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In-person and online learning go together

By John B. Taylor and Jack Mallery

KEY TAKEAWAYS

- America must prioritize getting elementary and secondary schools open for quality in-person learning as soon as safely possible.
- Whether or not in-person schools open soon, we must also increase online access for low-income families. There is a big educational divide in online access.
- Unfortunately, the issue is becoming increasingly polarized politically with the presidential campaigns and others staking out strong positions on one side or the other.
- Having in-person school and online learning is a national security and economic imperative. This is not a choice between one and the other.

It's almost universally accepted that America must prioritize getting schools open for in-person learning as soon as it is safely possible. But, whether or not in-person schools open soon, we must increase online education's capability. Even though the issue is becoming increasingly polarized with the presidential campaigns of Donald Trump and Joe Biden staking out strong positions on one side or the other, it is no longer a choice between in-person and online. Both are needed. Education is not only necessary for an adequately prepared workforce; it is a national security and economic imperative.

There are positives to in-person learning — interaction with other students, lab work, one-on-one explanations by teachers, group activities — but there is also a safety issue. There are *56.6 million*[1] K-12 students in America, and the Centers for Disease Control and Prevention has estimated the fatality rate for students age 15 and under is 0.02.[2] But young children are not immune to the virus and can spread it. This must be recognized.

There are also positives to getting students acclimated to working online. Long before COVID-19 America's workforce had been moving online, with *5.2 percent*[3] of workers working from home in 2017, up from 5 percent in 2016 and 3.3 percent in 2002. Online work is skyrocketing now, and it will continue

1 EducationData.org, June 6, 2019, *https://educationdata.org/k12-enrollment-statistics/.*

2 CDC COVID Weekly Statistics, 2020, *https://data.cdc.gov/NCHS/Provisional-COVID-19-Death-Counts-by-Sex-Age-and-S/9bhg-hcku.*

3 Quartz at Work, *https://qz.com/work/1392302/more-than-5-of-americans-now-work-from-home-new-statistics-show/#:~:text=According%20to%20recently%20released%20data,%2C%20and%203.3%25%20in%202000.*

to grow in the aftermath of the pandemic. *Twenty percent*[4] of chief financial officers have already started planning for a future in which at least 20 percent of their company's workforce will operate remotely.

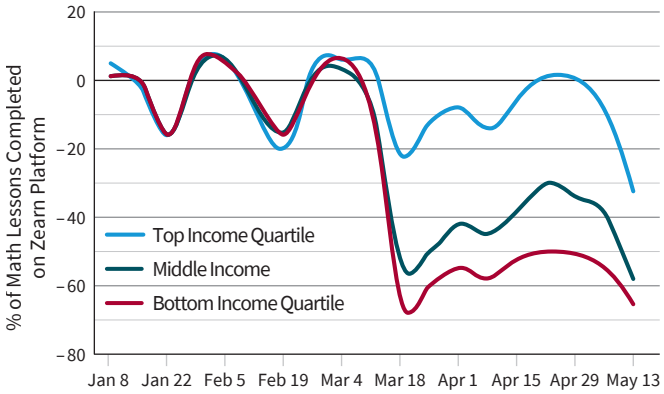
There are many arguments both for online and for in-person education, but the facts — not the politics — must be the focus of the judgments and the basis for decisions.

Bridging the online and in-person educational divide

The United States can no longer ignore the digital divide for low-income students and minorities in America: COVID-19 has clearly revealed the gulf and ensured that it is a front-line issue. The recent surge in online schooling shows that students who do not have broadband capabilities have had several drawbacks in education quality. Recent research shows that when schools went online this past spring, learning rates among those in the bottom income quartile fell by 60 percent, compared with just 20 percent for those in the top quartile, as clearly seen in Figure 1[5]. A third of households with an annual income under $30,000 and children ages 6 to 17 do not have access to broadband[6].

