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EXPANDING COLLEGE OPPORTUNITY
A HAMILTON PROJECT POLICY FORUM

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A STRATEGY FOR REACHING LOW-INCOME, HIGH-ACHIEVING
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PARTICIPANTS (CONT'D):

THE ROLE OF HIGHER EDUCATION IN AMERICAN MOBILITY:

Moderator:

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P R O C E E D I N G S

MR. RUBIN: Good afternoon. I'm Bob Rubin and I will welcome you on behalf of all of my colleagues at the Hamilton Project to today's discussion entitled, as you know, The Economic Imperative of Expanding College Opportunity. We've done a number of K through 12 education projects and today's project extends our work into the next level of education.

Let me also say that I think today's discussion gets even greater urgency and pertinence because of the Supreme Court decision on Monday which, while in one sense very gratifying, in another sense creates a lot of complexities, practical complexities, and also, I imagine, will lead to a realm of future litigation with a lot of uncertainties about where all that will come out.

Let me say a few words, if I may, about the Hamilton Project before we get in today's program. About seven years ago or thereabouts, a group of us

who were deeply interested in public policy got together and we decided to set up something that, to the best of my knowledge, is unique in the policy world. And it was a group of people who came together, we call ourselves an advisory committee, we set up an institution which we then called the Hamilton Project. We have a director, a managing director, and a policy director. And we are housed at Brookings, but we are, in a substantive sense, free-standing. We are not an institution. We are a group of people who banded together. We have a wide range of experience. We have policy experts. We have academics. We have business people. And by virtue of that, we bring a wide array of perspectives to the policy work we do.

We started with a strategy paper, a broad economic strategy paper. And since then we've done events on various, as we are today, events on various subjects that we thought were of great importance to the country with respect to policy.

We have, in our judgment, economic policy

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should have as objectives growth, wide spread income increases, and economic security, and we believe that they can all be mutually reinforcing. We strongly support market-based economics. And we equally support a strong government to do what markets will not do.

Many of our events have at the center of them a paper or a number of papers. In this instance we have a single paper. And those papers are subject to rigorous academic peer review. And all of our work is conducted with a great sense of substantive seriousness, as well as relevance to the policy-making world.

Clearly, many Americans have experienced great hardship and continue to experience great hardship, and the Hamilton Project is focused on those issues with activity in the area of stimulus, mortgage relief, and much else. But our primary focus is long term economic policy. We believe that our country has enormous economic strengths, our dynamism, entrepreneurial culture, flexible labor, capital

markets, natural resources, and so much else. I'll speak personally. I think the United States over the long term would be the best, or is potentially the best major economy in the world for economic activity.

But to realize that potential, we need to have a sound fiscal position. We need to have strong public investment in the many areas that are critical to economic success. And we need reform in health care, immigration, education, so much else. And that takes us to today's program.

As we all know, our country has been experiencing roughly speaking stagnant median real wages for some decades now, with one exception being the last few years, the 1990's. And relatedly, children from lower income families have a diminishing opportunity with respect to improving their economic position. And that, in our view, is an issue of great concern not only for those families, but for all of us, no matter where we may live or what our incomes may be.

One of the great strengths of our country

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has traditionally been the opportunity to realize your potential no matter the circumstances from which you come. Clearly, that, even at its best, has not been a fully realized objective. And there have always been far too many kids who have not had that opportunity. But fundamentally, that has been at the heart of the American dream.

We believe that, having now seen a period of some decades where that opportunity is diminished for far too many children in modern circumstances, that it's absolutely imperative to reverse that trend of recent decades and to reinforce what is not only an objective that underlies the beliefs of our republic, but also is a tremendous economic advantage of this country, which is to realize the productivity of all of our citizens.

As I say, that is an economic imperative, it is an imperative for social cohesion, and it does go to the basic values, if you will, of our republic. And that takes us to today's program.

We have an extraordinary group of
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discussants that you'll find in a few moments experienced, talented, and distinguished, and we're deeply grateful to all of them for being with us.

