

THE BROOKINGS INSTITUTION

GREAT LEVELERS OR GREAT STRATIFIERS?
COLLEGE, ACCESS, ADMISSIONS, AND THE AMERICAN MIDDLE CLASS

WITH A SPECIAL DISCUSSION ON THE EFFECTS OF COVID-19
ON COLLEGE ACCESS

Washington D.C.
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Welcome and moderator:

RICHARD REEVES
Senior Fellow and Director, Future of the Middle Class Initiative
The Brookings Institution

Middle Class Mobility Report:

SARAH REBER
David M. Rubenstein Fellow, Economic Studies
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Opportunity Insights Report:

JOHN FRIEDMAN
Professor of Economics and International and Political Affairs
Brown University

**Panel Discussion on College Access, Equity, and Admissions With a Special Focus
on COVID-19:**

Panelists:

SANDY BAUM
Nonresident Senior Fellow, Urban Institute

BRADLEY HARDY
Associate Professor of Public Administration & Policy, American University
Nonresident Senior Fellow, Economic Studies, The Brookings Institution

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Vice Provost for Admissions and Financial Aid
Hopkins University

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P R O C E E D I N G S

MR. REEVES: Good morning. My name is Richard Reeves. I'm a Senior Fellow at the Brookings Institution and Director of our Future of the Middle Class Initiative. I'm thrilled that you've been able to join us for this Webinar. The title of the Webinar, I think, says it all, but I'll repeat it, Great Levelers or great stratifiers? College access, admissions, and the American middle class.

We're going to be talking about the extent to which the American higher education system acts to promote upwards mobility to help those from poorer and middle-class backgrounds to achieve the American Dream rise up the ladder or the extent to which the higher education system can act to stratify the class system that we see in the U.S. In order to do that, we have two presentations from two leading academics in the field in a panel with three experts in the field as well as those two experts.

I want to encourage you to join the conversation using the hashtag #HigherEdForAll on Twitter. You can also during the course of the event, send any questions you have in to events@brookings.edu, and a team led by the fearless Anna Dawson will be watching those hashtags and emails and forwarding them to me as the moderator of the event so that I can forward them to the panelists.

So thank you again for joining us for this very special conversation which now of course is taken on added urgency with the upheavals being caused to the higher education system by the COVID-19 pandemic questions of access, questions of benefits, questions of class divisions and other divisions are perhaps even more pressing than they were before, and so we're going to start with some presentations and then move into a general discussion which will include a focus on the short-term impact and potentially a medium and even a longer-term impact of COVID-19 on the relationship between equality, equity, and higher education.

So I'm going to introduce everybody you're going to be hearing from this morning so that we can then just go through the speakers and the panelists and allow some

conversation then from you, too, so first of all, you're going to hear from my colleague Sarah Reber.

Sarah Reber is a David M. Rubenstein Fellow at the Brookings Institution on loan to us from UCLA, and she's going to be presenting some brand new work published today on the role of higher education institutions in serving middle-class children or those from middle-class households in terms of mobility. That's a brand-new paper. There's a new interactive paper on our website; encourage you to check that out during and after this event.

And after Sarah, you're going to hear from John Friedman. John is an economics professor of Brown University. He is also one of the founding directors along with Mae Hendren and Raj Chetty of Opportunity Insights which is using anonymized IRS data to really completely change the discussion about intergenerational mobility and education in the U.S., and we've actually used Opportunity Insights data in the paper that Sarah is going to be presenting.

John's going to be presenting a recent paper which looks at the role of an admission policies or specifically how who gets into different institutions affects the composition of those institutions, so we're going to air presentations from Sarah immediately followed by John, then we'll have moderated Q&A with both of them. There are many common themes, of course, in their reports, and then we're going to hear from three other experts.

We're going to hear from Bradley Hardy who is the economics professor at American University and a Nonresident Senior Fellow at Brookings, from Sandy Baum who is a Nonresident Fellow at the Urban Institute, and from David Phillips who is Vice Provost for Admissions and Financial Aid at Johns Hopkins University which has recently been making strides towards making its admissions policy more equitable not least with regard to legacies but as part of a broader question, then everybody will be invited to discuss COVID-19 and the impact that that has, so you'll be seeing the speakers and their presentations as

we go, and then moving into the Q&A.

So with that, just a hugely warm welcome, again. Hope you're enjoying this, hope those of you who are on the right times, and have coffee. I have my coffee in my Brookings' branded mug, not essential, but we take our branding opportunities when we can, and with that, I'm going to hand over to my colleague Sara Reber.

MS. REBER: Thanks, Richard. Let me just get my screen shared. Okay, thanks, Richard, for the introduction, and thanks to all of you watching at home for taking the time today. In the few minutes, I have, I'm going to draw on some data from a new report we have out that Richard mentioned today on Middle Class Mobility and Higher Education. This is joint work with Chenoah Sinclair, Research Assistant here at Brookings, and I want to thank her for her hard work on this project.

One second. Okay. So I want to start by reminding us all that in the United States intergenerational mobility is low. This figure shows the relationship between parental income and adult earnings. If adult earnings didn't depend on parental income during childhood, all these bars would look the same, but in fact, they do not. For example, only nine-percent of children who grow up in the poorest families have earnings in the top quintile (phonetic) as adults, and you can see that in the first bar, but 37 percent of children who grow up in the most affluent families, those with parental income in the top quintile, have high earnings as adults, and you can see that in the right-most bar.

So intergenerational mobility is not as high as rhetoric about the American dream would have you believe, but upper mobility is much more common for those who go to college. This figure shows the same thing as the last figure, but separated by college attendance status, and the left bar shows that the chances that children from poor families who never attend college are upwardly mobile are very small

Forty-two percent are in the bottom 20 percent of the earnings distribution as adults and another 28 percent in the next quintile. But among those who attend college shortly after high school, the last bar, only 16 percent have bottom quintile earnings as

adults and 80 (phonetic) percent have top quintile earnings.

And we see a similar pattern for the other parental income quintiles. Adult earnings depend on your parents' income, but your chances of upward mobility are much higher if you attend college.

The last slide shows how important going to college is for upward mobility, but unfortunately college attendance also depends critically on parental income. Nearly all children of affluent families attend college shortly after high school, 87 percent as shown in the last bar. On the other hand, just half of children from low-income families ever attend college as shown in the left bar. And attendance for children of middle-class families falls somewhere in between these extremes.

So we said that college plays an important role in upward mobility for children of poor and middle-class families, and a lot of research supports that, but work by Opportunity Insights, the precursor the work that John is going to talk about next, shows that not all colleges contribute equally to upward mobility.

They focus their analysis on mobility from the bottom quintile to the top quintile, sort of rags-to-riches mobility or what we're calling bottom-to-top mobility, and in our analysis we're going to use their mobility report card data for each college to construct a measure of upward mobility focus more on the middle class.

And the data that John and his colleagues put together and made public is really very cool. It's an important public service that has led to a lot of good research, and there's a lot of detail that's important when you're using the data, but I'm just going to hit a few highlights.

So they used the identified tax records which let them link children to their parents and see where the children attend college, and then they can follow those kids and see their earnings in young adulthood. So using these link data, they can show which colleges enroll more poor and middle-class students and which colleges enroll students who are upwardly mobile.

Chenoah and I construct a measure of middle-class mobility for each college that is similar to the bottom-to-top measure analyzed by Opportunity Insights. You can find the details in the report, but the key idea is that a college's mobility rate, its contribution to middle-class mobility, depends on two factors. First, do they enroll a lot of middle-class students; that's what we're calling the access rate following what Opportunity Insights does. And second, are the middle-class students who do enroll in the college upwardly mobile; do they climb the economic ladder relative to their parents' income? That's their success rate.

Again, there are some details you can see in the report, but the basic idea is that colleges that enroll more middle-class students who are then upwardly mobile rank higher on our measure of the middle-class mobility rate.

So there are a few different ways we can cut the data on middle-class mobility, and I'm just going to show you one way here. For this figure, we count up all the upward mobility for the bottom quintile and for the middle class according to our measure, and we can look at how that mobility is distributed across different types of colleges. So here we're looking at private four-year or public four-year or two-year and for profit, and first, we can see that about 70 percent of upward mobility is associated with four-year colleges, the shades of blue in this figure. And public colleges account for almost 80 percent of mobility for both groups; that's the light blue in the sand or gray bars.

