K-12: COVID-19 Disruption Must Lead To Overdue Reform

High quality education is a critical pathway to career success and economic mobility, particularly for students from low-income backgrounds. An education system that invests in children beginning at the earliest ages and supports their development as both citizens and skilled workforce entrants of the future—with both in-demand cutting-edge abilities and knowledge and the tools to continue to upgrade their education and training across the course of their career—is a necessity to ensuring that US employers remain globally competitive and that all Americans share in broad-based and growing prosperity in the 21st century.

Pre-pandemic, even with low measured unemployment, there were reasons to be worried that US education was failing to live up to its full potential to better serve many students. Employers remained worried about the preparedness of the workforce, with nearly 40 percent of employers reporting that they couldn’t attract workers with the skills they needed, even for entry-level jobs. Despite the lure of higher average wages and employment rates for college graduates, a third of recent high school graduates did not enroll in college in October of 2019, and based on past studies, only about forty percent of students who do enroll in college will complete a degree within six years. In 2018, nearly a quarter of full-time workers aged 25 to 64 were earning less than $15 per hour and the labor force participation of American workers between the ages of 25 and 54 remained stubbornly low.

Policymakers, educators, and business leaders were already faced with the task of improving the status quo; as outlined in Early Education and Child Care: The Essential Sector and Developing the Future Workforce: Revitalizing Postsecondary Education and Training After COVID-19, the COVID-19 pandemic has upended the nation’s education
and training at every level. Elementary and secondary education is no exception. The disruption to date has already set back student learning, widened existing educational disparities, and placed K-12 schools under enormous pressure to chart a viable path forward through the end of the pandemic even as local conditions remain subject to rapid change.

Even best-case scenarios require schools to significantly modify operations to balance the safety of students and staff with successful learning. Those schools that are able to resume in-person operations must still be prepared for severe outbreaks in the fall or winter requiring the resumption of stricter public health measures or complete shutdowns and a return to fully remote instruction. The past and near-certain future costs of preventive public health measures may make business as usual simply unaffordable.

To strengthen the effectiveness of education and training programs for a successful 21st-century economy, policymakers, educators, and business leaders concerned with the national interest must both draw lessons and warnings from this spring’s disruption to address the immediate concerns COVID-19 poses for the upcoming school year, as well as take action to strengthen K-12 education in order to improve the college and career readiness of all students, including:

- Facilitate improvements in remote learning, including universal student access to high-speed internet and devices for the start of the 2020-2021 school year
- Fund additional state and local pandemic costs, and avoid cuts in educational services
- Create a true workforce system—beginning prior to K-12 entry and continuing through K-12 and beyond—that fosters innovation and improves outcomes, better preparing all students for initial workforce entry, including:
  - Supporting high-quality career guidance informed by up-to-date labor market realities and relationships with potential employers
  - Providing K-12 students with opportunities to learn and practice in-demand skills as part of the standard curriculum
- Support innovation and competition by piloting and testing new educational models, learning what works under what condition for which students, particularly in places where traditional approaches are failing to deliver improving outcomes—including drawing from, and further refining, the most successful practices incorporating technology-enabled supports for remote or asynchronous instruction deployed during the COVID-19 pandemic

The COVID-19 pandemic has disrupted elementary and secondary education

The COVID-19 pandemic forced closure of nearly all US elementary and secondary schools, affecting students and their families. Although many school districts attempted
to shift learning online and to other remote tools, concerns about disruption of student achievement, especially for younger learners, were widespread. There are now early indications of challenges ahead if schools cannot quickly resume normal operations.