In accordance with the practices of the Hamilton Project, I will introduce them, but I will not recite from their resumes. Their resumes are in your materials. Our first panel will be entitled A Strategy for Reaching Low Income, High Achieving Students. That will begin with a paper presented by Caroline Hoxby, Professor in Economics at Stanford University. The discussion will then be conducted by three extraordinarily well equipped discussants, Nicole Farmer Hurd, Founder and Executive Director, National College Advising Corps, Bill Fitzsimmons, Dean of Admissions and Financial Aid at Harvard College, and Robert Gordon, guest scholar at the Brookings Institution and a former Deputy Director, or I guess he was Acting Deputy Director at OMB.

The moderator will be Michael Greenstone, a 3M Professor of Environmental Economics, Massachusetts Institute of Technology and also the Director of the

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Hamilton Project.

The second panel is entitled The Role of Higher Education in American Mobility. And that panel will engage in a broad ranging discussion which they will take wherever they wish it to go on American mobility and on education more broadly.

As with the first panel, we are honored to have a truly distinguished and extraordinarily well experienced group of discussants. They are Nancy Cantor, Chancellor and President, Syracuse University, David Coleman, President of The College Board, William Kirwan, Chancellor and Chief Executive Officer of the University System of Maryland, and Jon Whitmore, Chief Executive Officer of ACT, Inc. Our moderator is a Pulitzer Prize winning journalist, David Leonhardt, who's also the Washington Bureau Chief of the *New York Times*. Let me close my remarks by thanking especially the people who've created the intellectual construct for this session and who put the session together. Again, Michael Greenstone, the Director of the Hamilton Project, Karen Anderson, the Managing

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Director of the Hamilton Project, and Adam Looney, the Policy Director of the Hamilton Project.

And we also thank all of our staff, without whom none of the work that we do at the Hamilton Project could get accomplished. With that, I will turn the podium over to Michael.

MR. GREENSTONE: Caroline, Bob just introduced everyone. Maybe we'll start with your excellent paper in which you're going to do the amazing feat of going to 14 Power Point slides in 7 minutes.

MS. HOXBY: They're pictures, they're not text. Okay. So I just want to give you a little introduction to our approach to expanding college opportunities for low income, high achieving students, and give you a little bit of the taste of the main results of the research we did and the implications, policy implications, and some other key lessons that we learned.

So Sarah Turner, Chris Avery and I have been working for a number of years on understanding why it

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is that low income students who are high achieving are so much less likely to go to very selective colleges and universities, colleges and universities that are geared toward students with their level of preparation, than are high income students with the same level of preparation.

So first let me define what we mean by low income, high achieving students. Low income, we're mainly going to be talking about the bottom quarter of the family income distribution and the top 10 percent of achievers in the United States. Those are students who get on either the ACT or the SAT, one of the top 10 percent of grades. And you can see that there are about 25 to 35,000 such students in the United States each year.

Now, if you are a college admissions officer at one of the selective colleges and universities, you would not see very many of these students in your applicant pool. In fact, you would see something like eight times as many high income, high achievers as you saw low income, high achievers. You might even see 15

times as many high income, high achievers as low income, high achievers.

Yet the real ratio is only about 2 to 1, okay. So there are two times as many high income, high achievers as low income, high achievers, but it's not 8 to 1 or 15 to 1. And that's something that we discovered some time ago. And then we tried to understand, well, why is that? Well, one easy way to understand that is to look at where they apply. So what you can see here, these are high income, high achievers, and you can see that most of them are applying to the schools that we call peer institutions, where most of the other students have preparation a lot like their own. So these are very high achieving students and normally they would be applying to very selective colleges and universities and only a very small number of them apply to the non-selective institutions that are over here. Okay.

If you look at the same sort of chart for low income students, you can see that it looks dramatically different. These students have exactly

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the same level of preparation in terms of test scores and grades, but the vast majority of them are just applying to non-selective colleges and universities, they're not particularly applying to peer institutions. And, in fact, they apply to fewer institutions when they do apply to institutions.

