July 22, 2020 Board of Education Meeting
Written Comments Received Monday, July 20th through Thursday, July 23rd
Submitted via BOE@cps.edu

1.

Stop criminalizing our kids

We need a new way. Please lead and do not obstruct finding a new way.
Willing to be a partner instead of protester.

Sincerely,

[redacted]

2.

CPS Opening Framework - PLEASE, High School Juniors & Seniors Should Attend IN-PERSON Class

Dear CPS Board of Education,

I applaud all who have been involved to compile a framework for CPS schools to open in the fall. I just completed the online survey, emailed Mayor Lightfoot, Dr. Jackson, the Jones principal Dr. Powers and other CPS officials. I'm reaching out to you with the same concerns.

As the mother of a soon to be 11th grader who attends Jones College Prep I'm extremely concerned about a 100% remote learning schedule for high school juniors and seniors. My husband and I made every effort to keep our only child motivated to do her school work and remain positive through the last few months of school, as we both went to work daily. An active, social and positive person who thought the City of Chicago was the greatest city in the world, she became lonely, sad and angry – and extremely focused on social media and the many negative postings. In fact, we have been aghast at the terrible postings circulating social media during and after the riots and how many kids have very extreme thoughts. Not a day goes by that we don't discuss social events with our daughter, speaking out for equality and change but condemning violence. It seems much of today's youth thinks change can only happen through violence.

High school juniors and seniors need a routine, set schedule, social interaction and in person teacher interaction – not 100% remote learning. Teachers play such a big role in kids' development and have so much influence. Chicago's youth needs to have in person class, guidance and conversations. There must be a way to schedule some classes so that 11th and 12th graders can be in school as all other grades below them.

Juniors and seniors are at a very difficult age and while my daughter is concerned that she won't learned anything, some of her friends are happy to stay home because they don't like school. How many will drop out with 100% remote learning, or get into trouble on the streets.

PLEASE, I urge those involved to find a way for 11th & 12th graders to have in person class. All have determined how important it is for kids to be IN school for their social well- being and so much more. Unless all IL high schools are following this model, our 11th & 12th graders will be at a clear disadvantage. Many already are as they come from broken homes. In person interaction is so important for their development and to lead them on the right path.

As the general manager of a hotel on the North Side that has stayed open through the pandemic, I know first- hand the challenges this crisis has brought. By following City, IHLA, AHLA and brand guidance we know that it's possible to persevere through this and be safe. And so I feel strongly that opening schools and the model that CPS and the team involved have developed is the right path. However, it must include in-person instruction for juniors and seniors.

Thank you for all you do!

With sincere respect –

[redacted]

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3.

Board of Education

7/15/20

When my daughter was in 8th grade she wasn't living with me at the time, and I knew that she was looking into the goCPS process to pick a high school. The first time she only really picked two or three schools and didn't have many options that I particularly was excited about. She had missed out on Noble the first time around but then the second round of applications opened up, and we jumped on the opportunity for her to attend Noble Street College Prep. I've had family members who sent their children there, and I liked the structure.

At first, remote learning was very stressful. We were so used to getting up early and having our routine. It's tough because I grew up going to school everyday and it was difficult at first to understand how to support my children. With remote learning you have to force yourself up with the mentality that you have to do everything in your house. When we first got into remote learning the biggest obstacle was sharing one laptop. As a single father with two children it was really hard to adjust to everyone's needs without anyone's learning suffering. When the pandemic first hit I didn't have a job because I was applying to be a police officer so I didn't have extra money to buy a computer. When Noble first offered up the opportunity to get a chromebook we jumped on it. I reached out to her advisor and she was extremely helpful in the whole process. It's been great, and I'm so happy that Noble was able to offer up the opportunity.

There are so many people that can't afford laptops now more than ever because of lost jobs or money getting tight all around. The difficult transition into less structured remote learning and the sharing of one laptop, ultimately meant that my daughter struggled with keeping up with some of the assignments, especially in her AP Chemistry class. However, once we had a chromebook, which was shipped directly to us and was super easy to set up and use, we were able to establish more consistency and improve work completion. We have also started implementing our own structures to help us. I've even signed my daughter up for a book club to help keep up with her reading.

The chromebook has also allowed my daughter to engage with credit continuation. Because of the earlier challenges of remote learning, by the end of the semester, my daughter's grade in AP Chemistry was not as strong as she hoped for. She elected to take advantage of credit continuation to improve this grade. Still having access to the laptop during the summer has made all the difference in terms of her effectively maintaining momentum in her education and has helped make up for some of the struggles she had in the beginning due to lack of a routine.

While remote learning has changed how our students learn, I am still grateful for all the support Noble Street has offered. All of the effort Noble has put into mitigating the negative impact of this pandemic has made all the difference to her learning experience, which is why I am in strong support of the school. I hope that you continue to support Noble too.

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4.

Greetings - I am writing from the perspective of the parent of a rising senior in CPS, and as an elected LSC Parent Representative (a role I have held at 2 different CPS schools over the past 8 years). My concerns regarding the proposed framework for Fall re-opening are both general and specific.

In general, I join many parents, teachers, and staff members in raising strong concerns regarding the plan to bring most, but not all, students back to in-person classes in the Fall. With coronavirus infections on the rise in Illinois and no real research available on the classroom and school building as an environment in which spread of the virus can be safely controlled, it would be foolish and dangerous to bring so many students, teachers, staff, and others together in our buildings, in their current physical and staffing environments, in September. I hope CPS will wisely choose to follow the lead of other large districts and make the virtual opening of school in the Fall universal for the sake of public health.

More specifically, I am concerned, as a parent, by the differentiated approach that has been suggested for high schools in the current plan; one that will have a negative impact on my daughter and the other members of the Class of '21. Specific concerns follow:

1) CPS notes the "profound" benefits of in-person instruction, but does not seem to account for these in plans for juniors and seniors. For the senior class, in particular, the lack of attention to the unique needs of those making the transition from high school to college or career is especially notable (as these transition needs are at least as significant as those of 9th grade students entering high school).

2) CPS notes complexity of upper-class schedules, with both variety owing to electives and more advanced content, as an argument for moving juniors and seniors to online-only instruction, but does not mention needed investment in access to digital learning tools that will be needed to support robust learning for those classes, e.g., virtual lab simulations for STEM courses

3) CPS does not note if this change will require schools to limit course options, including electives, for seniors, especially, owing to limitations of remote learning (especially given the fact that more advanced online learning applications may require computing power greater than the Chromebooks employed in many CPS schools)

4) Many high school teachers may need to teach underclassmen in person and upperclassmen online only; a hybrid learning approach that requires considerably greater investment in professional development for teachers and time for the design and delivery of robust learning experiences; where is the plan to ensure this support for teachers (and, ultimately, for our students)?

5) Full commitment to an all-online experience, at least at the high school level, would provide teachers with the opportunity to focus wholly on developing new skills and planning courses for digital delivery; having to "split the difference" while CPS continues to consider its final plan seems a recipe for a sub-par experience for teachers and students

6) There has been discussion of planning for Fall sports, but have there been any discussions of planning for performing arts or for academic competitions? Many of these could be conducted in a remote environment, but this, too, will require advanced planning (and mae additional demands on teachers who will already be over-burdened by the approach currently being discussed)

7) Again, for seniors, this will be a college applications season like none in memory; what provisions are being put in place to ensure support for seniors preparing their college applications?

8) If we are still in the midst of the virus in December, will we switch the plan so that 9th and 10th graders are remote and 11th and 12th graders are in-person (as some universities are doing), both to allow for the on-site educational experiences noted above and to allow seniors, especially, to come together for their final semester in CPS?

Clearly, the approach currently proposed by CPS would result in a "worst of both worlds" situation for many students, but certainly for rising juniors and seniors. I strongly encourage the Board to direct CPS leadership to adopt the online-only model for the vast majority of our students, and to immediately eliminate this "split" approach to high school, which would allow our teachers the opportunity to focus on developing the highest-quality online teaching and learning options for our students in the Fall.

Thank you.

[redacted]

5.

RYH's Recent Report

In May Raise Your Hand conducted a parent survey on the spring 2020 remote learning experience in CPS. You can find our resulting report plus back to school recommendations here: Parent Perspectives on CPS Remote Learning and Back to School.

(https://www.ilraiseyourhand.org/parent_survey_results_rl_bts)

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[redacted]

Support the Fight for Public Education

6.

My name is [redacted]. I go to school at Jones College Prep and will be a junior this upcoming school year. We have been told of the new plan regarding juniors and seniors not returning to school this year, and my fellow upperclassmen and I are outraged. We think this is a really bad decision for the sake of us students as most of my peers, if not all, agree that remote learning is completely ineffective for learning. Participating in remote learning at the end of last school year proved to us how ineffective it is, and none of us will stand by to let us go through a full school year of it. I felt that I learned absolutely nothing last year with remote learning and it was just a burden of completing long assignments that don't teach us anything due to a lack of physical instruction. As a junior who is soon to be applying to colleges, I value my learning a lot. I think it is completely unfair that freshman and sophomores are allowed to go back to school but juniors and seniors cannot. CPS juniors and seniors not being able to go to school is just going to help suburban school kids have more learning, and thus take away from our college opportunities as we will not be as educated as them. I understand it is difficult to figure out a plan that allows for a safe socially distant school environment, but if you can make a plan for fresh/soph to go to school, juniors and seniors should be equally as capable of safely going to school. It could be grades 9-10 go to school the first half of the week and grades 11-12 go to school the second half, or something similar. I think no matter how you do it, you should give juniors and seniors our much needed in school learning. I know as a person who wants to

go back to school if I did I would always wear a mask, regularly wash my hands, and keep a safe distance from others. Please try to make this work out for everyone to have the opportunity to go back to school.

The learning of your children and students depends on it.

Thank you.

Sincerely, [redacted]

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7.

AS you know, the CTU has called for school to start with remote learning—we think that this is the safest and wisest course given the state of the pandemic.

I will not use this time to repeat an argument you have likely heard us make in public, but instead the CTU has a series of questions about your plans that we need to have answered. For the sake of time, highlight just four (4).

1. Who decides? Does the Board of Education have the authority to make the decision whether and when schools open with remote learning, in person or with a combination of both, or does the mayor have that authority?

2. What are the criteria that will be used to decide about the re-opening or subsequent re-closure of schools? The WHO recommended that positivity rates stay below 5% for 14 days before reopening. Is that the standard we are using? Cook county is at 4.4% with 4 days of positivity increases in the last 10. When can we expect to know, in clear terms, the criteria—in terms of transmission, positivity, testing, contact tracing, and etc?

3. Your plan calls for pods and social distancing to mitigate risk. What about students and teachers who fall outside your risk mitigation system?

-for example, so-called specials teachers, that is Art, music, physical education, etc. who typically see every student in a school as they rotate through classes.

-what about clinicians who travel widely around the city, servicing several schools?

4. Your plan calls for an increase in custodial services, with the hiring of 400 additional custodians, but what about all the additional needs in other areas, from nurses to counseling and social workers who will be needed to address student needs in the midst of this pandemic?

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8.

Concerned Educator from Curie H.S

Dr. Jackson/CPS Leadership Team/CPS Board Members:

As you are well aware of Dr. Jackson and CPS Board Members, you/we are all ultimately responsible for the health and well-being of the students who attend District 299. I have been a public educator for close to 20 years myself and you and I know that a school's number one job is safety. These are unprecedented times and I wanted to personally thank you as a citizen and as a fellow educator for being an excellent communicator and leader(s) during this unique time in our country. It makes me feel proud to know that all of you are working tirelessly and are genuinely concerned for the health and safety of every Chicago child

who attends are schools. I am also very proud of our school community at Curie H.S and consider Curie my second home. With that being said, I would like to implore your attention for a brief moment and by no means is the intent of this letter to attack or insult the staunch dedication that Dr. Jackson's leadership team and CPS Board Members have displayed throughout this pandemic.

I am writing to express my concern about District 299 reopening in the fall. I am begging you to do everything in your power to prevent schools from reopening to in-person instruction until there is an effective vaccine with which to respond to COVID-19. I've seen a variety of reopening plans from different schools in different districts trickle out as the summer wanes. All of these plans seem like dangerous half-measures. Anything less than completely remote learning presents excessive danger to students and staff. Many seem to be advocating for hybrid models, rotating students and staff through odd schedules and attempting to maintain small numbers of students and staff in the building. I do not see these plans resulting in an environment that will be safe enough for those that must be present in the building. No matter how few students or teachers are present for in-person instruction, there is still too high a risk of infection.

I will reiterate: Please do everything in your power to prevent schools from reopening to in-person instruction until there is an effective vaccine with which to respond to COVID-19. Lives are at stake. While I know teachers and students belong in the classroom for learning to be truly effective and opening schools ultimately helps our economy, our children are not "guinea pigs" for COVID-19. Teachers and administrators will be able to teach confidently if they know that the health and well-being of students, colleagues, and our families are being taken seriously. The district cannot say that teachers will be able to teach effectively in-person during a global pandemic, nor can I say students will be able to learn effectively in-person during a global pandemic. The danger of infection and the resulting anxiety surrounding it will be too great in my humble opinion.

I strongly believe that reopening the schools to in-person instruction before there is an effective vaccine to prevent COVID-19, is an unnecessary potentially life threatening risk. Other surrounding suburban school districts are taking the lead and adopting the stance that anything less than complete remote learning presents excessive danger to students, faculty, and staff.