And we can compare this to the distribution of enrollment in the first bar and instructional spending in the middle bar. I should say that the measure of spending here is not tuition but rather what colleges report that they spend per student regardless of who is paying. So this is a hard number to pin down, but this is an estimate that we can use to sort of see how the distribution of spending compares to enrollment and mobility.

You can see in the left bars that a small share of students from low and middle-class families attend the

four-year private colleges. They get so much attention in discussions of college and especially discussions of admission. Only 10 percent of low-income students and 15 percent of middle-class students attend a private 4-year college, more than 80 percent of students attend public colleges, and a plurality of students at least start their careers at a 2-year college.

Enrollment in for profits shown here is less than five percent, and that might be surprising to some, and it's important to keep in mind these data are for cohorts that were born in the early 1980s that attended college at a time when the for-profit sector was much smaller and arguably less predatory. This is an important caveat in interpreting all of these data. We have to look at older cohorts to follow them into adulthood to see what their earnings are. We need to give them time to be old enough for that, so this analysis focuses on those cohorts.

So the middle bars here show the distribution of spending across colleges which is heavily skewed to four-year colleges, and especially disproportionate to enrollment for private four-year colleges. So overall what we can see in this figure is that public two-year colleges account for a plurality of enrollment, not that much spending, and a moderate share of upward mobility. Public four-year colleges account for substantial shares of enrollment spending and upward mobility, and private four-year colleges account for a small share of enrollment, a larger share of spending, and a moderate share of upward mobility.

So this is the same type of figure but arranged by a selectivity, and just briefly focusing on the middle class on the right set of bars, you can see that only 7-percent of students attend highly selective colleges, but those colleges account for 24 percent of instructional spending and that's because those highly selective private colleges spend much more per pupil than other colleges.

But those colleges count -- students who attend highly selective colleges do have very good chances of achieving upward mobility, so these colleges account for a larger share of mobility than enrollment, so 12 percent of mobility versus 7 percent of enrollment.

So, you know, increasing access to these colleges is important since access is so low, and they offer such opportunities for upward mobility. But again, we see that most students attend 2-year colleges or 4-year colleges that are less selective.

So let me offer a few concluding thoughts. A lot of research shows that college is critical for upward mobility, and that whether and where people go to college depends too much on their parents' income. In our new report, Chenoah and I developed a new measure of middle-class mobility and we see that some colleges are doing better than others in promoting the mobility, and you can explore the interactive that Richard mentioned on the Brookings' website if you want to look how different colleges are doing. And we see that public 4-year colleges are the workhorses of economic mobility for the middle class, but 2-year colleges are also really critical. They enroll a large share of students and are important contributors to mobility.

Going forward, I hope we can focus on improving both access and success for low and middle-income students by improving access to colleges where success is the norm for those types of students, and by providing better support at more colleges so more students can succeed wherever they attend.

So I'll stop there and hand it over to John, and I look forward to the Q&A.

Thanks.

MR. FRIEDMAN: Great. Well, thank you so much, Sarah, for that incredibly interesting work, and as Sarah mentioned, and I think this follows very nicely from Sarah's presentation, what I'm going to show you now are some results from a paper that I released in February which is a continuation of the work Sarah references really trying to drill down on the question of access, thinking about what it would take in order to improve access for low and middle-income students in this country to selective colleges and then what the potential consequences of such increases in access would be.

So as, you know, Sarah mentioned is this is great that she has teed this up in this way, so I won't spend much time talking about this previous body of work, but rather

I'm just going to go directly to these new findings and specifically we're going to try to answer three different questions around access. And, again, just to be clear, access is the fraction of students from different parent income backgrounds on different college campuses. So, first, we're going to ask the question whether differences in access across college are driven by differences in academic qualifications among students at the end of high school or whether it's driven instead by differences in the applications and admissions process.

I think this is a very important distinction especially from the position of universities trying to think about addressing these issues, right, not that we want to let society off the hook if these issues are arising because of, say, different school quality, but if, you know, everything were explained by differences in academic qualifications at the end of high school, it might be very difficult, or more difficult, for colleges to address these issues directly, and we might seek more to address issues in the, you know, K through 12 and other policies that affect children younger in life, but instead, if it's more about the applications and admissions process, then that's something that's really directly or at least something that can be directly affected by the colleges and universities themselves.

So second, after we've done that, we're going to talk about changing this process, and we're going to try to get a sense at a very high level for how much the existing applications and admissions process would have to change in order to generate more equality in access for students from different economic backgrounds across different tiers of selectivity, and then finally, I'm going to say, well, suppose that we somehow found a way to make those changes, how would that percolate through to impact upward mobility and intergenerational mobility in this county?

Now, the key data that we've added that really makes this all possible is the universe of test scores for the relevant cohorts from the college board which administers the SAT and ACT, and so we're going to use those test scores as a measure of academic qualifications. I'm happy to talk about the various issues that are out there for test scores

versus GPA, versus other things, but, you know, suffice it to say that I think this presents a pretty representative picture of what's going on, and I don't mean to imply from this at all that we should only be using test scores for applications or admissions, rather this is just a universal measure that we can get for most students who are potentially applying to these schools.

So just to start with the first question: Is access driven by academic qualifications or applications or admissions procedures? I'm just going to show you a very simple statistic which is take all students in the country that have exactly a 1080 on the SAT or the equivalent on the ACT. Now why we're picking 1080, it's because that's the median SAT score for a student attending a selective college. Any college that's selective; not just those that are kind of merely selective.

What we see here, we're then going to calculate what fraction of such students -- who at least by this one measure appear similarly prepared -- what fraction of these students from different parent income backgrounds attend selective colleges? And what you see is that these probabilities, these percentages vary quite a bit across the income distribution, so over here on the right, you see that 75 percent of top quintile students, those are students coming from families earning more than about \$110,000 year in current money, about 75 percent of top quintile students attend selective schools with this score, but only 51 percent of students from low-income families, those are bottom quintile families earning less than about \$20,000 to \$25,000 in current money.

And so as you see from selective schools, there is pretty large differences that exist even after taking high-school qualifications into account, and you see for selective schools in general -- and just because most students go to public schools; these are mostly public selective schools that are driving this -- you see that's it just kind of a monotonic increase where the richer background you come from, the higher chance is that you have of attending a selective school coming from this particular academic background.

And for middle-income students, you can see kind of in the middle of the chart there is less underrepresentation less kind of undermatching than for the lowest income students, but it's still below that dashed horizontal line which are kind of the average attendance rate for all students with a 1080.

Now, this picture actually looks very different if we instead focus on the Ivy-plus schools which are right at the top of the kind of selectively pyramid. So this is the same chart except instead of looking at students with a 1080 SAT or ACT equivalent, we're looking at students with a 1400 SAT or ACT equivalent. Again, 1400 was chosen because that's the median SAT score for students from these cohorts attending Ivy-plus schools.

Now, the pattern, as you see, is very different. Still, it is true that students from the highest income families are attending these schools at the highest rate, nearly 11 percent of students with a 1400 attend Ivy-plus schools from top quintile families, but the pattern for the rest of the income distribution is actually very different so that it's in fact the middle class at these Ivy-plus schools who are most underrepresented and who have the most undermatching with attendance rates that are only less than half what they are for top quintile students.

Students from the bottom income quintile are still underrepresented, but as you see just quantitatively, they are attending at 7.3 percent which is only a touch below the national average attendance rate of students with a 1400 SAT score. So, you know, from these figures, you know, as you can see, there is a significant amount of differences in access that are driven not by kind of the academic qualifications that are the result of kind of many years of schooling and other things, but rather these are differences that are arising in the applications and admissions process. Students who appear to be very similarly qualified at least by this measure are very different in their likelihood of attending these schools.

Now, what's the implication of these differential attendance rates? Well, this chart shows the impact of some different kind of factuals on college access. And so just to start, the green bar on the left of each of these blocks of three shows the actual fraction of

students here from low-income families, the bottom quintile families in Ivy-plus schools on the left, all selective tiers in the middle, and then unselective colleges both 2-year and 4-year on the right.