So that's how you get what it looks like from the point of view of a college admissions officer, eight times as many high income students as low income students with the same level of achievement when really there are a lot of low income students out there. They just are not applying.

So what I did in a study with Chris Avery was, we tried to figure out what are the possible explanations for why it is that they're not applying, and the first explanation might be they just can't afford to go to very selective colleges and universities. And that explanation was actually quite easy to eliminate, and the reason is that for these very high achievers, it costs them less to go to the peer institutions than it would cost them to go to

non-selective institutions.

So what this graph shows is that if you look at the most selective colleges and universities in the United States right up there, they actually cost them less than any of the other options, and that's because such generous financial aid is offered by those institutions.

Yes, those institutions spend an enormous amount per pupil. They have tremendous instructional resources, great faculty, and everything else, but they also have tremendous financial aid which allows them to be the least expensive even though they have more resources.

And more generally, if you look at low income students as they go to more and more selective universities, you will see that they actually end up paying less. So cost cannot be the issue, per se, since the students are already spending more than they would, in fact, be spending by going to a more selective institution. So let's cross that out as an explanation.

We also found that the low income, high achieving students who do apply to very selective colleges and universities, for which I will emphasize, they are qualified, so they're getting in on their own, they are not getting in because they're under qualified but someone is making an exception for them, we find that they thrive and do just as well as high income students with the same level of achievement. And, in fact, they do so well that they end up with graduation rates that are more than 50 percentage points higher than students from the same backgrounds with the same achievement who go to non-selective colleges and universities, so an enormous, enormous difference in graduation rates and college success. So that's not a good explanation.

What we also found was that the low income, high achievers who failed to apply to peer institutions tended to be very disperse. They were often the only low income, high achiever in their high schools. That doesn't mean that they're all rural, it just means that they are in a high school where there

aren't very many high achievers. It could be a blue collar high school or it could be a small, urban area that doesn't have a selective or magnet high school, but they are fairly isolated.

And this means that they're very difficult for selective colleges to recruit because selective colleges can't visit tens of thousands of high schools in the United States and, you know, look for the one off student who happens to be there. And also, existing counselors in those high schools are going to be much more focused on helping students who are more typical for those high schools. So it's not that the high school counselors aren't trying to help students, and it is not that the colleges are not trying to recruit.

We found that, in fact, if you looked at high schools where it was relatively easy to be an expert counselor in selective college admissions or if you looked at high schools where it was relatively easy for the selective colleges to recruit students, all of those low income students who are high

achievers went to peer institutions. So where the recruiting was easy, it is already being done. And our personal experience is also just that both counselors and colleges are trying their best.

So this left us with two possible explanations. One is that for various cultural reasons, low income, high achievers just don't want to go to peer institutions. And the other is that there really is an information gap. The information playing field is not level between a high achiever who comes from a high income family maybe with highly educated parents and a low income student with the same level of high school achievement.

And what we decided to try to do was to close that informational gap or to level the informational playing field and see whether it would make any difference. Maybe it wouldn't make any difference, but maybe it would. We wanted to test that. And that's what we decided to do with the expanding college opportunities project, which is a set of interventions that try and give students much

better information about how to apply to college and succeed in college.

And it's a randomized control trial. So we are testing the students who get the interventions against the students in a control group to which they're randomly assigned. So this is just a -- just to give you a little bit of a flavor, this is the first information packet that would arrive if you had been randomly selected as a low income, high achiever to be in the expanding college opportunities project, and it would contain a lot of information on college application guidance, the net costs of colleges, which are very different from the sticker prices for low income students.

You know, Princeton University has a pretty high sticker price if you look, but the cost of actually going to Princeton University, if you're a low income student, is zero. Okay. And that's true of a lot of the most selective colleges. So there's differences. And also it contains some additional things that I'll talk about.

So just to give you a quick sense of the project, we worked with about 40,000 high achievers. They were mostly from low income families. We also worked with some higher income students just to test the materials on them. The materials were extremely customized. And I think this makes them very different from just your typical college brochure. We knew where the students lived, what high school they went to, what their college opportunities were around them, what merit scholarships they would qualify for in their state, what sort of need-based aid they would qualify for, so the materials were customized to a student's locality, their estimated family income, and their high school.