No one can guarantee that students will stay 6 feet apart, not touch common surfaces (doors, railings, lockers, etc), and then not fiddle with their masks and self infect by touching their faces. A study of medical students in 2015 showed that the average number of times adults touch their face was 23 times per hour (https://pubmed.ncbi.nlm.nih.gov/25637115/). The holes in most masks (other than N95) are 30-60 times bigger than the virus and are a window to the respiratory system. This is fact Dr. Jackson/CPS Board Members!

I have noticed that certain Board of Education meeting have been conducted via Zoom/Hangouts and not in person. Keep in mind that if you did not think it was safe enough for you to meet in person, then why would you think it is safe enough for our students to meet in person.

E-Learning seemed to work out well for the last 3 months of the spring semester and will work just as effectively in the fall.

Prior to COVID-19, Curie H.S has had issues with rat infestation, lack of soap in dispensers in all bathrooms, broken hand dryers, and hand sanitizing stations that are not refilled. We, at times, have not even had toilet paper. Ever since CPS has had a third party cleaning company clean our school, we have had deplorable unsafe and unsanitary issues. The IG office has been in our school and has been disgusted by what they have seen, but nothing has been done to completely remediate the problem. So I ask you, if you quantify our hygiene issues with COVID-19, how are kids supposed to be safe and clean? How are you going to tell parents they are safe to come to our school? You and I know there are a plethora of schools facing similar sanitation concerns. How can we reopen?

Lives that you/we are ultimately responsible for are at stake. Dr. Jackson, your voice carries a lot of "weight" in our community. Now is the time to act. Please be a voice of reason. Thank you for your time and may all of your families continue to stay safe and healthy. I appreciate everyone's diligence, care, and leadership.

All of us are parents and educators first, let us start acting like it and protect our children until a viable vaccine is in place! Thank you all for listening and reading, I can only imagine the amount of emails you all receive :)

Your proud CPS colleague,
[redacted]

McKinsey & Company

Public Sector Practice

COVID-19 and student learning in the United States: The hurt could last a lifetime

New evidence shows that the shutdowns caused by COVID-19 could exacerbate existing achievement gaps.

by Emma Dorn, Bryan Hancock, Jimmy Sarakatsannis, and Ellen Viruleg

June 2020

The US education system was not built to deal with extended shutdowns like those imposed by the COVID-19 pandemic. Teachers, administrators, and parents have worked hard to keep learning alive; nevertheless, these efforts are not likely to provide the quality of education that's delivered in the classroom.

Even more troubling is the context: the persistent achievement disparities across income levels and between white students and students of black and Hispanic heritage. School shutdowns could not only cause disproportionate learning losses for these students—compounding existing gaps—but also lead more of them to drop out. This could have long-term effects on these children's long-term economic well-being and on the US economy as a whole.

Despite the enormous attention devoted to the achievement gap, it has remained a stubborn feature of the US education system. In 2009, we estimated that the gap between white students and black and Hispanic ones deprived the US economy of $310 billion to $525 billion a year in productivity, equivalent to 2 to 4 percent of GDP.[1] The achievement gap between high- and low-income students was even larger, at $400 billion to $670 billion, 3 to 5 percent of GDP. Although we calculate these two gaps separately, we recognize that black and Hispanic students are also more likely to live in poverty. Yet poverty alone cannot account for the gaps in educational performance.[2] Together, they were the equivalent of a permanent economic recession.

Unfortunately, the past decade has seen little progress in narrowing these disparities. The average black or Hispanic student remains roughly two years behind the average white one, and low-income students continue to be underrepresented among top performers.[3] We estimate that if the black and Hispanic student-achievement gap had been closed in 2009, today's US GDP would have been $426 billion to $705 billion higher.[4] If the income-achievement gap had been closed, we estimate that US GDP would have been $332 billion to $550 billion higher (Exhibit 1).

These estimates were made before schools closed and the transition to remote learning began, sometimes chaotically. In this article, we explore the possible long-term damage of COVID-19–related school closures on low-income, black, and Hispanic Americans, and on the US economy.

Learning loss and school closures

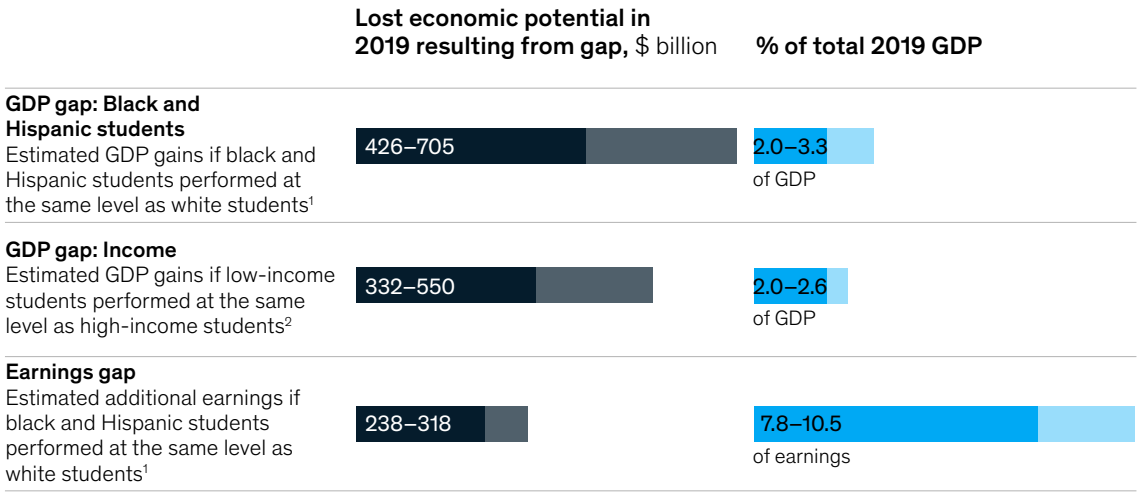
To that end, we created statistical models to estimate the potential impact of school closures on learning. The models were based on academic studies of the effectiveness of remote learning relative to traditional classroom instruction for three different kinds of students. We then evaluated this information in the context of three different epidemiological scenarios.

How much learning students lose during school closures varies significantly by access to remote learning, the quality of remote instruction, home support, and the degree of engagement. For simplicity's sake, we have grouped high-school students into three archetypes. First, there are students who experience average-quality remote learning; this group continues to progress, but at a slower pace than if they had remained in school.[5] Second, some students are getting lower-quality

[1] For both 2009 and 2019, we use $25,000 in annual income (in 2009 constant dollars) as the cutoff between low and high income.
[2] For an analysis of the interaction between the racial and ethnic achievement gap and the income achievement gap, see Byron G. Auguste, Bryan Hancock, and Martha Laboissiere, "The economic cost of the US education gap," June 2009, McKinsey.com.
[3] Erik Hanushek, Paul E. Peterson, Laura M. Talpey, and Ludger Woessmann. *Long-run Trends in the U.S. SES-Achievement Gap*, NBER National Bureau of Economic Research, working paper number 26764, February 2020; S. F. Reardon, "The widening academic achievement gap between the rich and the poor: New evidence and possible explanations," in Greg Duncan and Richard Murnane (Eds.), *Whither Opportunity? Rising Inequality and the Uncertain Life Chances of Low-Income Children*, New York: Russell Sage Foundation, 2011.
[4] The learning gap has remained almost the same between 2007 (the year of the latest data when we published our 2009 report) and 2019. Black students scored, on average, 31 points lower than white students did on eighth-grade National Assessment of Education Progress (NAEP) math assessments in 2007; in 2019 they scored 32 points lower. Hispanic students scored, on average, 26 points lower than white students did on eighth-grade NAEP math assessments in 2007; in 2019 they scored 24 points lower. The increase in dollar values is the result of an increase in proportion of black and Hispanic people in the workforce and higher GDP base value in 2019.
[5] High-quality remote-learning programs are typically the result careful planning and deliberate approaches—which were not typical of the COVID-19 transition.

Exhibit 1

The US economy would be significantly larger in 2019 if it had closed achievement gaps in 2009.



[1] NAEP 8th-grade math score: comparison of average scores of black and Hispanic students with white students.
[2] NAEP 8th-grade math score: comparison between low-income (eligible for free lunch) students and high-income students.

remote learning; they are generally stagnating at their current grade levels. Then there are students who are not getting any instruction at all; they are probably losing significant ground. Finally, some students drop out of high school altogether.

We also modeled three epidemiological scenarios. In the first—"virus contained"—in-class instruction resumes in fall 2020. In the second—"virus resurgence"— school closures and part-time schedules continue intermittently through the 2020–21 school year, and in-school instruction does not fully resume before January 2021.[6] In the third scenario—"pandemic escalation"—the virus is not controlled until vaccines are available, and schools operate remotely for the entire 2020–21 school year.

In our second scenario (in-class instruction does not resume until January 2021), we estimate that students who remain enrolled could lose three to four months of learning if they receive average remote instruction, seven to 11 months with lower-quality remote instruction, and 12 to 14 months if they do not receive any instruction at all (Exhibit 2).

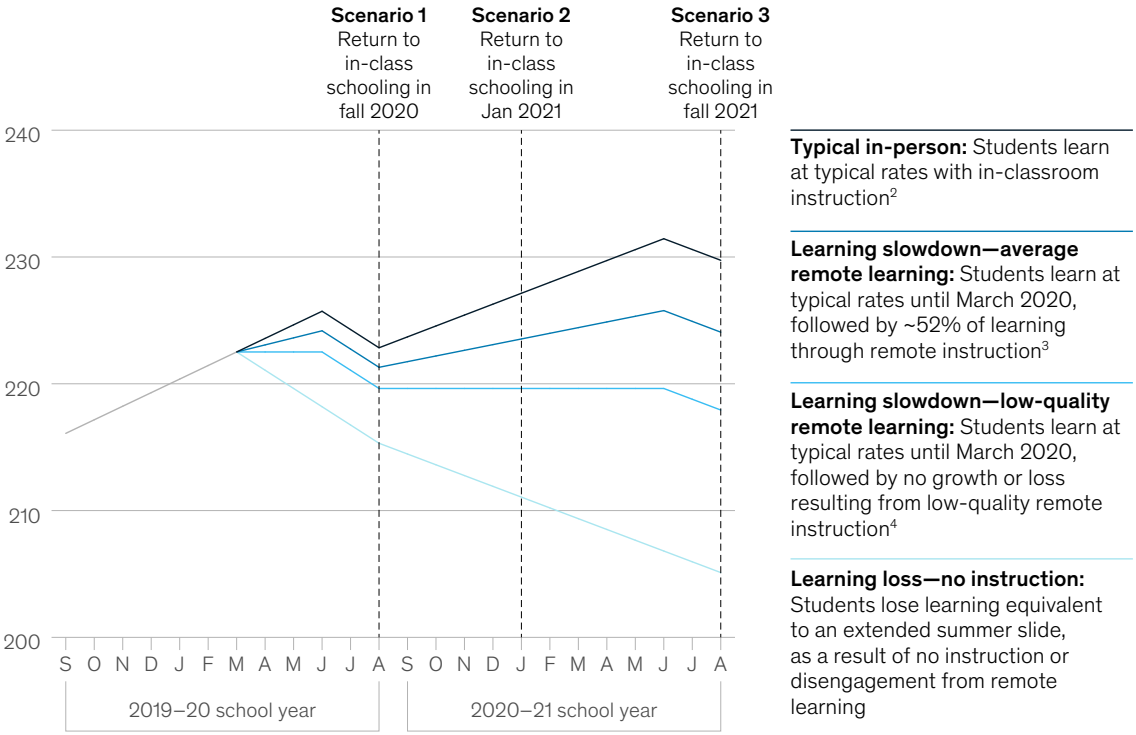
Although students at the best full-time virtual schools can do as well as or better than those at traditional ones,[7] most studies have found that full-time online learning does not deliver the academic results of in-class instruction.[8] Moreover, in 28 states,[9] with around 48 percent of K–12 students, distance learning has not been mandated.[10] As a result, many students may not receive any instruction until schools reopen. Even in places

[6] For simplicity's sake, we have equated this with schools restarting as normal in January 2021, even though the reality is more likely to be a patchwork of different actions.
[7] There is evidence from online-learning providers' internal, peer-reviewed research that some virtual-learning experiences can achieve parity with brick-and-mortar experiences for students, especially those who were struggling academically.
[8] See, for example the 2015 Online Charter School Study of the Center for Research on Education Outcomes (CREDO), credo.stanford.edu.
[9] Alaska, Arkansas, Colorado, Connecticut, Georgia, Hawaii, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Missouri, Montana, New Jersey, New York, North Carolina, Ohio, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Virginia, West Virginia, and Wisconsin.
[10] *Politics K–12*, "Coronavirus and learnings: What's happening in each state," blog entry by *Education Week* staff, April 3, 2020, blogs.edweek.org.

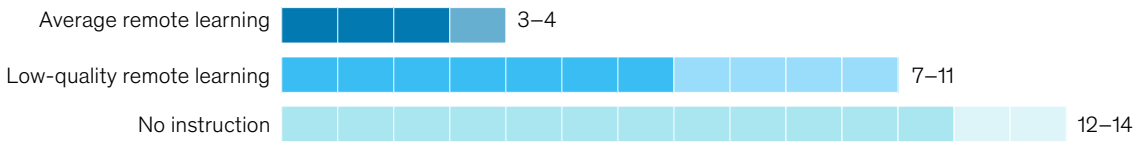
Exhibit 2

In all three scenarios, students are at risk for significant learning loss.