Time out of the classroom has already impacted learning, depending on how successfully remote education replaced in-person instruction. Past time out of school—whether because of absenteeism, summer breaks, or weather or natural-disaster-enforced closures—has typically been shown to reduce student achievement. Extrapolating from such studies, by the start of the 2020-2021 school year, students may return having achieved as little as one-third to two-thirds of the typical learning in reading and math in the prior year on average, with variability in student outcomes—some performing much better or much worse—larger than normal.6

Expectations of the help from remote learning and summer initiatives are somewhat restrained by past evidence that online-only models of K-12 education have struggled to match the results of in-person education. For example, a 2017 review of online education in Ohio found that students in "e-schools" performed significantly worse across all subjects and grade spans than similar students in other school settings.7 One review of 100 school districts found that, by the beginning of June, only 61 planned to provide any summer school, and less than half planned to offer summer school to students younger than high school.8

The ultimate reach of remote learning opportunities in the spring is also unclear. Although more than four-fifths of surveyed parents reported that their children were engaged in an online learning program at the beginning of April, a survey of teachers found that less than 40 percent of them were interacting with students on a daily basis.9 A Center on Reinventing Public Education analysis found that only one in three districts required that teachers “provide instruction, track student engagement, or monitor academic progress” for all students, though many teachers outside of those districts likely did so.10

One online math program showed a deep and durable drop in student participation after mid-March, as well as a drop and then gradual recovery in the pace of coursework completion.11 Of further concern, the drops in participation and completion were larger and more permanent for students attending schools in lower-income ZIP codes. By comparison, the pace of online math coursework completion by students in higher-income areas increased substantially in the pandemic period, presumably because more learning was shifted to the online program.12

The COVID-19 pandemic and its economic impacts also likely hurt academic achievement among students already at the highest-risk of falling behind or who are the most directly affected by the pandemic. By July 9th, COVID-19 had already killed over 132,000 Americans and compromised the health and well-being of many more. A Data Foundation survey in early June reported roughly five percent of all respondents, but 11 percent of Black respondents, having a family member or close friend die from COVID-19.13 Research suggesting that some children affected by Hurricane Katrina experienced effects of trauma and disruption that weighed on their academic achievement more than two years after the
hurricane points to potentially long-lasting effects COVID-19 could have on children who lose family members, friends, or teachers to the virus.

Despite hopes for rapid economic recovery, COVID-19 is clearly creating economic harm and stress for many families. Looking to the past, some researchers have found that the Great Recession significantly reduced student achievement in the places most affected, with negative effects concentrated among children attending schools serving higher shares of low-income or Black families.

How elementary and secondary schools plan to adjust to the COVID-19 pandemic

One attempt to model the impact of disrupted education finds that, regardless of the quality of remote learning, the “lost” learning during the pandemic-affected period will worsen and the number of school drop-outs will increase the longer the gap in receiving normal, consistent in-person education. However, the impacts are likely to be worst for the students receiving lower quality or no remote instruction the longer the COVID-19 disruption in education lasts. For instance, students receiving lower-quality remote instruction could lose the equivalent of 7 to 11 months of learning if they do not resume full-time, uninterrupted in-person instruction until January 2021. Under the January 2021 resumption scenario, on average, students can lose the equivalent of a year’s worth of lifetime income as a result of COVID-19–related learning losses—an aggregate annual hit of $110 billion in lost earnings across the current K-12 student cohort’s working lives. These projections drive home the urgency of two goals for policymakers and school officials preparing for the start of a new school year: increase the quality of remote learning options and engagement for all students, and resume in-classroom learning as safely and quickly as possible.

Improving remote learning

Even school districts that plan in-school learning to begin the 2020-2021 school year should prepare for remote learning. The path of COVID-19 is deeply uncertain, with new breakouts, recurrences, or mutations always possible later in the year. Avoiding a repeat of the unexpected and rushed March closures should be a priority, and plans for remote learning could prove essential for other unanticipated closures or disruptions in the future.

A critical first step for remote learning is ensuring that all elementary and secondary students have high speed internet connections and appropriate internet-enabled devices. As outlined in Technology and Innovation Solutions Must Lead the Way to COVID-19 Recovery, lack of reliable internet connections and devices was likely a significant barrier to many students’ remote learning in the spring, and will continue an impediment to successful online learning until it is addressed.

