

# How Has the Pandemic Affected Students with Disabilities? A Review of the Evidence to Date

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## About this Series

This report is part of a series that aims to provide a definitive account of the best available evidence on how the COVID-19 pandemic has affected America's students. The series is part of a broader effort, the [Evidence Project](#), which brings together researchers and policymakers to advance solutions-oriented analysis of the K-12 response to the COVID-19 pandemic.

The Center on Reinventing Public Education compiled hundreds of studies and convened panels of experts to interpret what the data show. Three initial reports assess what we know to date about the pandemic's effects on students' **academic progress**, its effects on their **mental health and social-emotional well-being**, and its impact on **students with disabilities**. We will update these assessments and add more topics over the coming year as new data become available.

We aim to present a coherent baseline of what we know, don't know, and need to know at this stage of the pandemic. These reports are designed to help system leaders, community leaders, policymakers, researchers, philanthropies, the media, and others to define ambitious goals and clear metrics that ensure our education system meets every student's needs over the coming years.

The series of papers will culminate in the release of CRPE's first annual *Profile of the American Student*. The report will provide a rigorous and nuanced assessment of 1) how extensive student needs and inequities are across a variety of dimensions, 2) how student needs vary across different dimensions and what that implies for policy and practice, and 3) what promising solutions and innovations are emerging to meet students' needs.

In future years, these reports will track progress toward repaying every student the educational opportunities they are owed after this traumatic and disruptive period. Our goal is to provide an ongoing assessment of student needs and a look forward toward restitution and recovery.

## I. Overview

The COVID-19 pandemic has disrupted education around the world and created extraordinary new challenges for students, families, educators, and policymakers. Its impacts on students' learning and well-being are far reaching, though not yet fully understood. However, early evidence indicates disproportionate effects on students with disabilities, a diverse group of seven million young people, or 14 percent of all U.S. students. Prolonged school closures, for example, separated many students with disabilities from the hands-on instructional supports and physical or cognitive therapies set forth by their Individualized Education Programs (IEPs). Adapting online learning platforms to ensure accessibility by students with a range of disabilities proved challenging for many educators and districts, especially during the pandemic's early months. While nearly all students have struggled to keep pace in 2020 and 2021, those who rely on specialized supports during ordinary times were doubly disadvantaged.

In June of 2021, the Center on Reinventing Education (CRPE) and the Center for Learner Equity gathered a panel of seven experts in educating students with disabilities to assess and reflect on current research. In this paper, we offer an agenda for researchers, policymakers, practitioners, and the philanthropic community in the years ahead. Perhaps the clearest takeaway from our review is the urgent need to know more about the experiences of students with disabilities.

### Panel of Experts

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### A Sudden Stop to Student Supports

*"He requires a lot extra just to achieve a little bit of the same."*

*– New York City parent Chrystal Bell, who joined a class-action lawsuit against city schools in late 2020 for failing to continue services for her son Caleb, who is nonverbal, deaf, and blind.*

By March 25, 2020, every public school building in the United States was closed—and most remained shut for the rest of the school year. Some teachers, principals, and systems quickly made the shift to remote instruction, while others struggled both with technological logistics and the pedagogical challenges posed by online instruction. Throughout the fall, more buildings

opened, with 81 percent of school districts offering at least some in-person instruction by November 2020, including 36 percent that were fully reopened.

What were the experiences of students with disabilities during those initial closures and in the long months since? To find out, we reviewed nearly 400 research reports, news stories, and case studies about education and the pandemic published since March 2020. We first sought to identify U.S. studies that included data specific to students with disabilities and, when relevant, offered comparable data over time. Only a handful met those criteria, so we expanded our review to include credible analyses published by states, districts, and established research organizations.

Despite casting a wide net, we found that less than 20 percent of the literature in our review even made references to the experiences or outcomes of students with disabilities. Furthermore, those relatively few studies that did discuss students with disabilities typically did not differentiate data by disability category or the level of service provided. Instead, they treat students who receive special-education services as a homogenous group. This singular category of “with disabilities,” however, includes a broad range of student profiles and needs, from those who participate in general-education classes with occasional help from an aide to students who use adaptive technology to participate in a specialized program. To gain additional insights into these varied experiences, we also reviewed a [sample of legal complaints](#) filed by families seeking to exercise their children’s rights under the federal Individuals with Disabilities Education Act.