Projected 6th-grade math performance, example, NWEA[1] RIT Scores



Average months of learning lost in scenario 2 compared with typical in-classroom learning



[1] NWEA is a K–12 assessment provider serving over 9,500 schools across the US; their RIT scores are a standardized scaled score that measures student performance and progress.
[2] Normal school year growth rates estimated using NWEA data.
[3] 52% assumed growth for high-quality instruction.
[4] 0% assumed average growth for low-quality instruction. Rates of learning loss may differ by student groups.

Source: Megan Kuhfeld, Dennis Condron, and Doug Downey, *When does inequality grow?*, 2019; Center for Research on Education Outcomes, Online Charter Schools Study, 2015

where distance learning is compulsory, significant numbers of students appear to be unaccounted for.[11] In short, the hastily assembled online education currently available is likely to be both less effective, in general, than traditional schooling and to reach fewer students as well.

Likely effects on low-income, black, and Hispanic students

Learning loss will probably be greatest among low-income, black, and Hispanic students. Lower-income students are less likely to have access to high-quality remote learning or to a conducive

[11] The Curriculum Associates analysis of anonymized data on usage from March to May 2020 of i-Ready software (a personalized learning system typically used as supplemental instruction by classroom teachers), curriculumassociates.com.

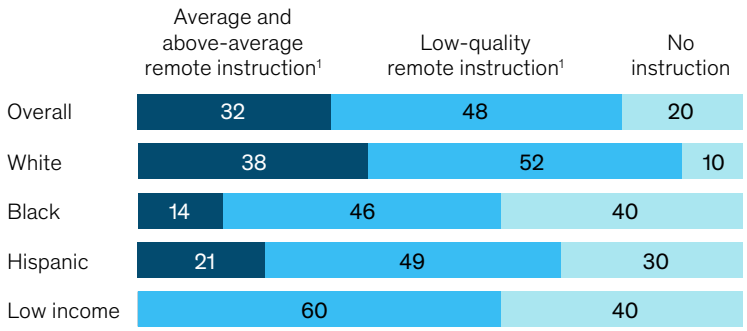
learning environment, such as a quiet space with minimal distractions, devices they do not need to share, high-speed internet, and parental academic supervision.[12] Data from Curriculum Associates, creators of the i-Ready digital-instruction and -assessment software, suggest that only 60 percent of low-income students are regularly logging into online instruction; 90 percent of high-income students do. Engagement rates are also lagging behind in schools serving predominantly black and Hispanic students; just 60 to 70 percent are logging in regularly (Exhibit 3).[13]

These variations translate directly into greater learning loss.[14] The average loss in our middle epidemiological scenario is seven months. But

Exhibit 3

Learning loss will probably be greater for low-income, black, and Hispanic students.

Quality level of remote instruction, % of K–12 students



Black, Hispanic, and low-income students are at higher risk of not receiving remote instruction of average or above-average quality ...

Average months of learning lost in scenario 2 compared with typical in-classroom learning[2]

... and the result is learning loss from student disengagement and/or lack of access

[1] Estimates based on income quintiles, with assumption that top 2 income quintiles receive high-quality instruction.
[2] Includes 0.05 standard deviation reduction for black, Hispanic, and low-income students to account for recession impacts (~1 month of additional lost learning).

Source: US Census 2018

[12] Many parents continue to work full-time outside their homes, so their children may not have an adult at home to supervise their learning; Brooke Auxier and Monica Anderson, "As schools close due to the coronavirus, some U.S. students face a digital 'homework gap,'" Fact Tank, March 16, 2020, pewreasearch.org. Many white-collar workers, however, are able to work remotely and thus provide at least some supervision. Dana Goldstein, Adam Popescu, and Nikole Hannah-Jones, "As school moves online, many students stay logged out, *New York Times*, April 6, 2020, nytimes.com. Also, one in ten public school students in New York City lives in shelter housing, which can mean several children sharing a single room; Anna North, "The shift to online learning could worsen educational inequality," Vox, April 9, 2020, vox.com.

[13] The Curriculum Associates analysis of anonymized data on usage from March to May 2020 of i-Ready software (a personalized learning system typically used as supplemental instruction by classroom teachers), percentage of log-ins as a portion of pre-closure rates on a weekly basis, curriculumassociates.com.

[14] To gauge the proportion of students that may fall into our three learning archetypes by race or ethnicity and by income level, we integrated multiple sources of information, including national surveys of teachers and data on student log-in patterns by race or ethnicity and income estimates to generate the plausibility of the type of instruction that students may receive given the income quintiles of their families. Specifically, "No instruction" estimates based on Curriculum Associates data and press reporting, including Mark Lieberman, "Taking attendance during Coronavirus closures: Is it even worth it?", *Education Week*, May 27, 2020, edweek.org; and Howard Blume and Sonali Kohli, "15,000 LA high-school students are AWOL online, 40,000 fail to check in daily amid coronavirus closures," *Los Angeles Times*, March 30, 2020, latimes.com. High- and low-quality instruction estimates are based on US Census income quintiles (Income Data Tables, US Census Bureau, 2019, census.gov) with the assumption that top two income quintiles receive higher-quality instruction.

These effects—learning loss and higher dropout rates—are not likely to be temporary shocks easily erased in the next academic year.

black students may fall behind by 10.3 months, Hispanic students by 9.2 months, and low-income students by more than a year. We estimate that this would exacerbate existing achievement gaps by 15 to 20 percent.

In addition to learning loss, COVID-19 closures will probably increase high-school drop-out rates (currently 6.5 percent for Hispanic, 5.5 percent for black , and 3.9 percent for white students, respectively). The virus is disrupting many of the supports that can help vulnerable kids stay in school: academic engagement and achievement, strong relationships with caring adults, and supportive home environments. In normal circumstances, students who miss more than ten days of school are 36 percent more likely to drop out.[15] In the wake of school closures following natural disasters, such as Hurricane Katrina (2005) and Hurricane Maria (2017), 14 to 20 percent of students never returned to school.[16] We estimate that an additional 2 to 9 percent of high-school students could drop out as a result of the coronavirus and associated school closures—232,000 ninth-to-11th graders (in the mildest scenario) to 1.1 million (in the worst one).[17]

In addition to the negative effects of learning loss and drop-out rates, other, harder to quantify factors could exacerbate the situation: for example, the crisis is likely to cause social and emotional disruption by increasing social isolation and creating anxiety over the possibility that parents may lose jobs and loved ones could fall ill. Milestones such as graduation ceremonies have been canceled, along with sports and other extracurricular events. These challenges can reduce academic motivation and hurt academic performance and general levels of engagement.[18]

The loss of learning may also extend beyond the pandemic. Given the economic damage, state budgets are already stressed. Cuts to K–12 education are likely to hit low-income and racial- and ethnic-minority students disproportionately, and that could further widen the achievement gap.[19]

The economic impact of learning loss and dropping out

These effects—learning loss and higher dropout rates—are not likely to be temporary shocks easily erased in the next academic year. On the contrary, we believe that they may translate into long-term harm for individuals and society.

Using the middle (virus resurgence) epidemiological scenario, in which large-scale in-class instruction does not resume until January 2021, we estimated the economic impact of the learning disruption. (The results would, of course, be worse in the third scenario and better in the first.) All told, we estimate that the average K–12 student in the United States

[15] *Research brief: Chronic absenteeism*, Utah Education Policy Center, University of Utah, 2012, uepc.utah.edu.
[16] "Declining Enrollment, Shuttered Schools," *Education Week*, September 19, 2018, edweek.org; "Legacy of Katrina: The Impact of a Flawed Recovery on Vulnerable Children of the Gulf Coast," National Center for Disaster Preparedness, Children's Health Fund, 2010.
[17] To create these estimates, we compared data on the effects on drop-out rates resulting from extended school absences, online-only instruction (which can disrupt engagement and student–teacher relationships), and natural disasters. We focus on grades 9 to 11, as many school districts have relaxed testing and other graduation requirements for current 12th-grade students.
[18] Leah Lessard and Hannah Schacter, "Why the coronavirus crisis hits teenagers particularly hard: Developmental scientists explain," *Education Week*, April 15, 2020, edweek.org.
[19] During the 2008 recession, annual academic gains in US counties that suffered the largest shocks to employment fell 25 percent from prerecession levels. These districts disproportionately served poor and black Americans. K. Shores, K and M. P. Steinberg, *Schooling During the Great Recession: Patterns of School Spending and Student Achievement Using Population Data*, 2019.

could lose $61,000 to $82,000 in lifetime earnings (in constant 2020 dollars), or the equivalent of a year of full-time work, solely as a result of COVID-19–related learning losses. These costs are significant—and worse for black and Hispanic Americans. While we estimate that white students would earn $1,348 a year less (a 1.6 percent reduction) over a 40-year working life, the figure is $2,186 a year (a 3.3 percent reduction) for black students and $1,809 (3.0 percent) for Hispanic ones.

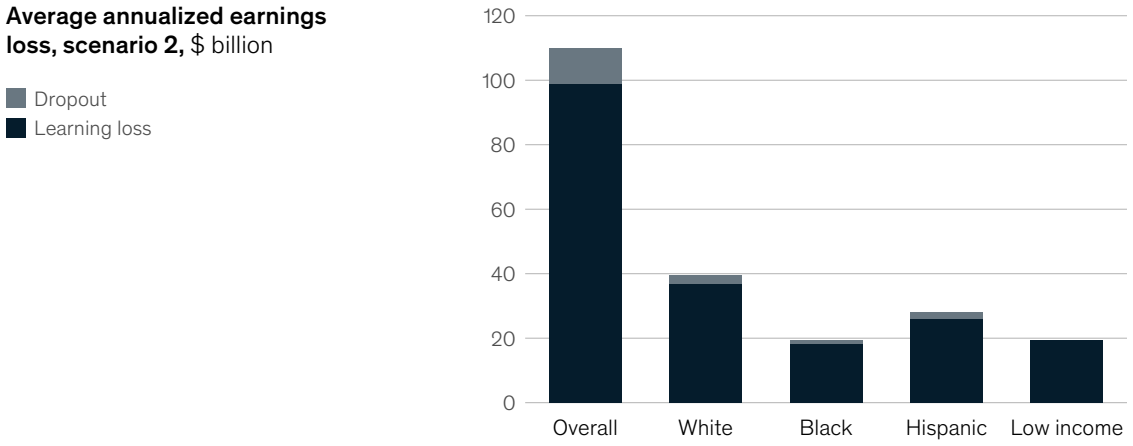
This translates into an estimated impact of $110 billion annual earnings across the entire current K–12 cohort[20] (Exhibit 4). Of that sum, $98.8 billion would be associated with loss of learning and the rest ($11.2 billion) with the increase in the number of high-school dropouts. This is not just an economic issue. Multiple studies have linked greater educational attainment to improved health, reduced crime and incarceration levels, and increased political participation.

The damage to individuals is consequential, but the consequences could go deeper: the United States as a whole could suffer measurable harm. With lower levels of learning and higher numbers of drop-outs, students affected by COVID-19 will probably be less skilled and therefore less productive than students from generations that did not experience a similar gap in learning.[21] Furthermore, if other countries

Exhibit 4

Loss of learning leads to loss of earning.

Average annualized earnings loss, scenario 2, $ billion



	Overall	White	Black	Hispanic	Low income
Estimated effect of learning loss					
Number of students affected, million	55.3	27.1	8.3	14.3	11.8
Average annual earnings lost, $	1,785	1,348	2,186	1,809	1,642
Average lifetime earnings lost, %[1]	2.2	1.6	3.3	3.0	4.0
Estimated effect of higher number of dropouts					
Average number of high-school dropouts, thousand	648	263	114	233	NA
Average annual earnings lost, $[2]	17,218	10,951	11,879	9,280	NA
Average lifetime earnings lost, %[1]	21.2	13.2	18.1	15.2	NA

[1] Assumes 40-year work life with average salary in 2020 dollars, using 2% inflation and 4.4% wage growth rate, average estimate.
[2] Individual earnings on average over a career of 40 years., average estimate.

Source: Bureau of Labor Statistics; Brookings Institute; National Center for Education Statistics; National Center for Children in Poverty

[20] Using projected learning loss onto the National Assessment of Education Progress and its relationship with the country's GDP and earnings. In addition, in all calculations below, we have accounted for the effects of an economic recession on academic outcomes.

mitigate the impact of lost learning and the United States does not, this will harm US competitiveness. By 2040, most of the current K–12 cohort will be in the workforce. We estimate a GDP loss of $173 billion to $271 billion a year—a 0.8 to 1.3 percent hit (Exhibit 5).[22]

A call to action

These numbers are sobering—but they are not inevitable. If the United States acts quickly and effectively, it may avoid the worst possible outcomes. But if there is a delay or a lack of commitment, COVID-19 could end up worsening existing inequities.