The big components were application guidance to help them get the same sort of application guidance a high income student would get or someone from a selective high school would get, information on financial aid and the difference between net cost and sticker prices of colleges and universities, and then some no paperwork fee waivers.

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So these students actually qualify for fee waivers for applying for college or taking College Board or ACT exams anyway. But what we did was, we gave them no paperwork fee waivers so that all they had to do was send in the fee waiver with their application either electronically or by the mail and they could apply to eight colleges.

And we delivered the interventions by mail and the internet, which was the combination that students themselves seemed to prefer. And it only cost \$6 per student including the reminder mailings that we sent them. There is, though, a big fixed cost that we had to manage of our assembling all of the information and materials that kind of underlie the interventions. So this, just to give you a sense, this is a customized college requirement and deadline chart for a student who's told us what colleges they're interested in, and we would give them all the deadlines, what are the requirements, and then send them the reminder, send them reminder emails, you need to take this test, you need to register for this,

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here's your deadline for the financial aid form and so on. And that's the sort of customization that we used.

Well, what were the effects? The effects were pretty dramatic. Remember, this is only \$6 per student and it's fully scaleable. So once we put together all the data to do it, there's no reason why you can't do it for every low income, high achieving student, not just the ones who participated in the expanding college opportunities project.

For instance, the probability of being admitted to a peer university, that's a university where your preparation is very similar to that of their current students, goes up by 78 percent relative to the control group. So it's a very big change in your admissions.

And if you look at other outcomes like instructional spending or student related spending, those are going up by about 35 percent relative to the control group, so that the students who got the interventions are really experiencing very different

sorts of resources for their undergraduate education than those who remained in the control group. This shows you some of the effects on enrollment outcome. So we don't want students to just be admitted, but we want to see what happens.

And you can see that they're about 50 percent more likely to enroll in a peer university and that instruction and student related spending are going up between 20 and 30 percent for these students in terms of where they enroll.

We're also following students as they go into college. And we are finding that these low income, high achieving students who are induced to go to very selective colleges and universities, universities where they are more like the typical student are, in fact, thriving and doing very well, they're getting good grades and so on.

So let's take away some key lessons that we think we learned. The first one is common aspirations that low income students do aspire to go to the best college that will admit them and that they're able to

afford. It is not that they don't want to go, but that there are information problems and they're figuring out how to make their aspirations into a reality.

Information does differ a lot. We can see from our survey data, we surveyed all 40,000 students, that high income students and low income students have very different information on what is out there in terms of the college landscape. It is not an even playing field right now without the interventions. The information does matter. It's not as though once you give students the information, they say, well, that's all very nice and well, but I'm still going to make exactly the same choices I was making before. Okay.

Now, I'm not claiming that if you were to take much lower achieving students, you would find the information matters just as much for them, but at least for these high achieving students, they were able to process the information and make better decisions for themselves.

And I should emphasize that we never tried to get them to go to a specific college or university. What we wanted them to do was make an informed decision and have the full array of information about their opportunities.

The informational interventions are obviously cheap. I told you it's about \$6 per student. And probably we didn't get the cost down as much as we should have done, and that's because essentially you only put all of the data and analytics together once. And then once you've done that, you can expand the interventions to an ever increasing number of students. And it really doesn't cost you much more than the cost of printing and mailing.

It's not just the quantity of information that matters, but the relevance of it. Is it customized? Can it be processed by the student? Is it digestible? And I always like to give the example of Amazon. If you went to Amazon and you wanted to buy something and the way it worked was that Amazon just listed every single product that it sold, you

probably would not buy very much from Amazon. But Amazon makes the experience easy for you to find the things that you want and to find suggestions that are close to what you're searching for. So it's not just the quantity of information, it's also how it's customized, how relevant it is to you.