Resource challenges may be partly why the Los Angeles Unified School District—which serves more than 600,000 students—reported in late March that one-third of its high school students were not regularly participating in its online offerings, and 13 percent...
had no connection with teachers online during the first three weeks of distance learning. A poll of California parents conducted in late March had more than 40 percent express concerns related to having enough devices in the home to participate in online learning programs and nearly 30 percent worried about reliable access to high-speed internet. 

Nationwide, surveys suggest that roughly one-third of families with school-age children at home and annual incomes below $30,000 lack broadband. A little more than half of superintendents estimated that at least ten percent of students in their districts are unable to participate in online learning because of a lack of high speed internet access or necessary devices.

Even prior to the pandemic, a lack of appropriate technology in the home was likely contributing to worse learning outcomes for the predominantly low-income or minority students going without. On a 2018 survey, 17 percent of 13- to 17-year-olds reported at least sometimes being unable to complete homework assignments because of a lack of access to the internet or a computer. Prepandemic, a lack of universal access to high speed internet and devices may have slowed, or even prevented, adoption of technologies that could potentially improve K-12 student outcomes, including by helping teachers devote their time and attention where it is needed most. Experimentation, experience, and improvements in online learning during the pandemic should help schools to incorporate technology going forward, but universal access will be necessary to prevent widening existing disparities.

Although durable improvements of access may take longer, some short-range strategies could quickly expand access to high-speed internet and necessary devices for the start of the 2020-2021 school year. Expanding computer lending programs, retrofitting school bus fleets with Wi-Fi connectivity, or creating lending libraries for individual Wi-Fi hot spots that could go to students without home connections all have merit. Federal funding should allow, and states and localities should expeditiously pursue, the hardware and connectivity solutions that would best suit the challenges facing their communities. At the same time, the federal government should connect states and school districts pursuing similar strategies to identify the most effective practices and negotiate together for the lowest prices and quickest procurement. Business leaders should also play a constructive role in their communities, expanding on efforts by some private companies in the spring—and often prior to the pandemic—to help address shortages of laptops and tablets and access to Wi-Fi, among other needs.

Solving access and device issues is the first, and potentially most straight-forward, step in improving remote learning. But K-12 schools also need to improve the effectiveness and quality of remote learning. While educators quickly responded to the unexpected need for extended, fully remote education at the end of the 2019-2020 school year, all school districts should provide clear expectations of teachers, parents, and students for any continued remote learning in the new school year. School staff must continually reconfigure their work so that all students are actively monitored, engaged, and assessed. In a spring 2020 survey, nearly 80 percent of superintendents cited special education and related services as difficult to provide equitably as part of their COVID-19 response.
Best practices and lessons learned from the end of the past school year and from summer sessions need to be widely disseminated across K-12 schools and thoughtfully processed and integrated into learning plans. Instruction in the new school year—whether fully or partially remote, or under safety-modified in-person teaching—will require significant support and training for teachers and other school staff. Because remote learning could continue for an extended period or be a recurring need—and with an eye toward better incorporating technology-based learning practices into regular instruction postpandemic—evaluation of different programs should be a priority. Given the expense and other challenges of high-quality evaluation, federal dollars could be smartly invested and clearly serve the local and national interest.

Returning to in-classroom learning

Given the generally inferior student outcomes from extended remote learning, ideally, most K-12 students should safely return to in-person instruction for the entirety of the 2020-2021 school year. But even under optimistic scenarios, schools will need to adapt their operations to ensure the health of students, staff, and the surrounding community. To that end, the Centers for Disease Control and Prevention (CDC) have released guiding principles for schools to reopen for in-person education before the end of the current pandemic.28

In addition to procuring sufficient supplies and personnel for routine cleaning and medical testing, CDC recommends, for instance, that student desks be six feet apart with all students facing in one direction, school buses be limited to one student per row, and school meals be served individually in classrooms rather than communally in cafeterias. To limit the contact between different students and staff, CDC recommends that students stay with the same class of children and staff as much as possible, rather than rotating between subjects taught in other classrooms or with other student groups.