## What the Research Says So Far

Even with this limited base of research to date, early evidence suggests widespread and lengthy interruptions in students’ specialized services, which essentially disappeared overnight at the outset of the pandemic. Anecdotal reports suggest that many students who typically receive more extensive supports and services regressed during long months at home. Those with less-intensive needs made some progress but lagged that of their neurotypical peers in both engagement and academic growth.

News reports also indicate that districts prioritized students with disabilities for in-person instruction during the 2020–21 school year, in what appears to be an acknowledgement of just how difficult it is to ensure accessibility and high-quality specialized instruction online. However, some states and districts also made surprising discoveries during this unplanned experiment in remote instruction. Some students with cognitive disabilities—especially those with attention issues that lead to them being highly distractable and those on the autism spectrum—thrived while learning online at home, often alone and at their own pace.

This combination of varied experiences and scant data indicates that there is much we don’t yet know about the experiences of students with disabilities during the last eighteen months. The information we have in hand so far implies that the consequences of these long interruptions are only just now starting to appear, in the form of the outcomes data available and a growing number of formal complaints and lawsuits by families. Despite the positive experiences for some students, the emerging data as a whole raises stark concerns. We fear a second crisis

may be looming in the 2021–22 school year, when students with disabilities return to school with steeper learning losses than their peers amid widespread trauma and stress associated with the pandemic.

## II. Overview of Findings

### What We Know

- Many students with disabilities did not receive the same quantity or quality of specialized therapies they received before the pandemic, due to shortened school days and the challenges of remote instruction.
- Students with disabilities experienced higher rates of absenteeism, incomplete assignments, and course failures compared to their typical peers, and the effect is more significant in mathematics than reading.
- Districts struggled most notably when trying to meet the needs of students who require more supports, including students with complex communication and learning disabilities.
- The negative impacts may be especially large for the youngest and oldest students—preschoolers aged three and up, in the earliest grades, and young adults nearing the age of twenty-one, when they transition out of special education and need new, community-based supports.
- Not all remote learning experiences were negative. Some students with disabilities, particularly those with emotional and attention issues, thrived in online environments that, when constructed with intentionality, fostered focused, individualized learning experiences.
- Greater technological connection helped many families become more involved with their children’s schooling. The shift to remote learning prompted districts to arrange virtual and more easily accessible IEP meetings with teachers, staff, and families. It also catalyzed efforts to prepare parents to support student learning at home.
- Initial challenges fueled the rapid development of positive, meaningful changes in service planning in some states. For example, a new California law requires all IEPs to specify how services will be provided under emergency conditions, such as when a student cannot physically attend school for more than ten consecutive days.

### What We Don’t Know

- The true scope of the impacts of service interruptions in terms of students’ progress, including regression in basic skills among students with intensive needs, remains unclear.
- How the pandemic has affected the social and emotional development of students with disabilities is also unknown.

## What We Need to Know

Understanding how the pandemic has affected the education and support services of students with disabilities is critical to informing policy and practice. In the current absence of data, a growing number of [due-process complaints and investigations by the U.S. Department of Education](#) confirm anecdotal reports that these students have not consistently been provided the critical supports and services central to their ability to learn.

We see an urgent research agenda to gain a detailed understanding of service interruptions and the pandemic’s impact on students with disabilities. Without nuanced details, we cannot effectively design and implement strategies to address deficits and accelerate learning.

## Uneven Access, Though Federal Mandates Held

*“[Rachel] had made no progress . . . and, in fact, had regressed on several things. . . . The teachers don’t know how to use the computers. . . . Everybody else is having technical issues.”*

*– Nashville parent Carolyn Shofner, whose teenage daughter has autism and struggled to learn remotely without the one-to-one aide who sits by her side at school. After she filed a due-process complaint, the district agreed to provide in-person tutoring at home if schools close in the future.*

From the earliest days of the pandemic, federal lawmakers and education leaders affirmed that the rights of students with disabilities to a free appropriate public education remained intact. In March 2020, the [federal Education Department issued initial guidance](#) emphasizing that public schools across the nation were required to continue to comply with the policies and procedures articulated in federal special-education law and associated regulations. And in April 2020, then-Secretary Betsy DeVos urged Congress not to approve waivers for states seeking a pause in delivering students’ educational services, arguing that districts could adapt students’ IEPs to remote-learning platforms.