It is therefore urgent to intervene immediately to support vulnerable students. Many students will continue to take advantage of free learning resources, but school systems must also think creatively about how to encourage ongoing learning over the summer. Initiatives might include expanding existing summer-school programs, working with agencies that run summer camps and youth programs so that they add academics to their activities, and enlisting corporations to identify and train volunteer tutors. Tennessee, for example, is recruiting 1,000 college students to tutor kids falling behind. New York will be conducting remote summer school for 177,700 students (compared with 44,000 in 2019). Some districts are making digital summer learning available (though optional) to all students.

The necessity of continued remote learning cannot be an excuse for inaction or indifference. There are examples of high-quality online education, and reaching this level should be the general expectation. While no one knows exactly what level of in-class learning will be possible for the 2020–21 school year, many students will probably need to stay home for at least part of it. Educators need to use the summer to learn how to make instruction more effective, whatever the scenario.

Achieving this goal will make it necessary to provide teachers with resources that show them how they can make virtual engagement and instruction effective and to train them in remote-learning best practices. It will also be necessary to work with parents to help create a good learning environment at home, to call upon social and mental-health services so that students can cope with the pandemic's stresses, and to ensure that all students

Exhibit 5

The educational losses caused by COVID-19 could hurt long-term GDP growth.

Estimated impact, by scenario

	Learning loss, months	**Number of additional high-school dropouts,** thousand	**GDP loss by 2040,** $ billion	**Annual earnings loss,** $ billion
Scenario 1: In-classroom instruction[1] resumes by fall 2020	3.1	232	80–125	44–57
Scenario 2: In-classroom instruction[1] resumes by Jan 2021	6.8	648	173–271	96–124
Scenario 3: In-classroom instruction[1] resumes by fall 2021	12.4	1,100	306–483	169–221

[1] Or instruction as effective as in-classroom instruction.

[21] Similar effects have been noted for other generations that experienced major learning disruptions. For example, several studies have shown long-term earnings implications for students whose learning was disrupted during World War II.

[22] Using Hanushek and Woessman 2008 methodology to map national per capita growth associated with decrease in academic achievement, then adding additional impact of COVID drop-outs on GDP.

have the infrastructure (such as laptops, tablets, and good broadband) needed for remote learning.

As a blend of remote and in-classroom learning becomes possible, more flexible staffing models will be required, along with a clear understanding of which activities to prioritize for in-classroom instruction, identification of the students who most need it, and the flexibility to switch between different teaching methods. And all this must be done while school systems keep the most vulnerable students top of mind. That may require investment—something that cannot be taken for granted if state and local government budgets are cut.

The US academic-achievement gap was first identified in 1966. Its persistence is troubling. The possibility that COVID-19 could make it worse deserves focused attention. The achievement gap costs the United States hundreds of billions of dollars—and also exacts a long-term cost in social cohesion. This is a moment—and a challenge—that calls for urgency and energy.

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Working Paper Series

The unequal toll of COVID-19 mortality by age in the United States: Quantifying racial/ethnic disparities

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Abstract

Importance: Excess COVID-19 mortality has been described among Non-Hispanic Blacks (NHB), Hispanics and Non-Hispanic American Indians/Alaska Natives (NHAIAN), compared to non-Hispanic Whites (NHW), but not in relation to age at death. Recent release of national COVID-19 deaths by racial/ethnic group now permit analysis of age-specific mortality rates.

Objective: To examine variation in age-specific mortality rates by racial/ethnicity and calculate its impact using Years of Potential Life Lost (YPLL).

Design: This is a descriptive study using the most recently publicly available data on COVID-19 deaths, with population data drawn from the US Census

Setting: United States

Participants: All persons for whom there were reported deaths, COVID-19 deaths and reported racial/ethnicity February 1, 2020-May 20, 2020

Results: Age-standardized rate ratios relative to NHW were 3.6 (95% CI 3.5, 3.7) for NHB, 2.6 95% CI 2.4, 2.7) for Hispanics, 1.2 (0.8, 1.6) for NHAIAN, and 1.7 (1.6, 1.9) for NHAPI. By contrast, NHB rate ratios relative to NHW were as high as 7.3 (95% CI 5.6, 9.5) for 25-34 year old, 9.0 (95% CI 7.6, 10.8) for 35-44 year old, and 6.9 (95% CI 6.3, 7.6) for 45-54 year old. Even at older ages, NHB rate ratios were between 1.9 and 5.7. Similarly, rate ratios for Hispanics vs. NHW were 5.5 (95% CI 4.2, 7.2), 7.9 (95% CI 6.7, 9.3), and 5.8 (95% CI 5.3, 6.3) for corresponding age strata, with remaining rate ratios ranging from 1.4 to 4.1. Rate ratios for NHAIAN were similarly high, ranging from 1.4 to 8.2 over ages 25-75, and only dipping below 1.0 for age 75-84 and 85+. Among NHAPI, rate ratios ranged from 2.2 to 2.4 for ages 25-75 and were 1.6 and 1.2 for age 75-84 and 85+ respectively. As a consequence, more years of potential life lost were experienced by African Americans and Latinos than whites, although the white population is 3-4 fold larger.

Conclusion/Relevance: This analysis makes clear the importance of examining age-specific mortality rates and underscore how age standardization can obscure extreme variations within age strata. Data that permit age-specific analyses should be routinely publicly available.

Title: The Unequal Toll of COVID-19 Mortality by age in the United States: Quantifying Racial/Ethnic Disparities

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Key Points

Question: How do COVID-19 mortality rates vary by age across US racial/ethnic groups?

Findings: In all age strata, COVID-19 mortality rates were higher for racial/ethnic minorities compared to whites, with extremely high rate ratios (5-9-fold higher) among younger adults (24-54 years) more than 3 times the age-standardized rate ratio. More years of potential life lost were experienced by African Americans and Latinos than whites, although the white population is 3-4 fold larger.

Meaning: Extreme variations in age-specific mortality are obscured by age standardization. Inspection of age-specific mortality rates is crucial to understanding the disparate impact of COVID-19 on racial/ethnic minorities.

Abstract

Importance: Excess COVID-19 mortality has been described among Non-Hispanic Blacks (NHB), Hispanics and Non-Hispanic American Indians/Alaska Natives (NHAIAN), compared to non-Hispanic Whites (NHW), but not in relation to age at death. Recent release of national COVID-19 deaths by racial/ethnic group now permit analysis of age-specific mortality rates.

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more years of potential life lost were experienced by African Americans and Latinos than whites, although the white population is 3-4 fold larger.

Conclusion/Relevance: This analysis makes clear the importance of examining age-specific mortality rates and underscore how age standardization can obscure extreme variations within age strata. Data that permit age-specific analyses should be routinely publicly available.

Introduction

The first death due to COVID-19 in the United States was reported on February 29, 2020. In late March, media reports brought to national attention of the disproportionate number of COVID-19 cases and deaths occurring among Blacks and Latinos (1). Typically these reports compared the proportion of cases and deaths by reported racial/ethnicity to the racial/ethnic composition of the population. Milwaukee, for example, noted on March 27 that all (100%) of its eight deaths were African Americans, who comprised 38% of their population; in all of Wisconsin, only 15 deaths statewide had occurred (2). Such reports came from state and local jurisdictions. At the time, the Centers for Disease Control and Prevention (CDC) made data COVID-19 data publicly available only by age and sex, prompting many calls to release racial/ethnicity data (3). New York City produced both crude and age-adjusted COVID-19 mortality rates, permitting some insight into the impact of population age structure and age at death on racial/ethnic specific mortality rates (4). Suggesting such information could be important, marked racial/ethnic inequities in premature morbidity and mortality, including for conditions that increase risk of COVID-19 mortality (e.g., diabetes and cardiovascular disease), are well-documented (5-7).

Newly released data by the National Center for Health Statistics (NCHS) (8) make it possible for the first time to explore with national data the likelihood that Blacks, Latinos, American Indian/Alaska Natives, and Asian and Pacific Islanders, in addition to experiencing higher COVID-19 mortality rates than white Americans, are also dying at younger ages.

Methods

Mortality rates and rate ratios

We used the publicly available NCHS data on Covid19 deaths race/ethnicity, age, and state (8) instead of the data on cases and race and ethnicity by age posted by the Centers for Disease Control (CDC) (9), because the NCHS data file includes death counts from New York City (NYC), a major hotspot for COVID-19, which is excluded in the CDC webpage and also provides the data jointly (rather than separately) by “race” and “ethnicity” (Hispanic or not). Racial/ethnic groups were limited to non-Hispanic white (NHW), non-Hispanic black (NHB), non-Hispanic American Indian or Alaskan Native (NHAIAN), non-Hispanic Asian or Pacific Islander (NHAPI), and Hispanic by the availability of denominator data in CDC Wonder (10). Only 1.7% of the NCHS COVID-19 deaths had missing data on race/ethnicity.

We calculated rates for 100,000 person years by dividing deaths by the person-time from February 1 (the "Start Week" listed in the CDC data file) and May 20 (the "Data as of" field in the data file). This permits comparison of the age-specific and age-standardized rates to published mortality rates for common causes of death in previous years. We age-standardized to the Year 2000 standard million and computed age-standardized rates, rate ratios, rate differences, and their confidence intervals using standard methods (11,12).

Years of Potential Life Lost (YPLL) and Years of Potential Life Lost (YPLL) rates

To capture the population impact of premature death, we computed Years of Potential Life Lost (YPLL) by multiplying the number of deaths in each age category by the number of years from

the midpoint of the age category to age 65 and summing over age. We used the cut-point of 65 because of the importance of attainment of 65 years to eligibility for a range of social benefits, including Medicare.

Because the YPLL is sensitive to the size of the population and differences in the age distribution for racial/ethnic groups, we also computed the age-standardized YPLL rate per 100,000 by computing age-specific YPLL rates and then taking a weighted sum with the weights coming from the Year 2000 standard million) (13).

Results

As of May 20, the number of COVID-19 deaths equaled 36,545 for NHW, 15,631 for NHB, 322 for NHAIAN, 3,862 for NHAPI, and 11,303 for Hispanics; the corresponding population sizes were 186.4 million, 40.6 million, 2.6 million, 19.5 million, and 57.7 million (Supplemental Table 1).

Table 1 and Figure 1 show the racial/ethnic disparities in COVID-19 mortality, with Table 1 additionally providing the age-standardized comparisons. Discounting trends for ages below 25 because of instability due to small numbers, disparities were observed in every age stratum and were especially stark among young adults into midlife (25-54 years). NHB rate ratios relative to NHW were as high as 7.3 (95% CI 5.6, 9.5) for 25-34 year old, 9.0 (95% CI 7.6, 10.8) for 35-44 year old, and 6.9 (95% CI 6.3, 7.6) for 45-54 year old. Even at older ages, NHB rate ratios were

between 1.9 and 5.7. Similarly, rate ratios for Hispanics vs. NHW were 5.5 (95% CI 4.2, 7.2), 7.9 (95% CI 6.7, 9.3), and 5.8 (95% CI 5.3, 6.3) for corresponding age strata, with remaining rate ratios ranging from 1.4 to 4.1. Rate ratios for NHAIAN were similarly high, ranging from 1.4 to 8.2 over ages 25-75, and only dipping below 1.0 for age 75-84 and 85+. Among NHAPI, rate ratios ranged from 2.2 to 2.4 for ages 25-75 and were 1.6 and 1.2 for age 75-84 and 85+ respectively. By contrast, the age-standardized rate ratios equaled 3.6 (95% CI 3.5, 3.7) for NHB, 2.6 95% CI 2.4, 2.7) for Hispanic, 1.2 (0.8, 1.6) for NHAIAN, and 1.7 (1.6, 1.9) for NHAPI.

Table 2 shows corresponding Years of Potential Life Lost (YPLL) for COVID-19 (with Supplemental Table 2 also showing YPPL for all-cause mortality, for comparison). For NHB, disparities in COVID-19 mortality translate to 45,777 (95% CI 32,061 to 34,832) years of potential life lost, for Hispanics, 48,204 (95% CI 46,328 to 50,080), 1,745 (95% CI 1,371 to 2,119) for NHAIAN, and 8,905 (95% CI 8,156 to 9,654) for NHAPI, compared with 33,446 (95% CI 32,061 to 34,832) for NHW. Accounting for age distribution and population size differences between racial/ethnic groups, the age-standardized YPLL rate was 6.7 (95% CI 6.7, 6.8) for NHB, 5.4 (95% CI 5.3, 5.4) for Hispanics, 4.0 (95% CI 3.9, 4.0) for NHAIAN, and 2.6 (95% CI 2.6, 2.7) for NHAPI times higher compared with NHW.

Discussion

These data demonstrate excess risk of COVID-19 death at all ages among Non-Hispanic Blacks, Hispanics, Non-Hispanic American Indian or Alaskan Natives, and Non-Hispanic Asian Pacific Islanders (NHAPI) as compared to Non-Hispanic Whites (NHW), with disparities particularly

extreme at younger ages (25-54 years old). The impact of lives prematurely cut short (before attaining 65 years) can be measured in the absolute number of years of potential life lost. For both NHBs and Hispanics this loss is much larger than for NHW, despite the fact that the NHW population is respectively 4.5 and 3 -fold larger. Poor quality of AIAN mortality and population data likely means the estimated excesses are underestimates (14).