Even before COVID-19, there was a massive divide in the capability for low-income students to complete schoolwork. Some *15 percent of U.S. households*[7] with

Figure 1. Effects of COVID on Educational Progress by Income Group



school-age children did not have a high-speed internet connection at home, according to a new Pew Research Center analysis of 2015 U.S. Census Bureau data as shown in Figure 2. Even more pressing, 12 percent of teens say they sometimes use public Wi-Fi to complete assignments because they do not have an internet connection at home; 35 percent of teens say they often or sometimes have to do their homework on their cell phone; and 45 percent of teens who live in households earning less than $30,000 a year say they sometimes need to use their phone to do homework.

Yet, *70 percent*[8] of teachers still assign homework that requires access to broadband. COVID-19 has exacerbated these issues, raising a plethora of new problems as well. It has highlighted the importance of broadband, with *87 percent*[9] of adults saying the internet has been at least important for them personally during the coronavirus outbreak, and 53 percent saying it has been essential.

4 Brookings, April 6, 2020, *https://www.brookings.edu/blog/up-front/2020/04/06/telecommuting-will-likely-continue-long-after-the-pandemic/.*

5 Harvard University Economist Raj Chetty analyzed data from Zearn online math programs in a presentation for the Princeton Bendheim Center for Finance *(https://bcf.princeton.edu/event-directory/covid19_24/).*

6 Pew Research sampled 1058 parents and 743 teens in 2018 *(https://www.pewresearch.org/wp-content/uploads/2018/10/FT_18.10.26_HomeworkGap_Methodology_Topline.pdf).*

7 Pew Research Center, 2018, *https://www.pewresearch.org/fact-tank/2018/10/26/nearly-one-in-five-teens-cant-always-finish-their-homework-because-of-the-digital-divide/.*

8 COSN, September 9, 2015, *https://www.cosn.org/blog/scoping-digital-equity-problem-or-homework-gap.*

9 Pew Research Center, April 30, 2020, *https://www.pewresearch.org/internet/2020/04/30/53-of-americans-say-the-internet-has-been-essential-during-the-covid-19-outbreak/.*

Figure 2. Percent of US Households with Children Ages 6 to 17 Without High-speed Internet Connection

	All	White	Black	Hispanic	Asian
All households with school-aged children	15%	10	25	23	5
BY ANNUAL HOUSEHOLD INCOME					
Less than $30K	35%	28	41	38	14
$30K – $74,999	17%	13	21	22	7
$75K or more	6%	4	9	9	2

Note: Race and ethnicity are based upon the race and ethnicity of the head of household. Whites, blacks and Asians include only those who reported a single race and are only non-Hispanics. Hispanics are of any race. Household income data reported for the calendar year prior to the survey year.

Source: Pew Research Center analysis of 2015 American Community Survey (IPUMS).

Forty-three percent of lower-income parents with children whose schools are online say it is very or somewhat likely their children will be forced to use phones to complete homework; 40 percent report the same likelihood of their children having to use public Wi-Fi to finish schoolwork, as there is not a reliable internet connection at home; and 36 percent say it is at least somewhat likely their children won't complete schoolwork, as they do not have access to a computer at home. The digital divide has never been larger, and it is growing at a time where it has the most drastic effects on the younger generation.

While online school poses a significant obstacle to all children, it primarily affects minority and low-income groups. According to Pew Research, one-quarter of African-American teens report they are sometimes unable to complete their homework due to a lack of digital access, with 13 percent who say this often happens to them. Only 4 percent of white teens and just 6 percent of Hispanic teens say this happens often. Among Hispanic broadband users, 54 percent report they worry about the cost of their online access, compared with 36 percent of Black users and 21 percent of white users. This divide has already been well documented, and COVID-related data indicate that the virus is going to take this issue further.