The costs of such modifications could be significant. The School Superintendents Association estimates that it could cost as much as an additional $1.8 million dollars for an average-sized school district to follow CDC guidelines for the full 2020-2021 school year.29

In Massachusetts—where state guidelines require no more than ten students to a classroom to allow for social distancing—some school districts are considering rotating students between in-person classes one week and participating remotely the next, to reduce the need for additional facility space, personnel, or transportation, while giving all students at least some in-person education.30 Such a hybrid approach may be difficult for teachers, because they would need to serve both in-person and remote learning students simultaneously. It would also pose a continuing challenge for working parents. Schools would likely need additional funding relative to the prepandemic model; but additional school funding will be hard to come by without Federal help.

For the fiscal year just ended in June, state governments have already had a revenue shortfall due to COVID-19 of as much as $120 billion relative to year-ago expectations,
and may have a shortfall nearly three times as large in the current fiscal year, according to estimates by the Center on Budget and Policy Priorities. The projected annual shortfall for the 2021 fiscal year would be the largest this century. Based on past relationships between unemployment and state revenues, the state revenue loss in calendar year 2020 due to COVID-19 has been estimated to be 20 percent in an average state, but as high as 40 percent in some states.

Having become increasingly reliant on state funding, many school districts will suffer from this shortfall in state revenues even if local sources of school funding—typically heavily dependent on property taxes—endure the initial economic hit from COVID-19. After the Great Recession, inflation-adjusted per-pupil spending declined 9 percent between 2008 and 2013, likely worsening student outcomes.

While CDC COVID-19 guidance seemingly requires additional staff to enforce social distancing with smaller class sizes, already state and local government education employment, including public postsecondary institutions, was 9 percent lower in May 2020 compared to a year earlier, reaching its lowest level since 2001.

A few schools will begin modified operations during in-person summer sessions. Some states—including Illinois, New Jersey, and Texas—will permit in-person summer school under health and safety limitations, though many school districts in those states will continue to operate remotely. International examples of school reopenings present adaptation ideas and preview challenges. Schools should also respond to new learning about the virus and its spread. A return to in-person operations, even with precautions and modifications, may not be safe for all students and staff; some are at heightened risk. For example, nearly a fifth of all elementary and secondary teachers are at least 55 years old and an unknown number have, or live with someone who has, underlying conditions like asthma or diabetes that make them more susceptible to serious harm from COVID-19.

Schools must be thoughtful and creative in addressing the health and education needs of their communities cost-effectively. The national interest will not be served in the short or the long run if school decisions jeopardize either health or learning outcomes in pursuit of cost savings. While Congress already provided roughly $13 billion to K-12 to address COVID-19 costs through state education stabilization grants enacted in March, additional funding for states and localities will be necessary to meet incremental costs imposed by the pandemic and avoid cuts in educational services.

Improving K-12 education, post-COVID-19

COVID-19’s shocks to business-as-usual have highlighted areas of complacency throughout education and training – and the entire economy and society. Reform is needed for all Americans to share in growing prosperity, with genuine opportunities for upward mobility to uphold belief in American-style capitalism for generations to come. A return to the prepandemic status quo for K-12 education would represent a lost opportunity to improve the strength of the US workforce, the competitiveness of US businesses, and the economic mobility of many Americans. Instead, policymakers, educators, and business leaders must
drive changes that improve the quality of K-12 education to better match the needs of the 21st century.