We put an enormous amount of effort, in fact, pretty much a decade's worth of effort into figuring out where all the low income students were in the United States and putting together all of the data on colleges and universities, financial aid, every high school in the United States, and so on so that we could provide the analytics that lie behind the eco interventions.

This is not something, I should emphasize, that a college or university could do for itself or that a high achieving student could do for him or herself. Okay. So we want to make it easy for others to make choices for themselves.

And then a final lesson is, I sort of -- I grew up, I guess I would say, assuming, and I think

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almost everyone like me has been inculcated with the idea that in person interventions are the only type of intervention that works. And that's kind of what we expected really going into this project. We thought, well, we'll try these informational interventions that are at an arm's length and then if they don't work, then we'll move on to in person types of interventions.

Well, it turns out that these interventions are just as effective or more effective than a lot of the in person interventions that cost at least 100 times as much and sometimes 3 or 400 times as much. And so we decided that assuming that interventions must be in person was a bad idea, and that's because as soon as you say this intervention is going to cost \$1,000 per student, you are essentially ruling out the possibility that every low income, high achiever could experience that intervention.

Let's talk about a few policy implications. The first is that we think the logical thing to do next is to partner with some credible third parties to

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continue these types of interventions. We need to continue to provide the analytics and what I think of as the back office, but we need some third party organizations, not individual colleges and universities, but third party organizations to provide this type of information to students.

And I should mention that it's very important to low income families that the information appears to be coming from a third party, that it's not just recruiting for a specific college or university, that it isn't just, you know, a brochure touting a specific thing. Low income families are actually quite suspicious of those materials.

We think that we could serve all low income, high achievers through the two organizations, the College Board and the ACT, which are incredibly important for making the interventions even take place because they are ultimately the source of the college testing data that is the most accurate in the United States, and they have the capacity to ensure that every student doesn't just take tests, but is really

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well informed about college-going decisions. And I know that both organizations are very, very committed to that as a goal. So that's something that we hope will happen.

We hope we can improve the targeting and the effectiveness of these interventions by using better federal data and I'm sure that will be part of our discussion so I'll leave that on the table. But let me just say that I think the federal government is sitting on a gold mine of improving policies in higher education if it just uses the data that it already has, that it will not cost it anything to collect. So there is really a gold mine there that no one is pluming.

We'd like to test similarly informative interventions on a wide array of students. We started with high achieving students largely because we thought, well, if information interventions don't work for them, they're probably not going to work for anyone. But we're very interested in the problems that lower achieving students face, and we're also

interested in students before they get to their senior year of high school, when they're still thinking about what courses they're going to take in high school. When they're ninth graders or tenth graders, could we help inform them about their college going opportunities? We think we can do it, it's just a bit more complicated as you move to a broader array of students.

And finally, we're suggesting that the federal government support scientific research on informational intervention so that every federal dollar that gets spent on federal student aid, or student loans, or the tax expenditures on higher education gets better spent, so the students are making wise decisions with the money that they have.

And I should note that it is not financing which is a real barrier to our having better research on information interventions, it's really the data, and I hope we'll have a chance to talk about that, too.

MR. GREENSTONE: Thank you, Caroline.

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(Applause)

MR. GREENSTONE: Okay. So our first commenter or discussant is Bill Fitzsimmons, who is a legend in the world of higher education. My inclination, of course, was to invite him and to talk about our family's three year old daughter and what she needed to do to get into Harvard.

MR. FITZSIMMONS: You wouldn't be the first.

MR. GREENSTONE: But as much as I would like to talk about that, instead, I wondered, Bill, if you could talk a little bit about -- I know Harvard has a lot of programs in place to help students who might find Harvard slightly different culturally than what they're used to, kind of adapt and succeed?

MR. FITZSIMMONS: Well, I was one of those kids. And I should say we admitted her only 10 minutes ago it seems to me. But I grew up just south of Boston. And my parents hadn't gone to college. This was all a great mystery. We ran a gas station. We all had to work in the gas station. And I had never visited Harvard until my senior year of high

school. And I went to this little Catholic high school. It was very good in athletics, maybe not quite so good in some other things, say academics. We had no counselor. So it was an interesting time.