Over the next few months, the [Education Department published additional guidance documents](#) to [assist districts in shifting to remote and hybrid instruction](#). The guidance reaffirmed that schools and districts remained responsible for enacting students’ IEPs “no matter what primary instructional delivery approach is chosen.” However, the content mainly addressed technical questions, such as clarifying what would constitute a change of placement and how states could use federal dollars to pay for services provided remotely.

As districts and schools prepared for the fall of 2020, [many initially failed to develop detailed strategies](#) to serve students with disabilities in remote or hybrid learning environments. As part of an ongoing project looking at trends during the pandemic, CRPE studied how services for students with disabilities featured in the fall 2020 reopening plans for 106 school districts across the United States. Our review found that 12 percent of plans failed to mention students with disabilities at all. Among the plans that at least mentioned students with disabilities, very few did so explicitly or in significant detail. Fifty-two percent of plans called for in-person learning for students with disabilities, but only 33 percent included interventions or increased support for students with disabilities to address pandemic-related learning loss.

Within this context, teachers attempted to adapt their instructional approach to meet the diverse educational needs of students with a wide range of disabilities. But they typically had minimal or no guidance, much less a shared understanding of the challenges students with disabilities were facing or the best ways to help them make up for lost time.

While the challenges have been significant, teachers, schools, and systems have taken steps to overcome barriers and provide services to students with disabilities. These have not been adopted across the board, but we find anecdotal evidence for these responses in the current literature. They have [temporarily modified students' IEP goals](#) in light of the [limitations of remote learning](#), met with parents virtually, encouraged general- and special-education teachers to collaborate, fostered communication that is one-on-one or in small groups, and created instructional arrangements specifically for students with disabilities.

As a result, educational experiences shifted for students with disabilities in a wide range of ways during the pandemic, which impacted their learning. While these were mostly negative, there have been some bright spots, too.

## Impact No. 1: Lower Attendance and Engagement

*“He has no attention span and if the computer isn’t playing Sesame Street he slams the laptop down. . . . It’s been frustrating and a waste of time.”*

– *Arizona parent Jennifer Spiros, whose son has intellectual and physical disabilities and whose school closed for several months in 2020.*

In a [nationally representative survey in October 2020](#), leaders from 2,500 school districts and 260 charter management organizations reported that about 74 percent of students with disabilities participated in all or most remote-learning activities—about the same as the percentage of students overall.

However, local data and surveys of teachers found lower levels of engagement and attendance in remote or hybrid learning environments. In a nationally representative survey of more than 1,500 teachers in October 2020, only 29 percent of remote 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. In fall 2020, an in-depth review of user data by the Los Angeles Unified School District found that students with disabilities were completing online assignments at much lower rates than their typical classmates. Some 53 percent of high school students with disabilities posted messages or assignments online, compared to 67 percent of all students.

In addition, state- and region-specific data showed that students with disabilities experienced higher rates of absenteeism compared to their typical peers. In Connecticut, which has aggressively gathered and released monthly attendance data, 33 percent of students with disabilities missed ten days or more of school in 2020–21, compared to 21 percent in 2018–19. Among all Connecticut students, the rates were 21 percent in 2020–21, compared to 11 percent two years earlier.



## Impact No. 2: Inconsistent Delivery of Special Education and Related Services

*“I used to have a son who I could take almost anywhere. . . . He lost all of that socialization.”*

*– San Diego parent Shannon Primer, whose 19-year-old son has severe autism and did not receive services in person for six months during the pandemic.*

Many students with disabilities were not provided with the same quantity or quality of specialized instruction or services during remote learning or hybrid programs. This was caused by shortened school schedules, which left fewer hours in the day for specialized services or service delivery, and by a [host of logistical, instructional, and access challenges](#) associated with [remote-learning platforms](#), limitations to in-person instruction, and students’ diverse range of needs.

In a [nationally representative survey of school districts](#) in the [summer of 2020](#), 82 percent reported that it was more difficult to provide “hands-on accommodations.” In a nationally representative [survey of 1,500 teachers in October 2020](#), those working in remote settings reported having less confidence in their ability to meet the requirements of students’ IEPs. And in November 2020, a report to Congress by the federal Government Accountability Office cited the quality and duration of specialized services as an area of particular concern. One student, for example, was due to receive four hours of therapy daily, but the school day was less than four hours long. And in interviews, the Office reported, school leaders expressed concerns about the impact of virtual sessions for typically hands-on support services, such as physical and occupational therapy.