The divide existed before the rise of online learning and will only be made worse by COVID-19's greater effect on minority communities. To provide an example, in *Chicago*[10] African-American residents represent 57 percent of all COVID-19 deaths. That's more than three times higher than any other racial demographic, despite the fact they are just 30 percent of the city's population. *Non-Hispanic Black persons*[11] have an infection rate approximately five times that of non-Hispanic white persons. Hispanic or Latino people have a rate of about four times that of non-Hispanic white persons.

Opening schools should be and rightly is a national priority, but not before considering ways to remedy this divide. School choice and charter schools would help by opening up opportunities to minorities who might otherwise suffer from the unequal provision of schooling. The virus may not actively discriminate, but the research has drawn clear lines showing that there are indisputably adverse rates and effects toward minorities.

10 Marguerite Casey Foundation, April 22, 2020, *https://caseygrants.org/who-we-are/inside-mcf/marguerite-casey-foundation-announces-3-5-million-in-covid-19-grant-funding-to-tackle-racial-disparities-resulting-from-pandemic/?gclid=CjwKCAjwr7X4BRA4EiwAUXjbt5ExHdVRkeRLEuFl8PfbvnNmcMMVZsZDhBB3f9Kr7V92ci4se7TySRoCaQMQAvD_BwE.*

11 *https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fneed-extra-precautions%2Fracial-ethnic-minorities.html*

A nonpartisan issue turns politically partisan

Recently, copious amounts of tweets, talk, and articles have been put out by the Biden and Trump presidential campaigns about reopening K-12 schools, broadband, and education in general. An issue that should be nonpartisan has turned into a strikingly divided, partisan, and sensitive topic. It's no surprise: Seemingly everything has become a debate of red versus blue, but there is too much at stake to let education turn into a polarized national debate.

Instead of addressing the digital divide between students of different income levels, the campaigns of Trump and Biden have proposed spending billions to deal with less pressing problems: physical school infrastructure and rural broadband coverage. Rural broadband coverage is important, and there is a divide between rural and urban areas in internet coverage, but the focus should be on low-income students regardless of where they live.

The Biden campaign wants to invest *$100 billion*[12] funneling the money into buildings and at-school technology. However, this does little to solve the ever-growing issue of the digital divide.

An astonishing number of students don't have internet access. Pouring money into physical infrastructure in schools may seem like a worthy effort. However, this funding misses the most important matter at hand — the wide differences in high-quality distance learning.

In the *$30 billion emergency education bill*[13] that Biden called for, only $4 billion was allocated to upgrade tech and broadband, a small amount given the problem. Although Biden mentions that tens of millions lack access to high-speed internet, his efforts focus on rural broadband where populations are sparse and fewer children will benefit compared with more urban and densely populated communities.

The Biden campaign promotes the idea of spending $20 billion in rural broadband, tripling funding to expand in rural areas, and incentivizing competition among providers to increase speeds and decrease prices.

President Trump and his campaign have been aggressive and outspoken about returning to in-person schooling, threatening to withhold federal funding if schools do not comply. The Trump campaign does mention broadband, but like the Biden campaign has focused on rural communities whether or not the recipients are high-income or low-income. Closing the rural broadband gap is vital, but it is not nearly as time sensitive as helping a greater number of low-income students get access to the internet they need to learn and to advance their education.

Rural and low-income areas are not mutually exclusive, as they often overlap. But money should be allocated to the place with the highest concentrated number of students, leaving rural broadband less of a priority.

Regardless of schools going online or in-person in the fall, funding for K-12 and talk about education should be centered on the lack of quality broadband for students, not the quality of buildings that might not even go into use. Politically, one side has agreed to die on the hill of making absolutely certain that schools are safe before in-person instruction, and the other side has firmly planted itself as wanting to accept the risk of in-person schooling in order to increase the quality of education students receive.

Improving education and broadband access should not be grouped into either one of these stances. Both are vital.

The Trump administration is correct about how in-person education is essential for the well-being of students, parents, and the entire country. Reopening schools will allow parents to return to work, boosting family income and our economy. However, just because one side is correct does not mean the other is automatically wrong.