I thought about Harvard. I asked the first two teachers if they'd write recommendations for Harvard, and they said they wouldn't because they said Harvard was anti-Semitic, anti-Catholic, that if you went there, you would flunk out, you would lose your soul, it went on and on and on. When they got to the lose your soul part, I said this sounds great, you know, why wouldn't you want to do this? So I do think there are some barriers. And I do think that her program is a very good one because I think it does give people information. I do think the guide books today are much better than they used to be. But what you've provided, the customized sort of application pathway I think is very important.

Fee waivers are hugely important. It's very important for kids from my kind of background to apply to a number of different colleges so they can get

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different financial aid offers. So I think the fee waiver part of it is huge. We gave something like 5,700 fee waivers last year. It's been very, very effective for us over the years.

The other piece I think is the financial aid, and that is, it's a bit of a version, you know, if you build it, they'll come kind of thing. So in 2004, and we were working actually with Caroline and Chris Avery at that point, we put a new program into place. And essentially the long and short of it is, it makes it really simply to understand financial aid. It's free if your family income is under \$65,000 a year. It's zero to 10 percent from 65 up to 120. And it's 10 percent of family income from 120 to 150. And the real bugaboo for a lot of families like ours is loans, and there are no loans required. So this is what we call a bright line program, it's really clear. The one thing, you know, sometimes we go to these kinds of sessions and you come away from it feeling, oh my God, nothing good has ever happened, doom and gloom, there are 15,000 reasons why good things won't

happen in the future. The needle can be driven up rapidly and dramatically.

I had a great talk last week with David Coleman who will be on the next session and I'm inspired by what he and I know ACT will help us do following one of your key recommendations, is that we get a third party to help us distribute this information in a very sort of data driven --and with the data mining that you can do now, we can get to these kids a lot earlier.

So our program, we've gone from 11 percent Pel grant recipients to 17 percent in just that short period of time. We have had a huge increase, about a 33 percent increase in kids whose family incomes are less than 80. And we have a very dramatic increase actually for students whose families have incomes under 40,000. We went from about 128 such families to almost 180 in this very, very short period of time.

So there's a new Harvard. You know, about a quarter of our students now are sitting there with a -
- in our Harvard financial aid initiative program we

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call it. And it also is the case that, you know, that word is out. It takes in our business often times, I hate to say it, 5, 10, 15, sometimes a generation to really get the word out there. I think with the technology we have, we can leapfrog. And the dramatic changes we've seen, I must say, have created a new Harvard. There's a revolution underway and I think it's only partly on its way. I think, you know, we have the pieces in place, you know, to get going further.

When I arrived at Harvard, I think I, you know, when I made my first visit, that huge 15 miles, I, you know, didn't quite know what to expect, I guess the devil incarnate, you know. I expected to introduce everybody as Lucifer I guess or whatever it is. The truth is that even in those days, it was fine.

Now today it's so different, not just at Harvard, but at lots of similar institutions, as you indicated. So I would simply say that we've doubled the number of advisories, for example, in the past

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five or six or seven years. We've added peer advisors, a lot more peer advisors.

We just had a meeting last week with our freshmen dean's office and we identified a number of people, including a lot of students from poor economic backgrounds who need to have good counseling, and good advising, and good roommate combinations that will get them off and started.

We have a student events fund, you know, so the students won't be embarrassed if they can't afford to go to some of the events around campus. They can get the tickets from us and just go to all the events, a level playing field. Right away we created a whole new set of research opportunities for our own in-house people, you know, to make sure they're always going well. The reality is, the graduation rate is 97 and 98 percent for these students, which is exactly what it is for the Harvard students as a whole.

But there are lots of other things that have to be done. You know, we have, you know, this wonderful thing called a Shoestring Guide to Harvard

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that our students created, and that was a guide on restaurants and, you know, bargains around the university and around Boston. It was so popular that we now do it for everyone.