Examination of age-specific mortality rates, and not simply counts of deaths or crude comparisons of the racial/ethnic composition of COVID-19 deaths to the total population, is crucial to revealing racial/ethnic disparities. Nor are age-standardized rates sufficient because age standardization, while accounting for the different age distributions across racial/ethnic groups, notably obscured the magnitude of mortality inequities at younger ages (5-7). These COVID-19 mortality rate ratios, 7-9-fold higher for NHB, NHAIAN, and Hispanics, are extreme and reflect the devastating toll COVID-19 has taken among communities of color. Age-specific mortality rates for COVID-19 should be routinely available by race/ethnicity as well as by gender.

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Table 1: Age-specific and age-standardized rate ratios and rate differences per 100,000 person-years comparing rates of COVID-19 mortality for racial/ethnic groups compared with Non-Hispanic Whites, United States, February 1-May 20, 2020

Age group	Incidence Rate Ratio (95% CI) (reference group: Non-Hispanic White)			
	Non-Hispanic Black	Non-Hispanic American Indian or Alaska Native	Non-Hispanic Asian or Pacific Islander	Hispanic
age-standardized	3.61 (3.41, 3.81)	1.16 (0.84, 1.60)	1.74 (1.58, 1.91)	2.59 (2.43, 2.76)
Under 1 year	-*	-	-	3.96 (0.36, 43.70)
1-4 years	3.37 (0.21, 53.90)	-	-	-
5-14 years	13.82 (1.54, 123.70)	-	8.84 (0.55, 141.40)	-
15-24 years	5.43 (2.89, 10.20)	3.51 (0.47, 26.50)	1.64 (0.48, 5.60)	4.20 (2.27, 7.80)
25-34 years	7.29 (5.60, 9.50)	7.29 (3.79, 14.10)	2.42 (1.58, 3.70)	5.51 (4.24, 7.20)
35-44 years	9.04 (7.58, 10.80)	8.16 (5.20, 12.80)	2.44 (1.83, 3.30)	7.89 (6.67, 9.30)
45-54 years	6.91 (6.29, 7.60)	3.49 (2.46, 4.90)	2.79 (2.40, 3.20)	5.79 (5.28, 6.30)
55-64 years	5.68 (5.39, 6.00)	2.11 (1.65, 2.70)	2.72 (2.49, 3.00)	4.10 (3.87, 4.30)
65-74 years	5.05 (4.86, 5.30)	1.37 (1.09, 1.70)	2.22 (2.07, 2.40)	3.52 (3.36, 3.70)
75-84 years	3.61 (3.48, 3.70)	0.83 (0.64, 1.10)	1.61 (1.51, 1.70)	2.49 (2.38, 2.60)
85 years and over	1.92 (1.84, 2.00)	0.61 (0.47, 0.80)	1.22 (1.15, 1.30)	1.39 (1.33, 1.50)
	Incidence Rate Difference per 100,000 person-years (95% CI) (reference group: Non-Hispanic White)			
	Non-Hispanic Black	Non-Hispanic American Indian or Alaska Native	Non-Hispanic Asian or Pacific Islander	Hispanic
age-standardized	109.9 (145.0, 145.0)	6.9 (33.3, 33.3)	31.0 (66.3, 66.3)	67.0 (103.2, 103.2)
Under 1 year	-0.2 (-0.5, 0.2)	-0.2 (-0.5, 0.2)	-0.2 (-0.5, 0.2)	0.5 (-0.5, 1.5)
1-4 years	0.1 (-0.2, 0.4)	-0.0 (-0.1, 0.0)	-0.0 (-0.1, 0.0)	-0.0 (-0.1, 0.0)
5-14 years	0.2 (-0.0, 0.4)	-0.0 (-0.0, 0.0)	0.1 (-0.1, 0.4)	-0.0 (-0.0, 0.0)
15-24 years	1.0 (0.5, 1.5)	0.6 (-1.0, 2.1)	0.1 (-0.3, 0.6)	0.7 (0.4, 1.1)
25-34 years	6.9 (5.6, 8.2)	6.9 (1.9, 11.9)	1.6 (0.5, 2.6)	4.9 (4.0, 5.9)
35-44 years	20.8 (18.4, 23.2)	18.5 (9.5, 27.6)	3.7 (2.1, 5.4)	17.8 (16.0, 19.6)
45-54 years	57.3 (53.2, 61.4)	24.2 (12.6, 35.8)	17.4 (13.8, 21.0)	46.5 (43.2, 49.8)
55-64 years	281.6 (268.5, 294.7)	66.8 (36.1, 97.5)	103.4 (89.8, 117.0)	186.5 (175.5, 197.5)
65-74 years	372.5 (358.2, 386.8)	33.8 (5.4, 62.1)	111.9 (98.5, 125.3)	231.9 (219.2, 244.6)
75-84 years	755.3 (723.0, 787.6)	-49.4 (-110.0, 11.2)	176.8 (147.1, 206.4)	430.6 (402.6, 458.5)
85 years and over	943.0 (870.5, 1015.4)	-402.9 (-570.4, -235.5)	225.2 (148.4, 302.1)	400.3 (337.5, 463.0)

* "-" indicates rate ratio or rate difference not calculated due to zero cases in this age stratum.

Table 2: Years of potential life lost with age 65 cutoff (YPLL65) and age-standardized YPLL65 rate per 100,000 by race/ethnicity, with age-standardized YPLL65 rate ratios and rate differences per 100,000, COVID-19 related deaths in the United States, February 1-May 20, 2020

Race/ethnicity	YPLL65	Age-standardized YPLL65 rate per 100,000	Age-standardized YPLL65 rate ratio	Age-standardized YPLL65 rate difference per 100,000
Non-Hispanic White	33,446 (32,061 to 34,832)	18.9 (16.6, 21.2)	1.00 (reference)	0.0 (reference)
Non-Hispanic Black	45,777 (44,023 to 47,531)	127.6 (114.4, 140.9)	6.7 (6.7, 6.8)	108.7 (95.3, 122.2)
Non-Hispanic American Indian or Alaska Native	1,745 (1,371 to 2,119)	75.4 (30.6, 120.2)	4.0 (3.9, 4.0)	56.5 (11.6, 101.3)
Non-Hispanic Asian or Pacific Islander	8,905 (8,156 to 9,654)	50.1 (39.2, 61.0)	2.6 (2.6, 2.7)	31.2 (20.0, 42.3)
Hispanic or Latino	48,204 (46,328 to 50,080)	101.3 (91.2, 111.4)	5.4 (5.3, 5.4)	82.4 (72.0, 92.7)

SUPPLEMENTAL TABLES

Title: The Unequal Toll of COVID-19 Mortality by age in the United States: Quantifying Racial/Ethnic Disparities

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Supplemental Table 1: Age-specific and age-standardized deaths, population, and mortality rate per 100,000 person years for total all cause and COVID-19 mortality in the United States, February 1-May 9, 2020, along with corresponding mortality rate ratios and rate differences per 100,000 person-years

Racial/ethnic group	Cause of death	Age group	Deaths	Population	Rate per 100,000 person-years	Incidence Rate Ratio (95% CI)	Incidence Rate Difference per 100,000 person-years (95% CI)
Non-Hispanic White	COVID-19 mortality	age-standardized	36545	186,405,546	42.2 (40.9, 43.5)	referent group	referent group
		Under 1 year	1	1,994,440	0.2 (0.0, 0.6)		
		1-4 years	1	8,244,087	0.0 (0.0, 0.1)		
		5-14 years	1	21,483,759	0.0 (0.0, 0.1)		
		15-24 years	16	23,544,616	0.2 (0.1, 0.3)		
		25-34 years	84	25,657,465	1.1 (0.9, 1.3)		
		35-44 years	183	23,709,326	2.6 (2.2, 3.0)		
		45-54 years	760	26,232,985	9.7 (9.0, 10.4)		
		55-64 years	2,726	15,189,511	60.1 (57.9, 62.4)		
		65-74 years	6,340	23,091,706	92.0 (89.7, 94.3)		
		75-84 years	10,409	12,034,203	289.8 (284.3, 295.4)		
		85 years and over	16,024	5,223,448	1028.0 (1012.0, 1043.9)		
	All Cause mortality	age-standardized	671,316	186,405,546	833.7 (827.8, 839.7)		
		Under 1 year	1,898	1,994,440	318.9 (304.5, 333.2)		
		1-4 years	376	8,244,087	15.3 (13.7, 16.8)		
		5-14 years	651	21,483,759	10.2 (9.4, 10.9)		
		15-24 years	3,960	23,544,616	56.4 (54.6, 58.1)		
		25-34 years	9,834	25,657,465	128.4 (125.9, 131.0)		
		35-44 years	14,456	23,709,326	204.3 (201.0, 207.6)		
		45-54 years	29,137	26,232,985	372.2 (367.9, 376.5)		
		55-64 years	76,781	15,189,511	1693.8 (1681.9, 1705.8)		
		65-74 years	128,841	23,091,706	1869.7 (1859.4, 1879.9)		
		75-84 years	172,745	12,034,203	4810.1 (4787.4, 4832.8)		
		85 years and over	232,637	5,223,448	14924.0 (14863.4, 14984.6)		
Non-Hispanic Black	COVID-19 mortality	age-standardized	15631	40,613,993	152.1 (145.1, 159.0)	3.61 (3.41, 3.81)	109.9 (145.0, 145.0)
		Under 1 year	0	591,754	-	-	-0.2 (-0.5, 0.2)
		1-4 years	1	2,447,225	0.1 (0.0, 0.5)	3.37 (0.21, 53.90)	0.1 (-0.2, 0.4)
		5-14 years	4	6,217,144	0.2 (0.0, 0.4)	13.82 (1.54, 123.70)	0.2 (-0.0, 0.4)
		15-24 years	24	6,500,474	1.2 (0.7, 1.7)	5.43 (2.89, 10.20)	1.0 (0.5, 1.5)
		25-34 years	159	6,658,091	8.0 (6.8, 9.2)	7.29 (5.60, 9.50)	6.9 (5.6, 8.2)
		35-44 years	378	5,414,553	23.4 (21.0, 25.8)	9.04 (7.58, 10.80)	20.8 (18.4, 23.2)
		45-54 years	1,058	5,287,236	67.1 (63.0, 71.1)	6.91 (6.29, 7.60)	57.3 (53.2, 61.4)
		55-64 years	2,706	2,653,390	341.7 (328.9, 354.6)	5.68 (5.39, 6.00)	281.6 (268.5, 294.7)
		65-74 years	4,168	3,006,666	464.5 (450.4, 478.6)	5.05 (4.86, 5.30)	372.5 (358.2, 386.8)
		75-84 years	4,148	1,329,955	1045.1 (1013.3, 1076.9)	3.61 (3.48, 3.70)	755.3 (723.0, 787.6)
		85 years and over	2,985	507,505	1970.9 (1900.2, 2041.6)	1.92 (1.84, 2.00)	943.0 (870.5, 1015.4)
	All Cause mortality	age-standardized	117,244	40,613,993	1125.1 (1106.3, 1143.9)	1.35 (1.33, 1.37)	291.3 (1105.4, 1105.4)
		Under 1 year	1,243	591,754	703.9 (664.7, 743.0)	2.21 (2.05, 2.40)	385.0 (343.3, 426.7)
		1-4 years	229	2,447,225	31.4 (27.3, 35.4)	2.05 (1.74, 2.40)	16.1 (11.7, 20.4)
		5-14 years	274	6,217,144	14.8 (13.0, 16.5)	1.45 (1.26, 1.70)	4.6 (2.7, 6.5)
		15-24 years	1,899	6,500,474	97.9 (93.5, 102.3)	1.74 (1.64, 1.80)	41.5 (36.8, 46.3)