Now, this light-blue counterfactual which we call the income neutral student allocation, that just asks the very simple question, what would happen if we just equalized those attendance rates that I showed you one in two slides ago? Suppose it were the case that students from each type of family were equally likely to attend different schools conditional on their test score so that those students, say, with a 1080, they would all be equally likely to attend selective schools, and those students with a 1400 would all be equally likely to attend Ivy-plus schools, and in particular we keep the number of seats at each school fixed, and so essentially assigning the average attendance rate for kind of each level of test score to students from all different family backgrounds.

What would happen to access in that case, and what you see especially in the middle here in the selective tiers is that you kind of make a decent step towards this dashed line which is the equal access benchmark, kind of the totally egalitarian benchmark, so you'd increase from 7.3 to 8.6 percent of students from low-income families at selective tiers, and that's a little bit less than half of the way from where we currently are in the green to the kind of equal representation benchmark.

In Ivy-plus schools, though, you see that this has very little effect. And intuitively, as you saw on the last slide, low-income students are already attending Ivy-plus schools at not quite as high rates, but, you know, quite similar to average rates conditional on test scores, and so just going back here, right, moving this 7.3 up to the dashed line just doesn't increase application attendance rates that much.

You know, why is it that in some sense this light-blue bar is so small, the problem for low-income students at the Ivy-plus schools is not so much that they're not being admitted or applying at high rates, it's that there just aren't that many students with these high levels of test scores to begin with. And so again, the picture is quite different for the

Ivy-plus and for the more broadly in the selective tiers.

Now, you see this equal representation dashed line here, what would it take in terms of increase in access to actually make things really much more equal? So that for instance in this chart, roughly 11 percent of students at all colleges would come from low-income families. It turns out that what you would need is to increase application and admissions rates, increase attendance rates for low-income students above the average for other students with the same test score so that they equaled the attendance rates for richer students with 160 points higher SAT score.

And, you know, that, you know, sounds like a lot. That would, you know, certainly be a very significant change, but that is oddly (phonetic) similar magnitude to the preferences that many, especially private schools, already give to students, for instance, from legacy backgrounds or athletes or racial minorities, and so, you know, while it would a major change in how things are done, it is not something that is entirely outside the experience of what admissions offices in college and universities already do.

So to give you an example, you know, students with a 1400, they have to be admitted at like a 25-percent rate instead of a 7-percent rate when they applied to Ivy-plus schools to give you a rough sense, and again, that's very similar to the admissions advantage that some of these other groups have.

Now, for middle-income students, as you saw for the selective tiers, middle-income students are kind of somewhat represented, not that underrepresented, but for Ivy-plus schools for middle-income students, things look much more like they do for low-income students at selective schools. In that moving to the income-neutral benchmark where we just equalized those attendance rates, we got rid of that kind of deficit in attendance rates for middle-income students that would get you about half the way from the current 8.7-percent fraction of student body to the equal representation rate, and then this extra kind of SAT increment which we call the need (phonetic) affirmative student allocation would get you all the way to that benchmark.

Final question I want to address today is, what impact would these different allocations or counterfactuals have on intergenerational mobility? Are we just kind of nibbling around the edges here or will this have a major impact on intergenerational mobility? And the answer is that I think it would have a relatively major impact. So we make some assumptions in the paper about what's the causal effect of going to different colleges; right, obviously if you think this is all signaling and it doesn't really matter where you go in the end, then, you know, none of this is going to matter.

Here, what we're doing, briefly for those of you who know the literature, is essentially following the Dale Krueger approach of conditioning on application, then admission sets, and taking the causal estimates from there. What we find is that just changing the application and admissions patterns so that students with equal academic qualifications were equally likely to attend different schools, that would reduce intergenerational mobility gaps between the richest and poorest students by about 15 percent.

And if you were to go to this more kind of aggressive need-affirmative benchmark, that would reduce intergenerational mobility gaps by more than 25 percent, and I think even here, you know this is somewhat of a conservative benchmark for the potential for increases in access across colleges on intergenerational mobility, that's because we've held the total number of seats at all these schools fixed. Right, if you were to just to try to include more students, especially in the selective public schools, that would have an additional effect.

The other thing is we're not doing anything with students who didn't go to college. We're, again, kind of again just holding them aside, so that's 70 percent of low-income students who don't go to college at all who, you know, if you applied a similar approach and increased college attendance rates rather than just the attendance rates of selective schools conditional on going to college, you would have yet further effects.

So, you know, just to summarize, I think what I've shown you today is that

low and middle-income students attend selective schools at lower rates than similarly qualified students from richer families, although it's the middle class that's most heavily underrepresented from this perspective in the Ivy-plus schools.

Second, I've shown you that if low-income students were simply able to attend these schools at the same rates, that would make a pretty significant dent both in access overall as well as intergenerational mobility albeit not at the Ivy-plus schools, and if you were to take the more aggressive measure of this need-affirmative counterfactual where you actually were having low-income students and middle-income students attending schools at higher rates than their similarly qualified richer student peers, you could achieve an equal representation benchmark where you have the same fraction of students from low-income families and middle-income families across all different tiers of colleges.

And then third, these changes have the potential to make quite serious impacts on intergenerational mobility in the United States. So let me stop there, and I look forward to discussing this all with Richard and Sarah and then with you all in the panel.

MR. REEVES: Great. Thank you, John, and thank you, Sarah, for two such impressive and interesting presentations. Let's dive straight into some of the areas of carapace (phonetic). Along the way, if you could describe to me anything that surprised you in your findings. I think sometimes you listen to scholars speak about their work and it's like, "Yeah, well, I knew I was going to find this, but here's just lots of charts proving it," so I wanted just first ask you is like, was there anything in these findings that surprised you that you didn't expect to find? Sarah, I'll come to you first on that.

MS. REBER: Yeah, thanks, Richard. I think, you know, the work that when Opportunity Insights put out the initial work on this, I think it was surprising just how much the selective and highly selective colleges don't have a lot of poor kids in them, and I think, you know, doing this work on the middle class, it just reinforced for me that those schools also don't enroll that many middle-income kids and really, it's I think it's altogether astonishing how segregated by class than higher education is in, you know, across those

different tiers, so I think this was, I guess, something that I had seen before, but it was newly shocking to me in looking at the data again for this report.

MR. REEVES: The extent of it, yeah. Same question to you, John, but if you also want to pick up this middle-income point as well, because I do think there's a story about poor kids not going to these institutions, but you seem to show, if anything, poor kids are doing slightly better than middle-class kids.

MR. FRIEDMAN: Well, that's right, and again I think it, you know, depends on, you know, how you want to define "better," right? I think that, you know, Sarah is right that from, you know, by any measure there are just very, very few students from low-income families at selective institutions generally and especially at, you know, Ivy-plus or more generally in private selective institutions.

I think you're right picking up on the middle-class thing. I had not quite realized the extent to which the role of academic qualifications was very different for low and middle-income students in the sense that for low-income students, essentially, especially at these very selective schools, almost all of the problem is the fact that there just aren't that many students with very high academic qualifications to begin with.

Whereas for middle-income students, as you saw from one of those charts, it is a problem that, you know, they're not kind of getting to the same place by the end of high school, but there's also a huge, huge issue in that even once they get to the point of being highly qualified at the end of high school, they're still not attending these schools at anywhere near the rates of students either from low, or especially from high-income backgrounds, and I think that both has to do with the way the admissions process works out, but also in terms of the way that financing for middle-income families works at these schools.

You know, I think it's a very, very large share of family income to send students to these schools, and this, you know, obviously differs greatly by institution, but sometimes there is a much greater availability of financial aid for students coming from very poor families than those coming from the middle class.

MR. REEVES: Right. So they're not quite poor enough, but they're not quite rich enough either to put it very crudely.

MR. FRIEDMAN: Yeah, that's right, and again, you know, it's in some sense -- you know, I was having a conversation with a provost of a very elite school, and we were talking about the middle class, and this person said to me something like, "Yeah, you know, it's just too bad that we can't have more of these middle-class families earning like \$250,000, and I was like, hold on a second. Like, you realize that a \$250,000-family is not middle class in this country.

You know, they are in like the 96th percentile, and even there the fact that the sense of what middle class meant were families in the kind of \$100 and \$200,000-range at these schools, it is true that most families are in the middle of the distribution of student incomes at those schools --

MR. REEVES: But that doesn't make it the middle of the (inaudible).