This should not be a partisan issue. The dilemma is not red versus blue, but Americans versus COVID-19. Just as the issue of wearing a face mask has become politicized — an action that should be simple for a country with an overwhelming number of citizens who claim to be willing

12 Biden Campaign, 2020, *https://joebiden.com/clean-energy/.*

13 NPR, July 17, 2020, *https://www.npr.org/2020/07/17/892334856/biden-releases-proposal-for-reopening-schools.*

to do anything to protect their freedom and security — education has turned into a partisan issue as well. It is vital that we understand that education must be improved.

Instead of one side proposing spending $100 billion on school infrastructure and the other insisting on in-person schools, both sides should take a look at the big picture. The digital divide will not vanish unless measures are enacted.

We have in our hands a crisis that has the power to unite the right and the left on the cusp of an election, something that rarely occurs. The impact of COVID-19 on education can unite both political parties toward a common goal. Instead, it has pushed them even further apart. At least on this issue they should put their differences aside and improve education for all students.

Real solutions to the divide

The task is daunting, of course, and the road ahead is full of challenges, but there are several good solutions available and bridging the divide has never been a more pressing matter. *The Lifeline Program, implemented by the Federal Communications Commission*[14], makes communications services more affordable for low-income families by providing discounts on telephone and broadband services. It's specifically designed to combat situations precisely like the one we face now, and the groundwork is firmly in place.

Additionally, there is the HEROES Act and its *Emergency Connectivity Fund*[15] making its way through Congress. The fund earmarks $1.5 billion for Wi-Fi hot spots, devices, and related services to schools and libraries. America would be remiss if this fund was not taken advantage of in this crisis.

In a more unexplored solution, there is the possibility to utilize Wi-Fi hot boxes to provide a connection to areas with no broadband, but with LTE service. These boxes typically cost between $100 and $300 and can convert LTE data into a Wi-Fi signal for a household. They are an easily deployable and simple short-term solution to what is a long-term problem. Hot boxes might not be able to solve all our problems, but they can help patch them up for now.

The *Keeping Americans Connected Pledge* [16] is an agreement from more than 800 companies and associations to not terminate service to residential or small businesses because of the inability to pay bills due to COVID, to waive late fees due to the disease, and to open their Wi-Fi hotspots to Americans who need them. It's easy; it's free to the government and consumers and, if renewed, could provide a buffer between the economic hardship this pandemic has created and loss of broadband coverage for those unable to pay.

The *Telecommunications Act*[17] has a specific section in which it gives $963 million for E-rate, a service to fund broadband for educational purposes, loaning Wi-Fi hot spots to students. That's another path to explore.

In Chicago — which recently announced that the school year will begin online only —Mayor Lori Lightfoot announced the *Chicago Connected Project*[18]. Its goal is to supply free broadband to 100,000 children for four years in the city's largest school district. The plan cost $50 million and was funded by donations, the Chicago public school system, and city funds. It's a model that other major cities could take and copy to combat connectivity problems in their jurisdiction.

The in-person and online educational divides won't disappear instantaneously and COVID-19 is making them larger and more visible. It is vital that the decision to open or close K-12 schools is not taken lightly, that our political parties put aside their differences, and that

14 FCC, 2020, *https://www.fcc.gov/document/fcc-modernizes-lifeline-program-digital-age.*

15 Congress, H.R. 6800, *https://www.congress.gov/bill/116th-congress/house-bill/6800.*

16 FCC, 2020, *https://www.fcc.gov/keep-americans-connected.*

17 FCC, *https://www.fcc.gov/consumers/guides/universal-service-program-schools-and-libraries-e-rate.*

18 Wall Street Journal, July 9, 2020, *https://www.wsj.com/articles/chicago-hopes-broadband-plan-could-help-other-cities-address-digital-divide-11594287000.*

steps are taken to offer possible solutions regardless of the eventual decision.

The world is changing, and broadband will be an integral part of this change. It's up to America to decide if students will be left behind or not.

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