The ongoing Understanding America Survey captured the experiences of a nationally representative group of 1,400 families over time, through five waves of questions in the early months of the pandemic. Based on these families’ reports, the percentage of students who received special-education services and accommodations, under an IEP or through a less-common Section 504 plan, [dropped from 11 percent in February 2020 to 8 percent in October](#). In a nationally representative [survey of families conducted in April 2021](#), which focused on students with cognitive disabilities, 44 percent of respondents reported that “their child’s legal right to access an equitable education has been abandoned in the move to online learning.”

Reflecting broader systemic inequalities, students with disabilities whose schools had fewer low-income and nonwhite students were more likely to have access to alternative service arrangements than students attending schools where most students were low-income and nonwhite. In a nationally representative survey, 48 percent of teachers in schools with the lowest poverty levels reported offering alternative arrangements for students with disabilities, such as additional in-person class periods or virtual individual check-ins. By contrast, just 31 percent of teachers in the highest-poverty schools reported similar arrangements. Furthermore, 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 have reported experiencing [greater difficulty complying with IDEA](#) than before the pandemic.

The evidence also indicated differential impacts on students by the severity of their disability. When asked if they had “high-quality instructional materials,” 73 percent of teachers agreed that they did when working with all students. When asked about [students with moderate and severe disabilities](#), the shares of teachers agreeing were 55 percent and 20 percent, respectively. And while 56 percent of teachers felt they had received adequate guidance and support from a source in their district related to educating students with mild to moderate disabilities, that share dropped to 22 percent for [teachers working with students with more severe disabilities](#).

### Impact No. 3: Learning Losses and Regression

*“I don’t think I ever had anxiety but now I do. . . . I don’t think they should count grades against us this year.”*

*– Atlanta student Aryanna Manning, 14, who has a hearing impairment. During remote instruction, she became anxious, lost math skills, and forgot simple things like the days of the month, according to her mother.*

It may be premature to attempt to meaningfully quantify the degree of learning loss students with disabilities experienced as a result of missed instruction and associated supports. But results from the National Assessment of Educational Progress (NAEP) before the pandemic have been relatively flat in recent years while typical students have made modest gains, [maintaining a broad gap in achievement](#) even when students with disabilities had fuller access to tailored instruction and specialized supports at school. 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 performed below pre-pandemic expectations overall and that students with disabilities lagged even further behind in math.

Notably, negative impacts were not limited to academic performance. In a nationally representative survey of families of students conducted in spring 2021, 48 percent of parents of students with disabilities reported behavioral changes in their children, including high levels of anxiety that triggered physical symptoms and contributed to missing class. The survey also found that students with learning differences were [three times as likely to be described as experiencing depression](#) associated with their education being disrupted due to the pandemic than typical students. And 60 percent of families reported that their child is “a year behind and may never catch up.”

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](#).

## Impact No. 4: Unexpected Upsides

*“We have their eyes looking right at us, and it’s not painful for them. . . . It’s beautiful.”*

*– New York City special-education kindergarten teacher Tracy Murray, whose students with autism found it easier to converse with their peers on Zoom than in person.*

Not all the data emerging for students with disabilities are negative. In fact, some students thrived in online environments. When teachers are prepared to use best practices for remote instruction, they can [tailor and personalize instruction](#) in a solitary, self-paced environment that can serve as a [safe haven for students prone to anxiety or distraction](#). And for students with physical disabilities, remote learning can remove the stress of navigating crowded physical environments and sometimes unwelcome attention from classmates.

Case studies have documented that [increased use of technology and remote learning](#) has fostered highly individualized problem solving, which is particularly beneficial for students with disabilities. And in a nationally representative survey, teachers of students with disabilities in remote arrangements were equally likely, if not more likely, to report having [weekly one-on-one and small-group communication](#) with them as teachers in hybrid and in-person arrangements. However, in keeping with the intersectional challenges noted above, [teacher surveys](#) also revealed that alternative instructional arrangements were less common in schools with large numbers of nonwhite and low-income students.