MR. FRIEDMAN: -- because even that difference in frame was really quite (inaudible).

MR. REEVES: Psychologists refer to a reference point bias which is you're always getting bias by it. Let's dig into this -- because it's going to be important for everything else, this question of causality. Sarah, I'm going to invite you to kick us off on this, because in terms of the implications of all of these findings, from both of you, this more broadly this whole literature.

A lot of it depends on whether or not you think there's a causal effect here. In terms, as a policymaker, how much time and money and literal capital am I going to spend getting slightly different people into different institutions because I'm pretty confident that's going to have a causal impact on their life's circumstances. A lot seems to hinge on that question, and I think just reading your report, Sarah, and from discussions I think that you're sort of somewhere in the middle on this debate, and maybe John's a bit more convinced of the causal implications.

So, Sarah, why don't you say where you've come out in terms of how far this should matter in terms of causal relationships?

MS. REBER: Yeah, thanks, this is an important question, and let me talk about two aspects of it, so, you know, one question is: Are the estimates that John has in his report, or, you know, what we have on the Brookings' website showing mobility rates for different colleges, do differences in those things across colleges reflect causal differences in that something that that college doing is better or worse for students, or is it all just about who they're choosing, and, you know, the selective places are choosing very, you know, academically prepared students who are probably going to have good outcomes wherever they go.

And I think, you know, there's definitely some selection and that's part of the story, but I do think there's a lot of evidence from John's work, but also from other work in other context where we see that when students get the opportunity to attend a college that's sort of more selective than they otherwise might have attended and, you know, for a maybe quasi (phonetic) random reason, we do tend to see that they benefit, and sometimes quite a lot, and so that would suggest that, you know, that it does matter for individual kids where they go, and so it's not just like shuffling them around is, you know, going to leave us in the same place because it's all about selection.

But I do think also we need to be a little bit cautious because, you know, for comparing these outcomes for different colleges, you know, and one college looks bad and one college looks good, it's possible that some of those differences have to do with who attends. But the other point that I think is really important for thinking about these especially bigger types of policy changes like John is talking about is, you know, would that pattern of effects across colleges continue to hold if we changed who goes where.

So, you know, it could be the case that what we see now, you know, that Princeton has better outcomes for poor kids who go there than some other college, and that that is causal for those kids, but if we -- just not to put too fine a point on it -- but if we

replace the legacies at Princeton with, you know, more poor kids, and, you know, maybe we don't really know why Princeton students have good outcomes, so maybe when we do that, maybe, you know, part of the reason poor kids have good outcomes is because they need the legacy kids and get access to their networks and get high-paying jobs that way, and you would sort of undermine that dynamic.

So I don't think that that's all of what goes on, and I think there's more to a Princeton education than hanging out with Princeton legacies, but, you know, since we don't know from this type of work what is the mechanism that is producing these differences, I think, you know, we need to be a little cautious about, you know, there's a lot of -- we're sort of assuming that those facts remain constant if we would move a lot of kids around, and I'm curious what John thinks about that.

MR. REEVES: I also think it's fair to say that is how some of the work gets interpreted. I think that, you know, once it's out through the media and so on, it's very easy to say, "Oh, look, you know, Sonae, New York, or whatever, has this amazing effect on upward mobility," and it may have some but not as much as perhaps people think.

So, John, obviously you've been leading this work for some time now, how do you respond to the question about causality?

MR. FRIEDMAN: So I think that, you know, the first thing to make clear is that part of the original report that we put out includes these just kind of raw earnings or earnings' rank estimates for students from different colleges and different economic backgrounds, and it's very clear that those include an enormous amount of selection, and so, you know, that is not -- I don't think anybody here would agree that those are good estimates of the causal effects of universities.

But I do think that when you start adjusting for some of the differences that you see between students, you can start, you know, probably not literally at every single institution because the selection patterns are going to be more extreme in some places than others, but I think on average you do start to kind of hone-in on something that's more of a

causal effect, and, you know, I don't think this is the rock-solid evidence that we would like.

I think we're still working on that, but in my mind, it seems that, you know, the evidence from a variety of these different approaches when you triangulate them does point towards there being pretty serious of causal effects.

Now, I completely agree =with what, you know, Sarah was saying that, you know, there's kind of a generally glirarium (phonetic) issue when you start changing things a lot just that kind of boomerang back around and destroy some of the very thing that you were hoping to get advantage of in the first place. Now, you know, your argument that legacies are very important on campus, you know, not for their own sake but for the poor kids is perhaps -- you know, that's a new one that they should try.

I'm not sure that's quite what's going on, but I do think that there's going to be a limit to the breadth of students that you're going to be able to have on campus in the sense that, you know, just thinking about here in Rhode Island, you know, Brown University is thinking about lots of different ways to try to attract more low-income students, but, you know, just going over to Rhode Island community college, and, you know, having a bunch of their students attend Brown, like I'm not sure that would be the best fit, you know, for anyone just because that's not the right match of kind of educational qualification with educational experience.

And so I do think, you know, that's an example where, you know, at some point, you know, colleges are going to face constraints on what they're able to do here, and we can't, in some sense, rely only on this one set of institutions that's operating only on students for, you know, 4, 5, 6 years of their life to be correcting these inequalities that have built up over, you know, 18 years before they're ever in the picture.

So, you know, at the end of the day, though, I think that there's no question that these schools can make large changes that would have big impacts on what's going on in this country and I think, you know, what these numbers have convinced me is that in some sense it's going to be hard to do that, but there's no excuse for not really trying

because the potential for serious change is there.

MR. REEVES: Right.

MS. REBER: To be clear, I don't think legacy preferences are defensible in that sense --

MR. FRIEDMAN: I'm just was kidding.

MS. REBER: -- my --

MR. REEVES: I think you were using the most extreme example you could to make it look --

MS. REBER: My point is that there's a general issue of, you know, since we don't understand why, you know, the benefit occurs, and, you know, that we can't be as sure, but I think in general we're in agreement about I think the importance of trying to push in that direction. I just think we need to be a little bit cautious about our expectations for those upward mobility results that you show at the end.

MR. REEVES: Yeah. I think we could probably all agree, and we'll get David in on this in a moment, but in fact we're going to bring the Panel up in a second, but to help lower-income kids by sending them to schools where their legacies can help them get a job at their father's merchant bank or whatever they could -- it's a very long way around to equality.

That's I think we probably agree on. I don't know let's see what Twitter says that maybe we'll disagree, so we're now going to invite the rest of our participants onto the virtual panel, so by the magic of technology, they will hopefully appear in front of you, and I'm going to ask them. I'm actually not seeing Sandy on my screen anyway, so someone will tell me if it's Sandy -- oh, (inaudible). Okay, I think Sandy Baum unfortunately has lost her webcam, but is starting to come back on. That's breaking news.

But I just wanted to come to the other panelists and then we'll bring Sarah and John back in as appropriate, too. Just given what you've just heard from those two research papers, what struck you as most important, particularly in terms of actionable

insights here, so obviously there's lots of very interesting academic evidence here, but kind of somewhat like what do you do with this; what struck you the most about that?

And I was going to go to Sandy first. As we wait for her, Bradley I'd really like to ask you that question as you are deeply into this literature yourself. Now, what's the so what here? And then, David, I'll come to you, particularly in your institutional role and see what you've taken away from it, too, but, Brad, you first.

MR. HARDY: So, I guess I'm thinking about kind of a second-best solutions that we could consider if you think that the elite highly selected institutions are imparting these potentially strong economical ability impacts, right. If we're waiting on some of the policy interventions that might increase access along the lines that John's describing, are there some best practices that we can apply?

So, for example, where are the sorts of wraparound services that seem to be very effective for students in highly selective well-resourced institutions? And if you look on campus, there's a whole battery of physical and mental wellness kind of social supports that students have access to, whether and to what degree that can be effective, you know at maybe less selective institutions, for example, many of which don't have the same resource base.

So I tend to think about that because I think it actually kind of complements nicely with some of the other future in middle-class work that's showing: Look, a lot of these less selective institutions are doing yeoman's work pulling kids out of poverty and into the middle class. But I'll stop there. I know David might want to jump in, too.