		25-34 years	3,721	6,658,091	187.3 (181.3, 193.3)	1.46 (1.40, 1.50)	58.8 (52.3, 65.4)
		35-44 years	5,038	5,414,553	311.8 (303.2, 320.4)	1.53 (1.48, 1.60)	107.5 (98.2, 116.7)
		45-54 years	9,634	5,287,236	610.6 (598.4, 622.8)	1.64 (1.60, 1.70)	238.4 (225.5, 251.3)
		55-64 years	21,297	2,653,390	2689.6 (2653.4, 2725.7)	1.59 (1.56, 1.60)	995.7 (957.7, 1033.8)
		65-74 years	27,161	3,006,666	3027.1 (2991.1, 3063.1)	1.62 (1.60, 1.60)	1157.4 (1120.0, 1194.8)
		75-84 years	24,792	1,329,955	6246.5 (6168.8, 6324.3)	1.30 (1.28, 1.30)	1436.4 (1355.4, 1517.4)
		85 years and over	21,956	507,505	14496.9 (14305.2, 14688.7)	0.97 (0.96, 1.00)	-427.1 (-628.2, -225.9)
Non-Hispanic American Indian or Alaska Native	COVID-19 mortality	age-standardized	322	2,592,666	49.0 (33.4, 64.7)	1.16 (0.84, 1.60)	6.9 (33.3, 33.3)
		Under 1 year	0	38,260	-	-	-0.2 (-0.5, 0.2)
		1-4 years	0	156,473	-	-	-0.0 (-0.1, 0.0)
		5-14 years	0	409,393	-	-	-0.0 (-0.0, 0.0)
		15-24 years	1	419,255	0.8 (0.0, 2.9)	3.51 (0.47, 26.50)	0.6 (-1.0, 2.1)
		25-34 years	10	418,797	8.0 (3.0, 13.0)	7.29 (3.79, 14.10)	6.9 (1.9, 11.9)
		35-44 years	21	333,378	21.1 (12.1, 30.1)	8.16 (5.20, 12.80)	18.5 (9.5, 27.6)
		45-54 years	33	326,384	33.9 (22.3, 45.4)	3.49 (2.46, 4.90)	24.2 (12.6, 35.8)
		55-64 years	66	174,263	126.9 (96.3, 157.5)	2.11 (1.65, 2.70)	66.8 (36.1, 97.5)
		65-74 years	76	202,493	125.8 (97.5, 154.0)	1.37 (1.09, 1.70)	33.8 (5.4, 62.1)
		75-84 years	61	85,020	240.4 (180.1, 300.8)	0.83 (0.64, 1.10)	-49.4 (-110.0, 11.2)
		85 years and over	54	28,950	625.0 (458.3, 791.8)	0.61 (0.47, 0.80)	-402.9 (-570.4, -235.5)
	All Cause mortality	age-standardized	5,190	2,592,666	776.3 (714.4, 838.1)	0.93 (0.86, 1.01)	-57.5 (714.1, 714.1)
		Under 1 year	47	38,260	411.6 (294.0, 529.3)	1.29 (0.97, 1.70)	92.8 (-25.8, 211.3)
		1-4 years	15	156,473	32.1 (15.9, 48.4)	2.10 (1.25, 3.50)	16.8 (0.5, 33.2)
		5-14 years	16	409,393	13.1 (6.7, 19.5)	1.29 (0.79, 2.10)	2.9 (-3.5, 9.4)
		15-24 years	113	419,255	90.3 (73.7, 107.0)	1.60 (1.33, 1.90)	34.0 (17.2, 50.7)
		25-34 years	316	418,797	252.8 (225.0, 280.7)	1.97 (1.76, 2.20)	124.4 (96.4, 152.4)
		35-44 years	395	333,378	397.0 (357.9, 436.2)	1.94 (1.76, 2.10)	192.7 (153.4, 232.0)
		45-54 years	583	326,384	598.6 (550.0, 647.1)	1.61 (1.48, 1.70)	226.4 (177.6, 275.1)
		55-64 years	972	174,263	1869.1 (1751.6, 1986.6)	1.10 (1.04, 1.20)	175.2 (57.1, 293.3)
		65-74 years	1,085	202,493	1795.5 (1688.7, 1902.3)	0.96 (0.90, 1.00)	-74.2 (-181.5, 33.2)
		75-84 years	949	85,020	3740.3 (3502.3, 3978.3)	0.78 (0.73, 0.80)	-1069.8 (-1308.8, -830.7)
		85 years and over	699	28,950	8090.8 (7491.0, 8690.6)	0.54 (0.50, 0.60)	-6833.2 (-7436.0, -6230.3)
Non-Hispanic Asian or Pacific Islander	COVID-19 mortality	age-standardized	3862	19,492466	73.2 (66.5, 79.9)	1.74 (1.58, 1.91)	31.0 (66.3, 66.3)
		Under 1 year	0	216,177	-	-	-0.2 (-0.5, 0.2)
		1-4 years	0	949,886	-	-	-0.0 (-0.1, 0.0)
		5-14 years	1	2,429,718	0.1 (0.0, 0.5)	8.84 (0.55, 141.40)	0.1 (-0.1, 0.4)
		15-24 years	3	2,692,199	0.4 (0.1, 0.9)	1.64 (0.48, 5.60)	0.1 (-0.3, 0.6)
		25-34 years	28	3,534,255	2.7 (1.7, 3.6)	2.42 (1.58, 3.70)	1.6 (0.5, 2.6)
		35-44 years	61	3,233,519	6.3 (4.7, 7.9)	2.44 (1.83, 3.30)	3.7 (2.1, 5.4)
		45-54 years	223	2,759,529	27.1 (23.5, 30.6)	2.79 (2.40, 3.20)	17.4 (13.8, 21.0)
		55-64 years	573	1,174,022	163.5 (150.2, 176.9)	2.72 (2.49, 3.00)	103.4 (89.8, 117.0)
		65-74 years	918	1,508,767	203.9 (190.7, 217.1)	2.22 (2.07, 2.40)	111.9 (98.5, 125.3)
		75-84 years	987	708,822	466.6 (437.5, 495.7)	1.61 (1.51, 1.70)	176.8 (147.1, 206.4)
		85 years and over	1,068	285,572	1253.2 (1178.0, 1328.4)	1.22 (1.15, 1.30)	225.2 (148.4, 302.1)
	All Cause mortality	age-standardized	28,184	19,492,466	531.1 (513.0, 549.2)	0.64 (0.62, 0.66)	-302.6 (512.1, 512.1)
		Under 1 year	167	216,177	258.9 (219.6, 298.1)	0.81 (0.69, 1.00)	-60.0 (-101.8, -18.2)
		1-4 years	41	949,886	14.5 (10.0, 18.9)	0.95 (0.69, 1.30)	-0.8 (-5.5, 3.9)
		5-14 years	61	2,429,718	8.4 (6.3, 10.5)	0.83 (0.64, 1.10)	-1.7 (-4.0, 0.5)
		15-24 years	227	2,692,199	28.3 (24.6, 31.9)	0.50 (0.44, 0.60)	-28.1 (-32.2, -24.0)
		25-34 years	434	3,534,255	41.1 (37.3, 45.0)	0.32 (0.29, 0.40)	-87.3 (-91.9, -82.7)
		35-44 years	736	3,233,519	76.3 (70.8, 81.8)	0.37 (0.35, 0.40)	-128.0 (-134.5, -121.6)
		45-54 years	1,575	2,759,529	191.3 (181.8, 200.7)	0.51 (0.49, 0.50)	-180.9 (-191.3, -170.6)
		55-64 years	3,257	1,174,022	929.6 (897.7, 961.5)	0.55 (0.53, 0.60)	-764.2 (-798.3, -730.1)
		65-74 years	5,223	1,508,767	1160.0 (1128.5, 1191.5)	0.62 (0.60, 0.60)	-709.6 (-742.7, -676.6)

		75-84 years	6,848	708,822	3237.4 (3160.7, 3314.0)	0.67 (0.66, 0.70)	-1572.7 (-1652.7, -1492.8)
		85 years and over	9,615	285,572	11282.3 (11056.8, 11507.8)	0.76 (0.74, 0.80)	-3641.7 (-3875.2, -3408.2)
Hispanic or Latino	COVID-19 mortality	age-standardized	11303	57,731,112	109.2 (103.3, 115.1)	2.59 (2.43, 2.76)	67.0 (103.2, 103.2)
		Under 1 year	2	1,007,577	0.7 (0.1, 1.9)	3.96 (0.36, 43.70)	0.5 (-0.5, 1.5)
		1-4 years	0	4,164,396	-	-	-0.0 (-0.1, 0.0)
		5-14 years	0	10,535,155	-	-	-0.0 (-0.0, 0.0)
		15-24 years	28	9,814,256	1.0 (0.6, 1.3)	4.20 (2.27, 7.80)	0.7 (0.4, 1.1)
		25-34 years	170	9,429,166	6.0 (5.1, 6.9)	5.51 (4.24, 7.20)	4.9 (4.0, 5.9)
		35-44 years	523	8,587,112	20.4 (18.7, 22.2)	7.89 (6.67, 9.30)	17.8 (16.0, 19.6)
		45-54 years	1,178	7,025,565	56.2 (53.0, 59.4)	5.79 (5.28, 6.30)	46.5 (43.2, 49.8)
		55-64 years	2,024	2,749,799	246.6 (235.9, 257.4)	4.10 (3.87, 4.30)	186.5 (175.5, 197.5)
		65-74 years	2,593	2,682,684	323.9 (311.4, 336.4)	3.52 (3.36, 3.70)	231.9 (219.2, 244.6)
		75-84 years	2,658	1,236,374	720.4 (693.0, 747.8)	2.49 (2.38, 2.60)	430.6 (402.6, 458.5)
		85 years and over	2,127	499,028	1428.3 (1367.6, 1489.0)	1.39 (1.33, 1.50)	400.3 (337.5, 463.0)
	All Cause mortality	age-standardized	77,373	57,731,112	727.3 (712.2, 742.5)	0.87 (0.85, 0.89)	-106.4 (711.0, 711.0)
		Under 1 year	1,063	1,007,577	353.5 (332.3, 374.8)	1.11 (1.03, 1.20)	34.6 (9.0, 60.3)
		1-4 years	206	4,164,396	16.6 (14.3, 18.8)	1.08 (0.92, 1.30)	1.3 (-1.4, 4.0)
		5-14 years	290	10,535,155	9.2 (8.2, 10.3)	0.91 (0.79, 1.00)	-0.9 (-2.2, 0.4)
		15-24 years	1,783	9,814,256	60.9 (58.1, 63.7)	1.08 (1.02, 1.10)	4.5 (1.2, 7.8)
		25-34 years	2,851	9,429,166	101.3 (97.6, 105.0)	0.79 (0.76, 0.80)	-27.1 (-31.6, -22.6)
		35-44 years	4,051	8,587,112	158.1 (153.2, 162.9)	0.77 (0.75, 0.80)	-46.2 (-52.1, -40.3)
		45-54 years	6,752	7,025,565	322.0 (314.4, 329.7)	0.87 (0.84, 0.90)	-50.1 (-58.9, -41.4)
		55-64 years	11,597	2,749,799	1413.2 (1387.5, 1438.9)	0.83 (0.82, 0.90)	-280.6 (-309.0, -252.3)
		65-74 years	14,234	2,682,684	1778.0 (1748.7, 1807.2)	0.95 (0.93, 1.00)	-91.7 (-122.6, -60.8)
		75-84 years	16,347	1,236,374	4430.5 (4362.6, 4498.4)	0.92 (0.91, 0.90)	-379.6 (-451.2, -308.0)
		85 years and over	18,199	499,028	12220.4 (12042.9, 12398.0)	0.82 (0.81, 0.80)	-2703.6 (-2891.2, -2516.0)

Supplemental Table 2: Years of potential life lost with age 65 cutoff (YPLL65) and age-standardized YPLL65 rate per 100,000 by race/ethnicity, with age-standardized YPLL65 rate ratios and rate differences per 100,000, COVID-19 related and total deaths in the United States, February 1-May 20, 2020

Cause	Race/ethnicity	YPLL65	Age-standardized YPLL65 rate per 100,000	Age-standardized YPLL65 rate ratio	Age-standardized YPLL65 rate difference per 100,000
covid	Non-Hispanic White	33,446 (32,061 to 34,832)	18.9 (16.6, 21.2)	1.00 (reference)	0.0 (reference)
covid	Non-Hispanic Black	45,777 (44,023 to 47,531)	127.6 (114.4, 140.9)	6.7 (6.7, 6.8)	108.7 (95.3, 122.2)
covid	Non-Hispanic American Indian or Alaska Native	1,745 (1,371 to 2,119)	75.4 (30.6, 120.2)	4.0 (3.9, 4.0)	56.5 (11.6, 101.3)
covid	Non-Hispanic Asian or Pacific Islander	8,905 (8,156 to 9,654)	50.1 (39.2, 61.0)	2.6 (2.6, 2.7)	31.2 (20.0, 42.3)
covid	Hispanic or Latino	48,204 (46,328 to 50,080)	101.3 (91.2, 111.4)	5.4 (5.3, 5.4)	82.4 (72.0, 92.7)
total	Non-Hispanic White	1,886,288 (1,872,584 to 1,899,992)	1104.5 (1080.6, 1128.5)	1.00 (reference)	0.0 (reference)
total	Non-Hispanic Black	702,076 (693,066 to 711,087)	1799.0 (1736.7, 1861.2)	1.6 (1.6, 1.6)	694.4 (627.7, 761.1)
total	Non-Hispanic American Indian or Alaska Native	44,466 (42,215 to 46,718)	1786.1 (1539.3, 2032.9)	1.6 (1.6, 1.6)	681.6 (433.6, 929.5)
total	Non-Hispanic Asian or Pacific Islander	100,384 (97,032 to 103,735)	543.6 (491.7, 595.6)	0.5 (0.5, 0.5)	-560.9 (-618.2, -503.7)
total	Hispanic or Latino	537,846 (529,638 to 546,053)	960.0 (922.8, 997.1)	0.9 (0.9, 0.9)	-144.6 (-188.8, -100.3)

I would like to address inequity in three different domains at CPS. First, CPS has not adequately addressed the impact of the current pandemic on learning and instruction. I warned CPS officials of the seriousness of the pandemic that would result in an extended school shutdown and the need to develop contingencies for online instruction. The lack of preparation has resulted in students receiving varying quality of instruction based on the location of their school. Disparities in education are not new, but they are exacerbated by the pandemic and are felt strongest by students with disabilities. Schools provide varying levels of quality instruction, with students at more affluent schools receiving enrichment opportunities that are prohibited at other schools. Keeping students segregated in underperforming schools is less justifiable with distance learning.

Moreover, the decision to promote students without regard to their level of proficiency denies them the opportunity to learn. Parents should be given the option to place children in a grade-appropriate classroom that is reflective of their documented performance so they have the opportunity to learn and not fall behind. This is in the best interest of all students.

