access reports on specific topics and can search records by district or city on our website. More ambitious users can download a searchable district database featuring pandemic responses of America's 100 largest school systems.

We're continuing to investigate and suggest new measures to track that would offer important data on kids and their recovery—and that would not add extra burdens to state agencies.

We're also committed to identifying the most innovative new schools and highlighting what they're doing differently, especially when it comes to helping marginalized students succeed. The Canopy project, a joint effort between CRPE and the education nonprofit Transcend, features innovative school models that hold promise for replication and expansion. Another extensive project detailing pandemic learning pods and hubs offers important ideas for larger school systems to consider. Families and teachers value those ideas, our national survey suggested. In the future, we're planning to explore new approaches to learning that arose inside and outside traditional education systems, before and after the pandemic. The forthcoming Atlas of Innovation will examine the factors that affect the expansion of those practices/approaches.

For promising ways districts and states are spending their federal dollars to support recovery and reimagining, visit the EduRecoveryHub, cosponsored by CRPE, the Collaborative for Student Success, and the Edunomics Lab.

For big ideas about how to move to a more joyful, equitable, and resilient education system, see CRPE.org and in particular, our 25th anniversary series, Thinking Forward.

Finally, please reach out to us at crpe@asu.edu if you'd like to engage with us on any of these projects, have updates to the data presented in this report, or have questions about our research.

CRPE
REINVENTING PUBLIC EDUCATION

Mary Lou Fulton Teachers College
Arizona State University

The State of the American Student: Fall 2022
A guide to pandemic recovery and reinvention