MR. REEVES: Yeah, thank you, but, Bradley, I think --

MS. BAUM: So this is Sandy.

MR. REEVES: Oh, it's Sandy. Thank you for joining us again. So --

MS. BAUM: Sorry. My Internet went out, but I'm on the phone now.

MR. REEVES: I gathered that. Well, it's great to hear your voice and I think

pointed about students' success, and, Bradley, I think the point you kind of made unless there's something (inaudible) kind of come back to. But, Sandy, I'll come to you now as you just jumped on in your line. David, I'll come to you, if that's okay, in just a moment.

So, Sandy, I was just asking what struck everyone the most about the research you heard in terms of what it means, in particular, in terms of policy, and actionable -- what was your main take away from what you've heard?

MS. BAUM: Well, it's fascinating, and I think that it's really important to call attention to this middle-class issue, and it made me think about how we judge success of selective institutions in increasing access mobility based on the number of pale grant recipients if they enroll or not. That's obviously a problem because that means that there is much greater focus on low-income students to the exclusion of (inaudible) question, and then the other question is how we're going to pay for it.

Because one reason that some institutions don't do more, and this doesn't really apply to the Ivy-plus, they could pay for it, but many of these selective institutions actually don't have the resources or would have to make some real tradeoffs in order to enroll many of these students who absolutely need financial aid to attend.

MR. REEVES: Right. So we'd have to change some of the financial calculations that are being made by (inaudible) describes that very well in his book and associated essay of juggling the, well, we can take this many core kids but only if we take this many legacies, et cetera, and it comes down to an Excel spreadsheet of how it would be.

Thank you for that. David, I'm going to come to you by the sense of what you've heard, but also to reflect a little bit on the journey that the Hopkins has been on. Obviously you've been reacting to some of this data it seems like for a while now and been rethinking your own admissions philosophy, if I can put it that grandly, but what's been your reaction to what you've heard, but also tell us a little bit about the journey of Hopkins?

MR. PHILLIPS: Yeah, well, certainly, the presentations resonated a lot with

me about the journey we've been on, and the work we continue to do. We had a step-back moment to say these issues were important to us to really hone-in on what we felt (background noise) like mostly imparts (phonetic) to be an agent of social mobility in a liberal democracy.

We also, by the way, incredibly value diversity on campus, and as we looked at our student body and said it's not reflecting enough of the demographics of this country, that we needed to do something about it, so in that sense this work really hit home and reinforced some of the ideas we are working with to try and change the makeup of our student body.

Just to provide a little context on that, you know, in 2009, we had more legacy students in our incoming class than we did students who received the federal pale grant, albeit an imperfect measure, but it's sort of like the SAT. It's kind of the national statistic that we use kind of loosely to help gage where we are on these topics. As President Daniels came into the university, he noticed this was an imbalance. Well, certainly we always had a really talented student body. Nobody was ever admitted, you know, without qualifications. It was just what was the mix of those and were we were providing equal opportunity to everybody.

And so we made a broad push to say we want to diversity our class, and that's on man dimensions, and we wanted to make sure we were living up to our sort of social responsibility in a liberal democracy and that began a real institutional push. So in the most recent incoming class, now we flipped the model. Over 19 percent of the class of 2023 qualifies for a federal pale grant, and 3 1/2 percent had some sort of legacy affiliation.

So on that path, it's taken a huge institutional push to do it. It's not simply an admissions and financial aid endeavor as was referenced earlier. It takes thinking about student support systems; it takes thinking about how we insure equal outcomes for students, so it takes an institution to decide to make these moves, and then of course in admissions and financial aid, we did our part relative to eliminating legacy preferences and enhancing

our financial aid, most recently with the 1.8 billion-dollar gift for financial aid from Michael Bloomberg.

MR. REEVES: And can I just push you on this, the missing middle question a bit, too, because you've mentioned pale eligibility and that's already -- you've mentioned that that's potentially problematic. Do you see some of the same pattern that was visible in one of John's (inaudible), and more generally which is that it's those who are in the middle who may be underrepresented as well; do you see that?

MR. PHILLIPS: Yeah, we certainly worry about it, and it's something we think about. You know, we worry a lot that we don't want to have a class that's unevenly distributed that you're heavily weighted at the bottom end with representation in the top end, and there's no representation in the middle. Again when we think about this concept of diversity that permeates all socioeconomic strata, you know, as well as the other measures of diversity, we use, and so, yes, it's top of mind. It's something we have to deal with in a sense in different ways.

I mean the history is, I think, if you looked about 10, 12 years ago right before the great recession, a lot of schools turned to enhancing financial aid programs. Many of those enhancements are really focused on the lowest income students and families, and I think what you've seen since then is now a move; you're starting to really see emerge more of a focus on middle class and upper middle class students to try and make sure that the burden is eased on those students and families.

MR. REEVES: Thanks. So I actually want to go around and ask everybody and then we'll probably move on to perhaps more of a COVID-ready thing, so I'll probably come to, Bradley, to you first, and then go in a random order to be determined, but this question of preferences, because I'm aware right now, we're talking about way of institutions with weird policies, i.e., elite institutions that have all these weird policies, no offense to anybody on the call, but rather than make the (inaudible) students who serve the vast majority of American students, but just one more question on that is, perhaps we should just

get rid of all these weird preferences.

You have these odd sort of equilibria that form around, well, we'll have affirmative action, but on the other hand we'll have legacies, and then we'll throw in a bit of athletes and then we'll have a bit of donor, and then we'll have a bit of faculty. And so it's this very weird just complex system which no one really understands. Getting into college in the U.S. is a little bit like finding out who's going to be Pope. You know, some wide smoke emerges and you're like, oh, okay; like it's a mysterious elite college's process.

I'm very brave to (inaudible), should we just get rid of all of these weird preferences, because it just makes it very, very complicated, no one really knows what's going on, they're in a weird balance, and just sweep them all away so that everyone can at least see what we're doing. Bradley, I'm going to come to you first, and then we've got Bradley, Sandy, John, Sarah, David.

MR. HARDY: I mean, that's a tough question. I mean, I think there's something to be said for reexamining these preferences. I think there's a broader conversation about just what weight and influence we put on the broad portfolio that our very talented students bring to the admissions process, and so that's a choice, right?

Like, I think that at the very, very elite end of college admissions, my sense, and I think you just kind of echoed this, I suspect David Phillips who'll talk about this, that you're talking about kind of very infinitesimally small differences, and there's some tough choices that have to be made, and so ultimately there is a conversation about, look, as an institution how much weight do you want to put on the GPA versus the SAT, versus different life experiences.

And so that doesn't get totally at your question, but I do think that if you're thinking about moving that needle, you are talking about a broad set of students on what, I guess, education analysts would call the right tale, the very high ability spectrum where some of these little changes in how you wait or emphasize one or another part of the application could be quite important.

MR. REEVES: Okay, there is a danger of dancing on the head of a pin here; I do realize that. But, Sandy, you can tell me I'm dancing on the head of pin if you like. You will still need to --

MS. BAUM: I think we probably should get rid of legacy and athletic admissions. It's hard to make a strong argument for why that's the best social policy. That said, when you look at the admissions race of these institutions, most highly qualified students don't get in. So there's still going to be arbitrariness to the admissions process, and, you know, some people have suggested we, you know, do a lottery, whatever, to make it clear that this is about luck, so we probably should, but I think we have to keep remembering all the time that a very small share of students, and still a small share of qualified students are going to go to these institutions and that focusing on the quality of the institutions where most students go and particularly most lower and middle class students will continue to go there is a more important change.

MR. REEVES: Thank you, Sandy. John, I read your papers and argument for sweeping away all these weird preferences.

MR. FRIEDMAN: So I was actually going to talk about what's going on at the schools where like 90 percent of students are going these large public schools because I think, again, you know, whatever happens at these private schools, it just has a very limited effect. I mean, I think they're important from the perspective of producing leaders in society, but, you know, there's just no way for anything at these schools even if they decided to become as egalitarian as they could possibly be immediately, it's just not going to make that much of a broad difference.