Remote learning has also made it easier to include parents in educational planning by normalizing virtual IEP meetings. Federal investigators, in preparing a [report on the pandemic for Congress](#), documented that educators and parents both said that virtual IEPs have led to increased meeting attendance, fostered higher levels of engagement, and facilitated stronger partnerships between families and school personnel. [Researchers also have documented](#) that school closures have catalyzed efforts to train parents more intentionally to support student learning.

Finally, the challenges associated with the rapid shift to remote instruction have generated some policies with implications beyond the current pandemic. A [new California law](#), for example, required districts to develop remote learning plans for all students with disabilities in order to ensure their education can continue anytime schools need to close for ten days or more.

## II. Implications for Post-Pandemic Recovery

### Looking Ahead: Priorities for Research

Our review provides some, albeit limited, insight into how students with disabilities have been participating in their education since the beginning of the pandemic. But our main insight is just how little we know. Research to date has failed to tell us much, if anything, about the impacts of the pandemic on the academic and social-emotional development of students with disabilities.

Data-collection efforts did not identify which services students missed out on and will need to be compensated for in the future. Research to date has failed to show how experiences and impacts varied by disability category. And although we have some understanding that there were a range of student experiences—including some upsides for some students—research has not yet explained why.

Assessing the pandemic's impact on students with disabilities is essential to informing an effective response, including policy, resource allocation, and instructional practices. We cannot return to business as usual. Even before the pandemic, students with disabilities did not consistently receive all the specialized instruction and supports they needed, and the evidence that we do have indicates they have shouldered a disproportionate burden of its negative effects on learning.

Successfully addressing the full impact of pandemic-related disruptions will require focused and data-driven investments. Future research should prioritize the following:

Examine and quantify the impacts of missed instruction and related services for students with disabilities and how it differs by age, gender, demographics, and disability diagnosis.

Track referrals and identification rates to understand and proactively address notable shifts. For example, are schools experiencing a decrease in rates of identification due to lack of engagement in the early grades? Are the number of special-education referrals ballooning due to missed instruction or learning loss? Are there trends among those referrals by student or school demographics?

Document and validate emerging innovative practices, such as small-group learning hubs, remote instruction and teletherapy, virtual IEP meetings, instructional acceleration, and strategies to boost parent engagement to determine their effectiveness for students with disabilities and potential to be implemented over the long term.

1. Examine the role of trauma, including how it compounds with disability, to determine how to support the academic and social and emotional learning needs of students with disabilities who have experienced trauma.
2. Look closely at the state of the special-education teaching workforce, including recruitment, retention, and attrition associated with the pandemic and the pivot to remote and hybrid instruction. Identify promising practices and policies at the state and district levels.
3. Track changes in teacher preparation—specifically, how coursework and training incorporates differentiated instruction, Universal Design for Learning, and using technology to personalize individual instruction for students with disabilities.
4. Identify examples of states and districts capitalizing on broad disruptions to make policies or practices that will catalyze states and districts optimizing the unique moment to embrace more inclusive practices and change general education to educate more students with disabilities with their peers effectively.

5. Track the impact of federal funding under the American Rescue Plan, including associated increases in federal special-education funding under IDEA, to understand and measure its impact on outcomes for students with disabilities.
6. Examine the impact on transition supports and post-school employment and education outcomes for students with disabilities who were in school during the pandemic.

## Conclusion

We have only just begun to understand the experiences of students with disabilities during the COVID-19 pandemic. Our recovery starts with a full accounting of the diverse impacts on students, educators, and families, including the potential innovations and benefits that virtual communications and learning platforms may afford. However, fully accounting for the negative effects of pandemic-related disruptions, including lengthy separations from school buildings and communities, reduced access to mandated therapies, and disengagement of students attempting to learn independently at home, is a necessary first step toward crafting a plan for recovery that can nurture and accelerate learning for students with a wide range of capabilities and needs. It is not enough to return to prior patterns of development. We must take from this experience not only what we haven't done but also what we can do better for students with disabilities.

## About the Center on Reinventing Public Education

CRPE is a nonpartisan research and policy analysis center at the University of Washington Bothell. We develop, test, and support bold, evidence-based, systemwide solutions to address the most urgent problems in K-12 public education across the country. Our mission is to reinvent the education delivery model, in partnership with education leaders, to prepare all American students to solve tomorrow's challenges. Since 1993 CRPE's research, analysis, and insights have informed public debates and innovative policies that enable schools to thrive. Our work is supported by multiple foundations, contracts, and the U.S. Department of Education.