Finally, attached is my preliminary report on inequity in aggressive discipline by CPS schools with recommendations for consideration and implementation. I find distinct differences in the utilization of police and out-of-school suspensions in schools with marginalized students. Data on many schools, especially charter, are missing, preventing accountability. In schools that were analyzed, aggressive discipline was predictive of schools with high populations of Black and Latinx students, schools with low-income families, and schools with multiple long-standing vacancies in their Local School Council. The vacancies are likely the result of the CPS Office of LSC Relations repeatedly advising principals that compliance with the law to fill vacant seats is optional. Keeping seats vacant results in the adoption of bad policies and my local school Goudy currently has three parent LSC vacancies.

Sadly, the greatest disparity with aggressive discipline is observed in our elementary schools. The analysis also reveals that police involvement and suspensions can vary significantly among schools with the same student demographics, suggesting that having underserved students does not require aggressive discipline to be successful.

Thank you for your time.

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Preliminary Report of Disparities in Discipline in CPS Schools

Report recommendations that require limited additional funding.

- All disciplinary interactions in CPS should be documented and include statistics on sex, race, ethnicity, and IEP status of students to monitor patterns of discrimination and policies should be implemented to ensure the integrity of the data.

- Best practices for school discipline should be established, and all employees trained on them. Rules of engagement should be adopted, emphasizing de-escalation strategies, restorative justice, and appropriate interventions when disciplinary actions were needed.

- Choke holds and other take-down measures that have significant potential to cause permanent bodily injury should be banned.

- Those involved in school discipline, whether they be police, private security, or staff, should be screened against reasonable accusations of misconduct and carefully interviewed and trained before being allowed to serve in a school.

- Schools that utilize disproportionate rates of major disciplinary measures, from police interventions to suspensions, should be audited annually.

- Student arrests and use of force should be documented, and each incident should be subject review meetings to evaluate the justification and determine if best practices were followed, similar to morbidity and mortality meetings used in medicine.

- Schools should notify all parents/guardians when an LSC vacancy emerges, and the LSC should hold transparent elections within 30 days. The CPS Office of LSC Relations should be held accountable for repeatedly insisting that compliance with the law is optional.

- School employees should be properly trained to identify signs of trauma that may contribute to acting out and remind employees of their requirement to comply with the Abused and Neglected Child Reporting Act (325 ILCS 5/). Improved policies should be developed to address the effects of student trauma on classroom behavior and performance with appropriate interventions to mitigate the negative effects.

I have been researching inequity in CPS policies and decided to release a priminary report to help inform the current dialog regarding the use of police in schools. This report uses data aggregated from multiple sources to investigate if there are CPS schools that utilize disproportionate rates of police interventions and out-of-school suspensions (OSS), which I define as strong disciplinary actions. I then cross-reference disciplinary actions with school-level data to determine if there are disparities with respect to student demographics.

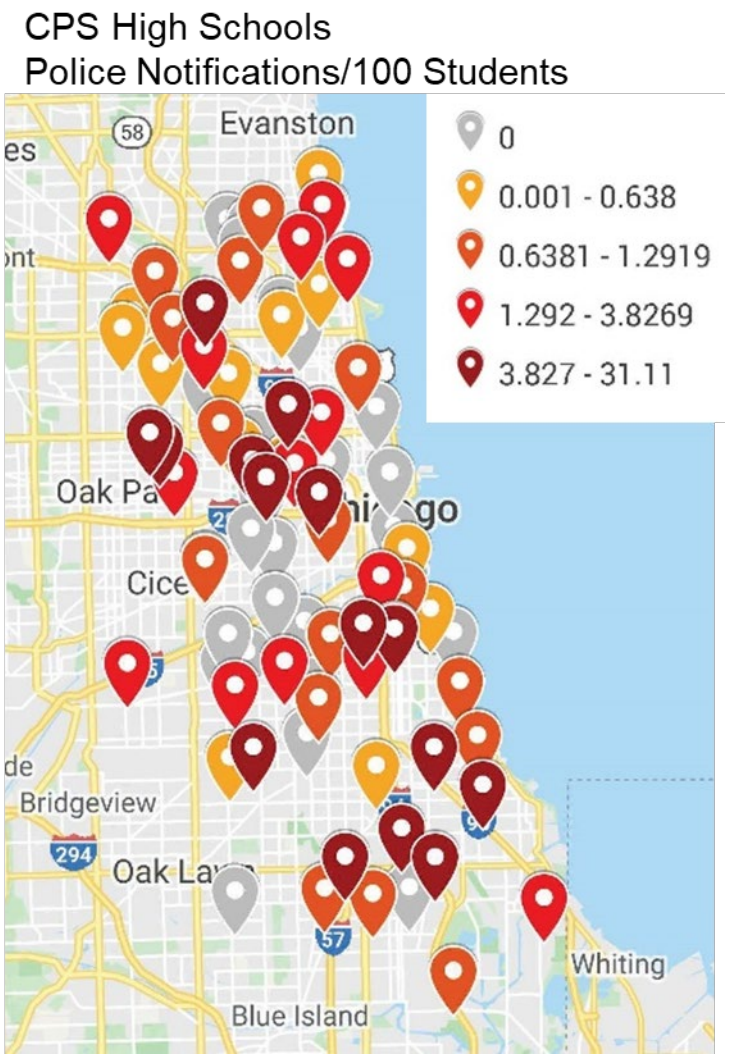
Disciplinary actions in CPS have a skewed distribution, with a smaller number of schools accounting for a disproportionate number of police notifications and suspensions even after accounting for student population. To avoid outlier events from biasing the results, I averaged data from the 2018 and 2019 school years. I performed quintile analysis to compare the top 20% of schools with the highest rate of police notifications per 100 students to the remaining 80% of schools. Additional research is currently being conducted to measure the impact of CPS policies on student success and novel findings that Black girls may be disproportionately penalized in CPS.

CPS High Schools with high rates of police notification were scattered throughout the city with higher rates on the South and West sides. These schools involved the police >3 to >30 times the median number of the remaining 80%. Demographic factors, including race and family income, were predictive of strong disciplinary use.

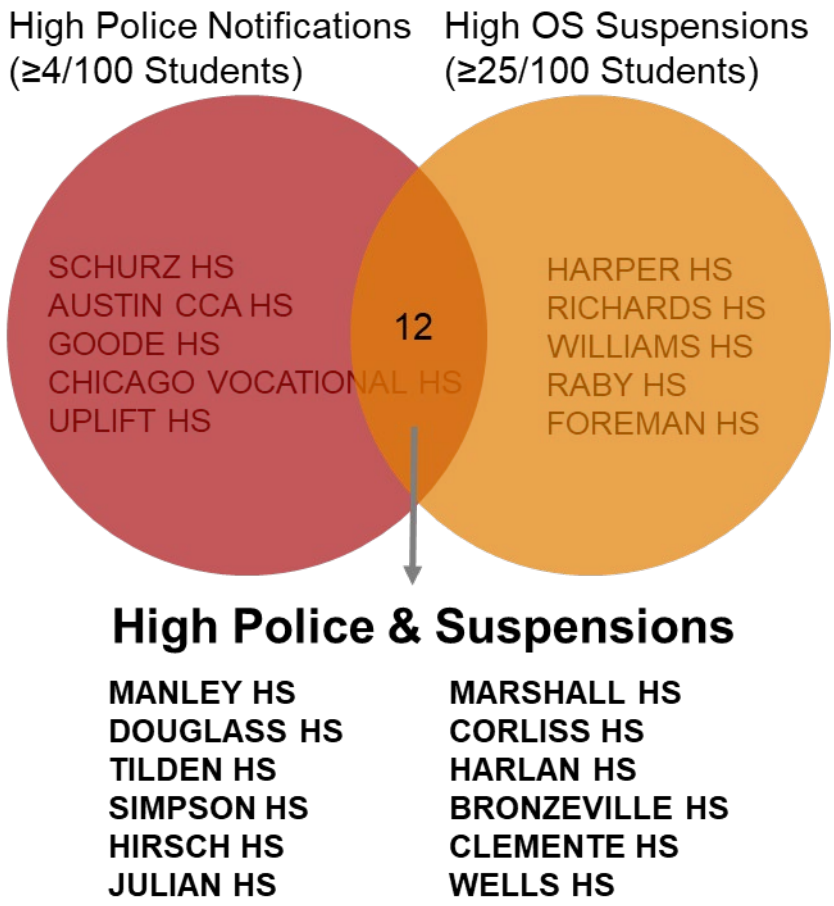
Key Findings with the highest statistical significance:

CPS HS with the highest rates of police notifications/100 students:

- **Have >3x the rate of out of school suspensions**
- **Are smaller schools: 455 vs 939 students**
- **Have higher rates of low-income students**
- **Have a higher percentage of Black students (72.7 vs 39.3) and a low percentage of White students**
- **Had lower rates of attendance**
- **Often near other comparable schools that have lower rates of aggressive discipline**



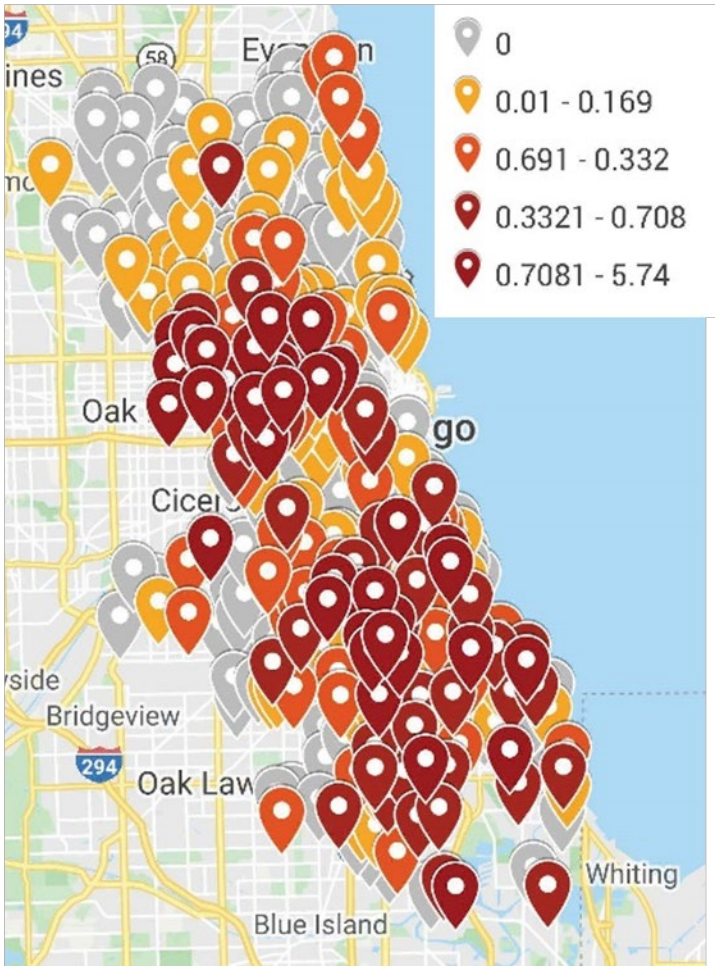
When analyzing schools for high rates of out-of-school suspension (≥25 per 100 students) and police notifications (≥4 per 100 students), I identified 22 schools, 12 that showed high rates of both.



Inequity in aggressive discipline tactics more pronounced in elementary schools

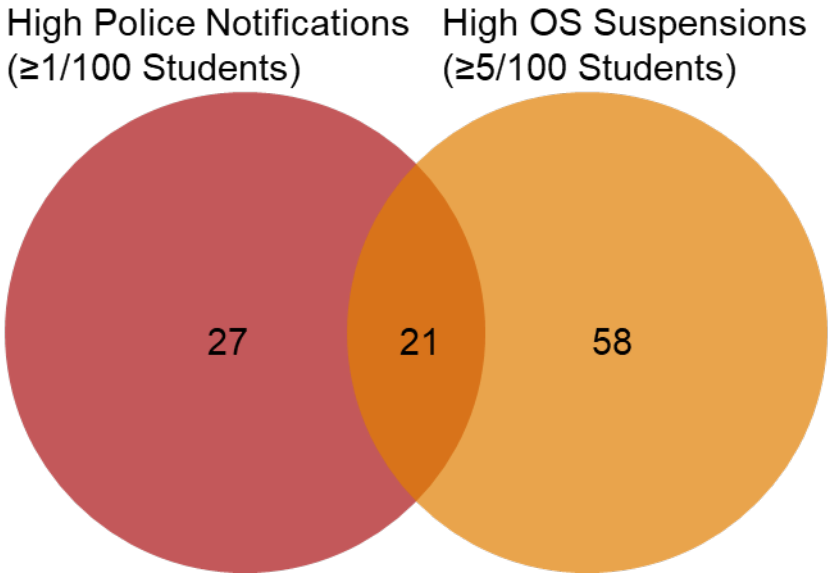
Disciplinary actions in CPS elementary schools reveals far greater disparities with respect to school locations, race/ethnicity, and economics. Elementary schools with the highest rates of police notification per student engaged the police 3 to 25 times more than the median schools in the remaining quintiles and 3 to >10 times the number of out-of-school suspensions per 100 students. These were smaller schools and overwhelmingly concentrated on the South and West sides. Significant racial and economic disparities were appearant as was the high frequency of vacant seats on the schools' LSCs.