And, you know, I showed you how these attendance rates differ across family background even at these, you know, very large public institutions, and when you look deeper in the data, what you see is that in fact things both are kind of worse versus better at some specific institutions versus others, and then also the reasons for things being worse versus better when you dive even deeper continue to differ, so let me give you a few

examples.

There are some schools which have very unequal attendance rates primarily because low-income qualified students are not likely to attend -- sorry -- not likely to apply, right? And that once students apply, both the admissions rate and then the yield rate are very similar across students from different family backgrounds, and so one example, we're working on getting the data out with this level of kind of disaggregation, but, you know, one school which both had this as a particular problem, but also I think had a very interesting and well-targeted solution is the University of Michigan.

So it turns out if you look at the University of Michigan, they have very, very unequal attendance rates across students from different family backgrounds, and this is restricting only to students from Michigan, so just take the out of state completely out of the picture, but it was entirely because of application rate differences.

And so the U-M HAIL Program that I think many of you will be familiar with that was, you know, spearheaded by the University of Michigan and Sue Dynarski was the researcher where they had both outreach efforts and also it wasn't that they increased financial aid, but they made the financial aid very salient to encourage people to apply. That seems to have been very successful, I believe, because it was addressing a problem that really was a problem, but in other cases where there are very unequal attendance rates, the problem is not that application rates are off.

So, for instance, in the state of California or most UC schools, it is actually the case that lower-income students with the same SAT scores, or ACT scores, are more likely to apply to the UC schools and students from higher-income backgrounds. And so in that type of circumstance, of course, you know, it's not like there is some cap on the number who can apply, maybe you can just continue to pump up the number of low-income students who are applying, but given that they're already applying more than the high-income students, and they're being admitted and then yielding at much lower rates, it seems like focusing on a different stage of the pipeline makes sense. And so I think that --

MR. REEVES: Just let more of them in, essentially, when they're applying.

MR. FRIEDMAN: Well, again, like sometimes it's let more of them in, sometimes it's going to give financial aid so that more of the ones who are let in can come, but I think, you know, what we've really learned here is that, especially in the public schools, there is really no one-size-fits-all solution, and that I think that's what we were hoping for at least to support this type of more directed policymaking where you're, you know, as I like to say, it's hard enough solving the problems that you have, let's not layer on solving the problems that you don't have as well.

So I hope this is the direction as we have more of these types of data available that kind of admissions policy can take.

MR. REEVES: So that's where the numbers are. We are being pushed away from this very small number elite schools towards more public schools. Sarah, and then, David, on that question. Sarah, you're obviously from the UC system; Sarah, so that may strike a bit close to home.

MS. REBER: Yeah, so I agree with, really, a lot of what's been said about, you know, focusing on the broad set of schools where most students go, and especially public 4-years, and so let me just pick up on what John was saying a little bit, and I think that the California versus Michigan comparison is apt (phonetic), so I think, you know, on the legacy preferences, there's the question of you asked, should we get rid of these weird things, and, you know, there's sort of a question of like, well, who's "we".

I think it would be like a good idea socially, probably, to get rid of these things, but I do think, you know, there is a "we" that actually does higher-ed policy which is states, and I think legacy preferences are sort of inconsistent with the mission of a public 4-year system, and, you know, for example, the UC system doesn't use them, and I think that's a good thing.

I think another thing maybe to try to emphasize is to have transparency about that, and you mentioned like how complex the whole process for applying to college

is, and I think, you know, again, like that there's one type of complexity that happens for, you know, sort of higher-income families looking to go to elite colleges, and there's a different type of complexity that happens for lower-income students, and, you know, for example, in California, a lot of that has to do with the system being oversubscribed, and so then there's like weird ways of rationing who can go where that aren't that clear.

And so I think this issue of complexity, it makes it difficult for low-income students, and so that is something to focus on, and, you know, it's interesting to hear what John was saying about, you know, different barriers in different places, so I think -- I have seen some data from California, too, suggesting that low-income students do apply, and so I think it's important to figure out, you know, why when they're not admitted, you know, why are they not admitted, but particularly why when they're admitted do they not enroll because that's actually a piece of this type (inaudible) that we haven't really been talking about.

And I think the financial aspect of that is surely important, but there may be, you know, other things coming into play. A low-income student in California is going to get a grant that covers their tuition at a public university. They have other costs, but, you know, there may be other things we should be thinking about as well.

MR. REEVES: Thanks. So I have some questions about financial aid coming in. We should come back to you perhaps when we get to the general Q&A. After I've heard from you, David, I'm going to try and switch the conversation a little bit to what's happening with COVID, and, John, I know you've got some literally real time data to show that's on that when we turn to that.

David, it's been unfair now because we've just gone around and just said the elite institutions aren't all that important because they don't have that many students; said that you should do the right thing, but it doesn't matter very much. So I apologize for that, but I'd love to hear your views anyway in terms of how you think you are contributing to those institutions is broader question.

MR. PHILLIPS: Yeah, so I appreciate those points. You know, I would say

there are a couple of points there for me. One is that highly selective institutions generally have been seen as bastions of privilege that have been excluding students from lower socioeconomic backgrounds, and that's true, so it doesn't strike me as right to say let's give up on that. They'll remain those bastions of privilege and then the low-and-middle income students can go elsewhere.

I think it's a strong signal to say we welcome every qualified student regardless of their personal family circumstances. So, you know, that was very important to us, and regarding whether, you know, back just quickly on why we should get rid of legacy preferences, obviously you know where we fall on that, there are two real important points. One is practical, right? There are only so many spots in our class. We do have large, talented applicant pools, so if you have a, like for us, a goal to maximally diversify your class then having that carve-out for legacies simply won't allow you to realize that goal as fully as you'd like.

But secondly, again, it's about that signal. If we're trying to send a signal that we are open to high-achieving students from all backgrounds, boy, I can think of a few things that would be more counter to that than having a policy that explicitly puts a finger on the scale for those who are probably from the most privileged backgrounds have had all the advantages. So how does that send a message to talented low-and-middle income students to say we want you here?

MR. REEVES: Yeah, it's hard to simultaneously be inclusive and run a hereditary principle in your admissions policy. That we'll just say on the complexity point that my prior (phonetic) is the complexity is the friend of the upper middle class is that if you make systems complex whether they are a tax system or an education system or a housing system, make it complex, and you will give an innate advantage to those if you are able to navigate that complexity more fully, and so there is a reason why very often those who are in a position to benefit from complex opaque weird systems will sometimes defend them

because transparency and simplicity is not the friend of inequality.

But I want to switch us now to COVID. Thank you, David. John, I think if you're in a position to share your screen, Opportunity Insights have a fantastic new tracker which is grabbing real-time data which I think you might be able to share some education data from with us?

MR. FRIEDMAN: I will do that.

MR. REEVES: So do you want me to say what it is? Well, you've got it, okay.

MR. FRIEDMAN: Yeah, so what we've done is, in this, a broader project trying to pull together data from various private companies that can give us a real-time look at different aspects of the economy as they're evolving throughout the crisis. You know, why do we need this? You know, we were all very excited to see what the jobs numbers looked like from the Bureau of Labor Statistics (phonetic), you know, 10 days ago or so, but the fact of the matter is that those numbers even when they came out were about a month old, and there's a lot that's happening in the economy even, you know, at the weekly level now.

You know, we need to think about how to produce statistics that can actually capture what's going on in real time, that, you know, we don't have to wait, for instance until official statistics come out in August or September to measure whether state reopening's are working or which type of businesses are being hurt.

So we have put together a website called -- you just go to tracktherecovery.org to see this if you want. One part of this, though, which bears on the current conversation looks at educational engagement for students in elementary school. So specifically what we did is we partnered with a firm that runs an online math teaching app, and this is not like Khan Academy where you kind of go and do it on your own. This is something that is integrated into the school and into the classroom.

And so what that means is that students are actually using this thing most every week, and then we can establish a baseline and see how things are changing as the

crisis impacts things in the middle of March and in the last two months, you know, to get not just a sense of what's happening in education at least through this particular window, but especially how it is differentially impacting students from different backgrounds.

So what I'm going to do is show you just a couple of charts that I've put together using these data, but, you know, we have these data for every state and county across the country online. You can go check it out. Again, it's at www.tracktherecovery.org. So this first chart, what we're doing is we're showing relative changes in student engagement in online math in this platform.