Creating a workforce system that begins prior to high school graduation

As described in *The Future of Work: How America Can Meet the Upskilling Challenge*, Americans need education that prepares them to upgrade and add new skills throughout their adult lives. An attempt to bifurcate education and work, or college preparation and vocational training—like many of the rules of curriculum and higher education funding in the 20th century—is increasingly unhelpful to students. CED believes that the foundation for successful careers begins long before students enter the workforce—and, with high-quality early learning, even before formal school entry—which motivates the recent more-nuanced approach of simultaneously preparing students for both college and career.

As discussed in *Building Supports for Successful Transitions Into the Workforce*, the vast majority of secondary students clearly value opportunities for college learning and want well-paying jobs. However, to improve outcomes, schools must prepare students to enter the workforce as well. This requires high-quality career guidance informed by up-to-date labor market realities and relationships with potential employers, and providing opportunities to learn and practice in-demand skills as part of the standard curriculum. Some promising efforts, such as so-called “pathways” models, utilize career-focused counseling and goal setting, teach academic and employability skills, and offer exposure to college academics and hands-on work-based learning experiences.

Competition has been an important driver of innovation and excellence in the US in many fields, with education no exception. As outlined in *Charting a Path Forward for Charter Schools*, the US needs “labs” to pilot and test new educational models, learning what works under what condition for which students. The COVID-19 pandemic has created unfortunate but extraordinary circumstances for experimentation and testing of alternative approaches of reaching students and advancing learning using technology-based tools. Post-COVID-19, removed from the life-and-death pressures of a public health emergency, policymaker needs to continue to find ways to incentivize, support, and embrace the pursuit of ambitious and promising reforms to education-as-usual in the places where traditional approaches are failing to deliver improving outcomes.

The role of business leaders in improving education

CED has long maintained that business plays a critical role in promoting educational attainment. As partners with pre-Ks, elementary and secondary schools, training providers, and institutes of higher education, business leaders can shape the pipeline of future employees, providing valuable signals of labor market demand and opportunities for learning and experience based on the “real world” of work. Business leaders are also uniquely well positioned to advocate investment and innovation in education to deliver the skilled future workforce that they depend on to be globally competitive. Businesses must make the case to local policymakers and school officials for the value of those investments, and support partnerships between business and education to spur future economic and civic growth.
Endnotes


5 Analysis by Education Week found that at least 55.1 million students in 124,000 U.S. public and private schools were affected by closures at some point between March 6 and May 15, 2020. See: “Map: Coronavirus and School Closures,” Education Week, May 15, 2020.


7 June Ahn and Andrew McEachin, “Examining Enrollment and Success in Ohio’s Online Schools,” RAND Research Brief, June 8, 2017.


9 Kuhfeld et al.


12 In the analysis, a school is high-income if it is in an area that fell within the lowest quartile of share in poverty in 2010, and low-income if it fell within the highest quartile of the distribution. In a similar study of online learning engagement performed by Curriculum Associates, data suggests that only 60 percent of low-income students were regularly logging into online instruction compared with 90 percent of high-income students. See: Emma Dorn, Bryan Hancock, Jimmy Sarakatsannis, and Ellen Viruleg, “COVID-19 and student learning in the United States: The hurt could last a lifetime,” McKinsey & Company, June 1, 2020.


16 Dorn et al.


22 Anderson and Perrin.


26 Gross and Opalka.

27 Rogers and Ellerson.

Lauren Camera, “Report: No Way to Reopen Schools Safely Without Federal Bailout,” US News & World Report, June 8, 2020. Most of the costs—roughly $1.2 million—stem from the additional personnel that the analysts assume to be needed to implement the health and safety protocols CDC recommends. For instance, it is assumed that every public school will have at least a part-time nurse presence and that every bus will require an aid to temperature check students before boarding. See: “What will it Cost to Re-open Schools?” Association of School Business Officials International and ASSA - the School Superintendents Association, June 2020.


Marguerite Roza, “How the coronavirus shutdown will affect school district revenues,” Brookings Institution, April 9, 2020


SUSTAINING CAPITALISM
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