CPS Elementary Schools
Police Notifications/100 Students



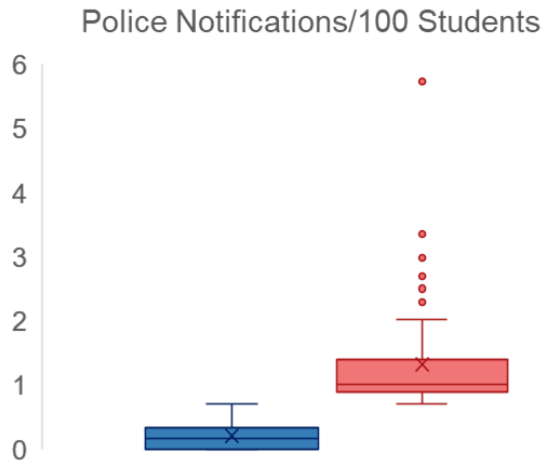
CPS ES with the highest rates of police notifications/100 students

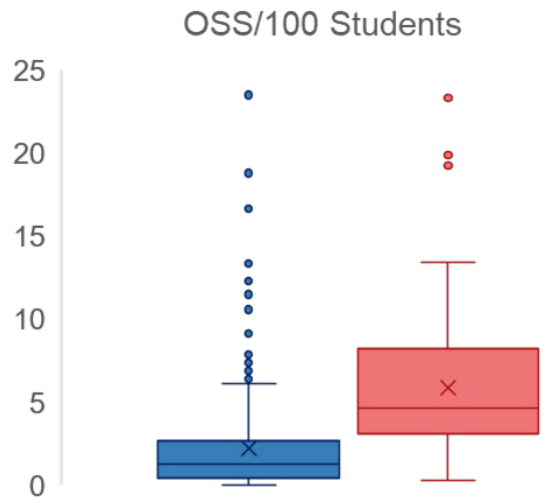
- **Have >2.5x the rate of out of school suspensions**
- **Are smaller schools: 387 vs 578 students**
- **Higher rates of low-income students**
- **Are concentrated on the South and West sides**
- **Have a percentage of Black students (81.1 vs 38.0)**
- **Had lower rates of attendance**
- **Far more likely to have vacant LSC seats**
- **Often near other comparable schools that have lower rates of aggressive discipline**

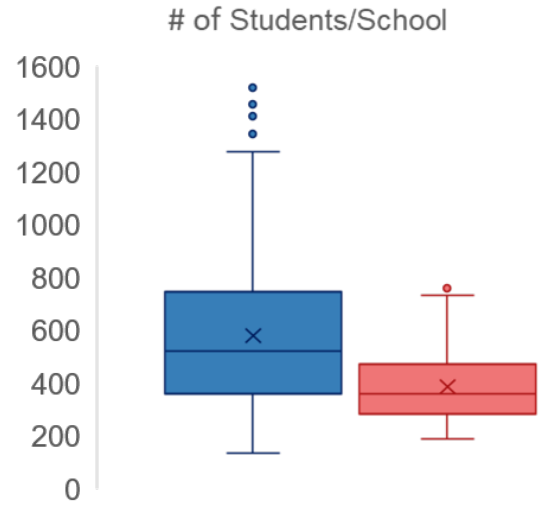


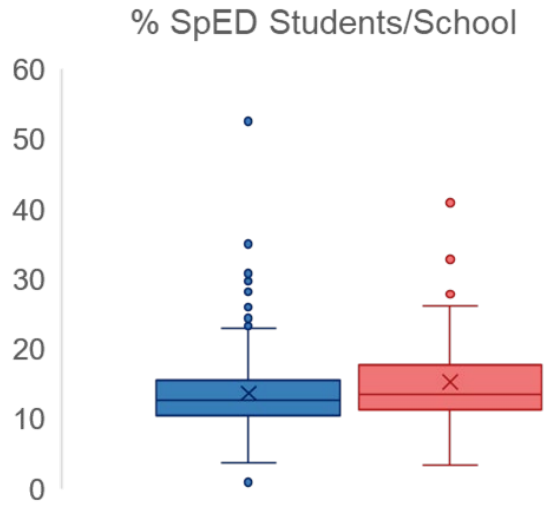
High Police Notifications (≥1/100 Students)	High OS Suspensions (≥5/100 Students)		High Police Notifications & Suspensions
CORKERY	SPENCER	DENEEN	**SMYTH**
GILLESPIE	MANIERRE	OGLESBY	**NINOS HEROES**
DAVIS N	RANDOLPH	SOUTH SHORE	**BRUNSON**
PENN	TILL	SHIELDS MIDDLE	**LANGFORD**
ALDRIDGE	POWELL	TURNER-DREW	**CROWN**
PULLMAN	MANN	BURKE	**MAYS**
CLAY	BARTON	FRAZIER	**BURNHAM**
PALMER	LAWNDALE	PROSPECTIVE	**KOZMINSKI**
ASHE	CLAREMONT	STOWE	**BEIDLER**
GARVEY	DOOLITTLE	HAMLINE	**FARADAY**
HEFFERAN	GRAHAM ES	BASS	**WARD L**
REAVIS	MIRELES	MARQUETTE	**NICHOLSON**
GRESHAM	HUGHES L	CATHER	**DE DIEGO**
HENDERSON	PIRIE	SOUTH LOOP	**HAY**
BROWN W	TILTON	EVERETT	**BOND**
ELLINGTON	DIXON	PARKER	**DETT**
MADISON	KELLMAN	REVERE	**HENDRICKS**
CLARK ES	MURRAY	NOBEL	**LELAND**
BRADWELL	DULLES	RAY	**KING ES**
BENNETT	SABIN	HOWE	**JENSEN**
HEARST	FAIRFIELD	CLISSOLD	**CARVER G**
LOWELL	MADERO	CHOPIN	
NASH	WEST PARK	WACKER	
EARLE	HARTE	HAMPTON	
GREGORY	CARTER	JACKSON M	
STAGG	YATES	CHALMERS	
HARVARD	WELLS ES	ESMOND	
	BARNARD	GRISSOM	
	DRAKE	LIBBY	
	NORTHWEST		

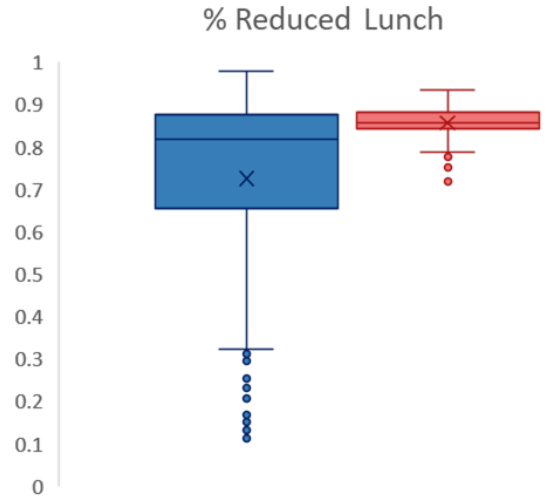
CPS elementary school statistics comparing the majority of schools (blue) to the schools with the highest rates of police notifications per 100 students (red).

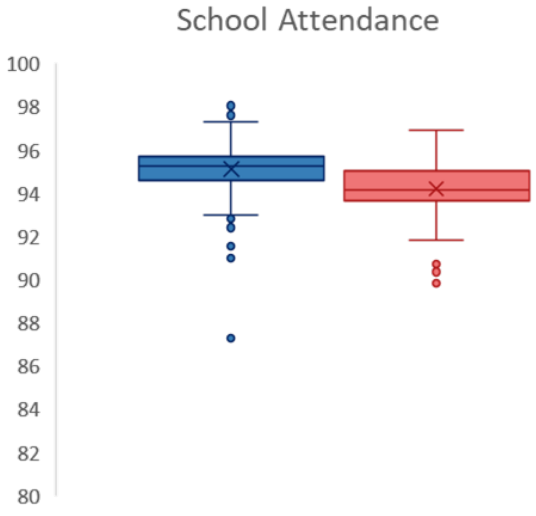




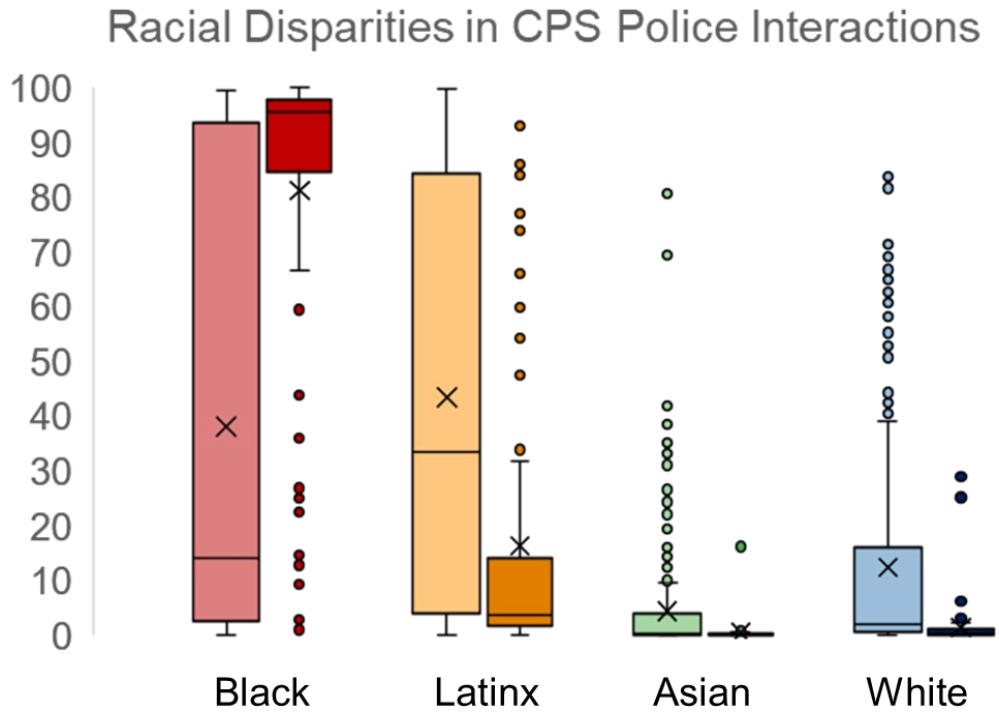








Dramatic racial disparities between the majority of schools (light box-and-whisker plots) compared to schools that engage in the highest rates of police notifications (dark plots).



We, the undersigned, are members of Mayor Lightfoot's transition teams. As part of an intensive six week process leading up to the Mayor's inauguration, we were asked to engage in research, community engagement, and collectively visioning for what is possible in our city's future.

In writing the Education Transition report last year, we were inspired by the five core values the Mayor-Elect named as the north star of her administration:
Equity, Transparency, Accountability, Diversity and Inclusion, and Transformation.

In pursuit of this vision, we submit this statement to call for the termination of the contract between Chicago Police Department and Chicago Public Schools and to reiterate the calls in our report to *transform discipline in all school types and replace police presence with restorative justice, socio-emotional learning, and transition supports*. (P. 50)

Last year, this Education Transition Team grounded its work in the core value of equity. We started by acknowledging that "current enrollment, discipline and funding practices often perpetuate historic inequities," and that our efforts were to map how to disrupt these systems. We cannot live up to this charge without joining youth leaders in this movement, who are calling on our city to address two of these key inequities: discipline and school funding.

Youth leaders, particularly Black youth most impacted by the school-to-prison pipeline, are calling for the removal of police from schools to address systemic, historical community trauma. They are calling on our city to redirect this $33 million funding stream into restorative justice, mental health resources, and other student supports. These are the same transformational policies that many of us have spent a lifetime researching, documenting, and proving as best practice in the field of education. We endorse their leadership and join their calls to end the relationship between Chicago Public Schools and Chicago Police.

We, the undersigned, reiterate our call to "transform discipline in all school types; replace police presence and zero tolerance with restorative justice, social-emotional learning, and transition support."

Niketa Brar
Education Transition Co-Chair

Jennie Biggs
Jason Coleman
Greg Darneider
Sandy De Leon
Alejandro Espinoza
Courtney Everette
Cheryl Flores

Sylvia Puente
Education Transition Co-Chair

Sana Jafri
Beatriz Ponce de Leon
Alexios Rosario Moore
Dilara Sayeed
Fareeda Shabazz
Sonia Soltero
Anthony Watson

Additional Organizations and Individuals In Support:

Chicago Area Fair Housing Alliance
Chicago Lawyers' Committee for Civil Rights
Conant Family Foundation
Education Law and Policy Institute at Loyola University Chicago
Educators for Excellence - Chicago
Gads Hill Center
MUSE Community + Design
Project Syncere
Speak Up Chicago
Westside Justice Center

Amy Meek
Andrea Hall
Andrea Mitchell
Anne Breen
D. Alex Greenwald
Era Laudermilk
Eve Rips
Imron Bhatti
Jason Gronkiewicz-Doran
Jennifer Jones
Jessica Phillips
Jessica Sullivan-Wilson
Jessica Torres
Katie N. Aquino
Katie N. Madden
Keeley Sorokti
Krista Elam
Leslie Ramyk
Lisa Litberg
Lynnette McRae
Megan Brand
Nella Coleman
Patricia Fron
Patricia Malone
Patti Vasquez
Paul Fitzgerald
Renuka Sharma
Romina N. Castillo
Sarah E. Dennis, Ph.D.
Tanya D. Woods
Tempe Thomas
Vanessa Uribe
Yolanda Cassandra Ayala-Santana