As you see, you know, things are kind of going along at a relatively steady clip up until the crisis hits when all the schools close down in the middle of March. But then what you see is that schools that are located in high-income areas -- and we're measuring this using a zip-code level incomes -- students at those high-income schools, they (inaudible) -- there's about a 20-percent fall-off in engagement.

This is literally a count of the number of students at the school that have logged on to the platform in a given week. That falls by about 20 percent, but very quickly it recovers, and even, you know, things are starting to fall off recently because, you know, schools are getting towards the end of the year, but, you know, in the middle of April, you actually had more students logging on in the week starting April 20th than they did in any week before the crisis.

And I think, you know, a richer school, you can understand how that's going to happen. It's not just that they're going to continue to use this platform; they're actually going to substitute towards this type of online learning platform relative to what they were doing before. Now, the story is very different for students from middle in the green and low-income ZIP codes in the kind of the turquoise.

What you see here is first a much steeper immediate fall in usage when schools shut down. So rather than falling by 20 percent, things fell by 60 percent, and then there's been a much less steep of a recovery so that even in this kind of best-of-all world's week in

the middle of April, fewer than 50 percent of students were logging in to use this platform than were before the crisis occurred. And you can see here that middle-income ZIP codes are about halfway in-between, and so this is certainly not something that is only affecting students in low-income areas, but it does seem to be kind of exacerbating already existing inequalities in this recession.

Now, this splits things across income. We can also do this looking at student race. Again, we don't have data at the student level; we have it at the school level, and we know where the schools are. And so what we've done is we've classified schools. We're restricting to large counties here just to kind of keep into the larger urban areas where there is a little bit more density.

We classify a school as white if it's in an area with more than 90-percent white households, and we classify a school as black or Hispanic if it is in a majority minority area, majority black or majority Hispanic. And what you see here is that it seems especially that students in black majority areas have again both suffered a steeper initial decline and then a slower recovery such that again even in this kind of peak in the middle of April things were, you know, fewer than 65 percent of the students who were logging on before were still doing, so.

And so I think, you know, I don't mean to claim that these are completely representative about all aspects of education, but I think that, at least to me, it confirmed some of what people had been talking about more qualitatively that this recession, from an educational perspective, is exacerbating already existing inequalities, and I think, you know, how we handle this is going to have really long-term impacts on the educational trajectories of these students.

You know, remember that a large part of the difference that we saw in college access rates did depend on the fact that they were different levels of academic qualifications at the end of high school. You know, these students are only in first through fifth grade, so there's, you know, a long time to make it up, but the evidence suggests that these types of

gaps make things worse over time, not better, and so I'd, you know, love to answer any questions people have, but I thought this was useful data.

MR. REEVES: Thank you, John. We asked John to share that and do check out their website, and if you are a data provider, I'm sure they'd love to hear from you in terms of about data, but I want to ask a general question about the impact of COVID-19 on learning. Obviously, this is very early in education, but we're going to see some of the effects in higher education, so in terms of impact on how people are learning, if there is a switch to online in preparation, who goes.

We could see an impact on enrollment. People might take a year, but then not go. They might stop out; they might drop out. So we could see enrollment, and we may see some increased inequalities just because it looks as if level of preparation has a huge impact on the impact of switching sites, online learning, so there's a lot of different ways in which COVID-19 could influence some of the things we're concerned around, and I just invite you not to answer maybe on every single dimension, but the ones that have struck you.

So I was going to start with you, Sandy, and then I'm going to David and then Bradley and then Sarah and then back to John if there's anything else, but how do you think COVID-19 might influence learning, especially at higher-education level? Sandy, can I start with you? Sandy, you are muted right now. Now, you're unmuted; now you're muted again. Okay, I think there is slight technical issues. David, I'm going to come to you, and then we come back to Sandy.

MR. PHILLIPS: Yeah, so I guess I'd speak more to toward the improvement in outreach and what we're seeing --

MS. BAUM: Hello?

MR. REEVES: Now, it's working. Go ahead. Let's let David finish, Sandy, and then we'll come back to you. Go ahead, David.

MR. PHILLIPS: You know, we're seeing some good news and I'm concerned about some things. Our class is looking really healthy and diverse and high-

achieving and we're thrilled with the students who have chosen to commit to us.

MS. BAUM: Hello?

MR. PHILLIPS: You know, what obviously this has deeply affected the way we recruit students. We've had to transition to a virtual environment. There are some real positives there that I think will persist even post-pandemic. The virtual environment has allowed us to reach out in a more nimble way to some populations and tailor content more. The admissions recruitment typically is pretty broad because we generally speak to broad audiences, and the virtual environment allows us to throw out content much more quickly that's much more tailored.

But what evaluation looks like is tough to say right now. You know, this is still all relatively new. We're still seeing what's evolving in high schools, how this semester ends and what achievement looks like, and we're going to have to work closely with the high schools, you know, of our applicant pool to understand what this semester means and how to interpret it.

Now, the good news is the work we do is generally context based, so we're used to taking context into account, right? We've taken into account environmental circumstances, educational circumstances, family circumstances. This is a new circumstance, and we'll have to figure out how to work it into the process.

MR. REEVES: Yeah, thank you, Bradley?

MR. HARDY: Yeah, I mean, so I think there's a couple of points here. I mean, you know, initial skill acquisition is then going to facilitate the higher-level skills that are needed to go to college. So this is a big shock to families, and, you know, per the summary measure John put up, it would appear that this is having an immediate impact on black communities and low-income communities which at times overlap. So, you know, I'm certainly concerned there about the longer-term consequences.

I think I'm just also take a moment to say that, and I'll try to economize on words here that, you know, this is a scenario where when you look at the event, it's

capturing all sorts of neighborhood level and a family level economic and social instability that's occurring. These are families that are going to be more likely to be on the front lines and working right now; you know, say, in sectors that have been adversely impacted, hospitality, just to name one.

So, you know, you have these summary measures, and, you know, it's probably the most extreme form of uncertainty and economic volatility, and so I don't think we have predictors for how that's going to translate in the future, so I think there's a learning component. I think there's also an uncertainty component where families are going to wonder about the resources that they will or won't have to invest in their kids' futures.

So if you're thinking about kids who are right at the stage of going off to college, I do think this is where, and again I don't want to take us too far afield, there is a question about wondering whether there is federal economic relief, wondering when and if your paycheck is going to be stable, and so you think about businesses that make investments; sometimes they're stymied if they think that there is uncertainty. Households can think the same way. So I'll pause there. I know there's other folks who will jump in.

MR. REEVES: Thank you. And, Sandy, it sounds like you're in now, and I wanted to talk about these marginal students in particular, or I can imagine some kids that just take a year or they go anyway, other kids maybe that weren't planning to go, but it's the ones for whom it's sort of somewhat hanging in the balance whether you go, whether you stay, will you go back, and that could also impact. Obviously, there's a lot of work you've done in your own work in terms of like who stays, who benefits from college. What do you think the impact might be?

MS. BAUM: Well, I mean, I think there (audio drop) we don't really know. I think one thing to really keep in mind is that even in the best of times we know that online learning is less effective for students who face disadvantages to start with, where those who are not already good students don't already know how to learn. We know for Hispanic students, for male students -- I mean, for all kinds of reasons, the longer we have to stick

with this as a method, the worse, and if we fool ourselves into thinking, "Oh, this is a solution," I think that the differences will be starker.

What students will decide to do; I mean, when people talk about a gap year, I mean obviously nobody is going to go, you know, to South American and build houses now. What are they going to do? But the question of, does it make sense? You know, can I reasonably take a year or not? I think it remains to be seen what will happen, but obviously there is a greater risk that students who were on a path but don't have the support system to stay on that path are more likely to fall off of it, and we shouldn't be surprised that there is a variation in outcomes. There are so many different students in so many different institutions.

MR. REEVES: Yes, this is the worry that it always becomes -- you know, a delay becomes a never -- stop out becomes a drop out, but you also write that a difference in what a gap here means, so they're also uniquely being hit. The youth unemployment is through the roof, education is being hit, and you can't travel, so it's actually a pretty unusual set of circumstances that this particular cove are facing. So, Sarah, do you want to comment on how you think that the pandemic is going to influence?

MS. REBER: Sure. So I guess I agree with all of the pessimism that has been expressed, and I guess I'll pile on a little bit that I think even not just kind of this fall in this year while we're waiting to see can we get back in the classroom, and I agree with what's been said about the inferiority of online learning, especially for students who are maybe more marginal in the first place, and so that's a big concern.

But, you know, and I really fear that states are going to be so hammered financially by this crisis, and that that's going to last a long time, and we're going to see, you know, those public universities, the 2-year, 4-year public universities, where most kids go, and especially the two years which in many cases are already underfunded and, you know, that contributes to a lower quality than we should have, and lower graduation rates, and I really worry that financially they're going to be hammered even more, and that that's actually going to last potentially a long time, and that's going to be really unfortunate if that's the

case.

And I think to what Bradley said, I think there needs to be a federal response to address that, and that could help, but otherwise, you know, we're going to have when we expect in a recession more people typically would want to go, although as you say, this is sort of a little bit of an unusual recession, but I think we would expect that, but if there's no funding and no capacity to accommodate those students, I think that we're going to get less out of that education than we could be.

MR. REEVES: Okay. Bradley, did you want to come back in and then, John, I'll come to you?

MR. HARDY: Just very quickly, you know, I just want to stand up a point that I think Sandy started to make, and it links up with Sarah's point as well which is, you know, we have these workhorse public institutions that frankly are not necessarily the flagship of, you know, a 4-year institution at a school, and I'll pick 3, you know, maybe North Carolina Central in Raleigh-Durham's Research Triangle Park; you know, the University of Maryland at Baltimore County; you could think about Georgia State in Atlanta, as well as a lot of the minority-serving institutions.

And I know, Richard, your work with Tiffany Ford (phonetic) has shown that these are the places that are moving a lot of kids into the middle class, right? So that's the other story here. It ducktails nicely with what Sarah and John have presented which is you have the nice story of moving upward into the highest income quintile, but there's a big American Dream story about moving out of a low-income status into something like the top 40 of the distribution, and so these schools are going to be hard hit, like Sarah says, by the potential loss to state and local revenues. It's something we certainly have to keep an eye on.

MR. REEVES: Yeah, it looks like the workhorses might be the ones who are going to suffer most, at least in the shorter term financially, so. John, you put into the data at the beginning from earlier in the education system, but on terms of higher education, we've talked a lot about economic pressure that's obviously going to add to it. How do you

think this is going to play out? And is there any good news here? Has anybody got any good news?

MR. FRIEDMAN: Well, you know, I think that all of the many challenges that everyone has talked about are absolutely right, and, you know, Sarah was talking about the effect of money in the public sector. I think honestly that's going to be a big problem in the private sector, too. You know that these schools even those that have large endowments, they don't have money trees in the backyard, and they're losing, you know, hundreds of millions of dollars a year at this point over, you know, COVID-19 costs and also lost tuition, lost donations, and all of that, so I think this is going to be a real, you know, challenge that lasts for many years both from a financial standpoint and from an educational standpoint.

You know, I think the only potential silver lining here is that sometimes, not all the time, but sometimes societies are able to make use of this type of crisis that make poignant the need to reform these types of systems. You know, maybe things are working okay, not great, but, you know, when the tide goes out, you know, it exposes a lot, and so I think to the extent that, you know, that it's not going to be the immediate policy focus, but to the extent that this can help support some kind of broader reform, both to the financing of education and to the quality of education, I think, you know, those are the type of grand steps that are going to be necessary to really make progress on this type of thing.

You know, for instance, it's been fantastic what David and his colleagues are doing at Johns Hopkins, and, you know, I think they're really leading the way in showing how, you know, extremely selective private universities can function here, but, you know, it is not a scalable solution to wait around for everyone to receive, you know, billions of dollars of donations in order to support this type of thing. We need to have a broader systems reform that can enable that type of change across lots of different institutions, and so, you know, it's amazing that they're leading the way, and we need to find a broader way for us all to follow.

MR. REEVES: One of the questions that's come in has been it's great to

hear about individual institutions doing well, but isn't this a systemic problem, and in particular a financial problem; should we be relying on individual institutions to see the light or do we actually need the same policies or better policies that push us in that direction, so maybe we'll get some reflections on that.

So we're close on the hour, but what I'd like to do -- Sandy, I know you wanted to kind of jump in, and is then just to come back, maybe just any final thoughts from anybody before we close out, but, Sandy, I'll come to you first.

MS. BAUM: Yeah, I mean, I think that listening to this, it's very important that we have a systemic solution and it is going to require a federal intervention, but they're going to be a lot of people who are going to say, "Oh, look at all these problems; let's just make it for you." And I think we have to be really careful about what the problems are and what the solutions are, and what the limited resources are, and make sure that these institutions and the students who are most limited in resources have the ability to continue with quality educational experiences, not look for blanket extensive solutions that won't solve the problem.

MR. REEVES: Thank you. I'm going to go on, and if David, Bradley, John, and then Sarah, final thoughts. You have a minute each just to give us a final thought if you have one, but no pressure if you don't. But, David, to you first.

MR. PHILLIPS: No, I'll just wrap up by saying, look, I think it's important what the goals of your institution are, and I think if you have the right goals, like we've defined our goals, we're going to figure out ways to operate towards those goals. So as we're entering sort of a new era of something we've never dealt with before, you know, we'll still use the guiding principles to help us try and maintain the path to socioeconomic diversity in our class.

Without that goal, it's easy to lose track; it's easy to get caught in sort of the practical hurdles and roadblocks that inhibit you from moving forward. So I think that's critically important in terms of defining who you want to be and where you want to go.

MR. REEVES: Thank you. Bradley?

MR. HARDY: You know, just quickly, you know, much of my work has been focused on low-income populations to social (inaudible) and economic mobility. You know, I think that there's a conversation about a longer term federal commitment to subsidizing higher education and, you know, folks like Susan Dynarski and others have noted that there's been a decommitment over generations to the size and scope of that subsidy, right? So I think that's something to put back on the table to think about, and again, how big is that, is it free, is it just lower cost.

I think that's just going to be a conversation. I guess I'm just also close up by saying that, you know, I think the transmission from middle class to upper income status and the role of institutions like Hopkins, I think it matters to the larger functioning of our society. Who are the folks who are going to be in the room in these elite institutions, philanthropy, captains of industry, so that doesn't matter for the idea that kids who came from middle-class upbringings are there and they have a voice, right? So that's just important.

But nonetheless, it still does mean that, you know, where my focus has been, you know, that, you know, lifting kids at of poverty component of our system, it's imperfect, but, you know, as the middle-class initiative has shown, that's a big piece as well. So I'll guess I'll just stop there.

MR. REEVES: Thank you. Okay. John and Sarah, any brief final thoughts in our final minute? John?

MR. FRIEDMAN: No, I just think that the challenges are great, but the potential rewards from, I think, efforts here are also great. That's what I take away from all of this, and so, you know, this is not about nibbling on the margins; this is a core set of policy issues that are incredibly influential on shaping the type of society that we have from kind of a mobility perspective, and so I think that it's incumbent upon us all to really make sure that, one, we are going to -- being as creative as we can be towards finding solutions, and, two, that we don't let this type of slightly more long-run set of issues fall off the agenda in the

current moment to make sure that we don't sacrifice that for some short-term thing.

MR. REEVES: Thank you. Sarah?

MS. REBER: So since I see we're out of time, I'll just say this was a lot of fun. I really enjoyed hearing from everyone, and in particular, I really look forward to hearing more about Hopkins' experience with what they're doing, and, yeah, it was a great conversation. Thanks.

MR. REEVES: Higher education is where much of the peril is, but it's also where a lot of the promises. I would encourage all of you to check out the work of everyone that's been on this webinar, including the work of Opportunity Insights, including Sarah as new report with Chenoah Sinclair on middle class mobility, Sandy's excellent book. Bradley Hardy has a new paper coming out very shortly that they mark up (inaudible) on similar issues, and, of course, Hopkins are leading the way in terms of many of these institutional reforms.

Check out all of our work. I just want to thank all of our panelists, speakers for joining us this morning. It's been a really excellent conversation in the time. We wanted to thank you all, and thanks for joining us by phone.

MR. FRIEDMAN: Thanks, Richard.

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