We created a new student organization connected to the Harvard financial aid initiative, which they help us recruit. They, in the summer, use our search list that we get from ACT and the College Board and they call, they email, they snail mail, they do all kinds of things to reach out to these kids. And some of the techniques we use came from Caroline and Chris back from the old days.

Under the new College Board and ACT information that we're looking forward to, we think we're going to be able to get to more of these kids earlier. So it's a new world. You haven't given me the stop yet so I'm waiting. So there's so many new things I think and so many ways we've tried to make Harvard a different institution.

I don't think any country can waste talent and I think that's the thing that is scary. You know,

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you go around the world and there are countries that aren't using half the population, namely the women, in terms of engaging them seriously in higher education. This country is leaving a huge amount of talent on the table never being utilized. And quite honestly, I think, you know, the kinds of things that some of your original research, you know, had sort of helped us with and some of the stuff coming right out of this report, and frankly, the collaborations that we're going to be able to have, we were just very fortunate to get a very generous gift that will enable us to I think create a new position that will help us leverage the sort of collaboration with the College Board and leverage the information that you have given us.

One of the things to remember is that kids need role models. And if there aren't role models in their schools, they can create -- we can create role models for them virtually through social media. So there are lots of exciting things I think that we can use with the new technology. I think the next 5 or 10 years, you're going to see this whole venture take

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off, and we thank Caroline and Sarah, obviously, for what they've done.

MR. GREENSTONE: Thank you, Bill.

(Applause)

MR. GREENSTONE: We're also fortunate to have Robert Gordon. I'm going to turn to you in a second, Nicole. Robert is, as Bob mentioned, Acting Deputy Director at OMB. And, Robert, I thought you might be able to shed a little light on what are the gold mines of data that are laying around the federal government. And is the federal government about to publish them all on the web so Caroline can data mine them?

MR. GORDON: We should be so lucky. So first, thank you, Michael. I guess I just wanted to express my own tremendous excitement about this work. I spend a lot of time at OMB looking at research and to how we can improve outcomes for kids. I think there's a bunch of things about this work that are quite extraordinary. One is the effect sizes on something really important.

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You get a lot of interventions that are big effect sizes on kind of smallish things or small effect sizes on things that matter a lot. These are enormous effects on where kids are going to college, the likelihood that they're going to go to school that they graduate from and earn a higher income from. It's incredibly unusual.

The second thing, the low cost. We often have -- or sometimes we have impressive interventions, but they're really expensive. Six bucks a pop is incredible. The third thing is, I think this points the way about the use of data in public policy generally. I don't know the right way to talk about it. But this use of detailed individual level data to improve important social outcomes, obviously you see businesses doing a lot of this. There was a great article in *The Times* last weekend about political campaigns during a lot of this. But this is about using it for social purposes which the government doesn't do enough of, and I think this points the way back.

The last point obviously, and I raise this just because it hasn't been raised, is the value proposition, not in an economic sense, but in a moral sense. The notion that there are lots of kids who have faced obstacles as poor kids do and are achieving at high levels and they are not achieving their potential is something that I think offends values that are incredibly widely shared in our society. And to be able to do something about it and to be able to do something about it for \$6 an intervention is extraordinary.

So I am hugely excited. I think that the opportunities for the government to play a constructive role here are really excited. When I read *The Times* article about this a few months ago, I sent a note to my former colleagues in the administration and said what are -- I always got confused about you and we, what are you doing about this? What are we doing about this? Why weren't we doing more of this?

Because I think the results here were, you

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know, there was research from H&R Block sort of in this space about information and sort of nudges that that was -- I don't think you would have anticipated magnitudes of this size, but you can anticipate significant effects. And so there is lots more that government can be doing here, I think. I'll speak briefly to the data questions. I think, you know, using administrative data sets has incredible potential, but it is hard, it's hard work, and getting the right people to come together and connect systems, it's the blocking and tackling of government that is just challenging.

And I think that there are three challenges for this work in particular that I have thoughts about what to do about them, but they are obvious challenges. The first with my OMB hat is actually I think that they're -- it doesn't help that we're going through sequestration right now and that every agency in the federal government is facing constraints and is having trouble doing the most basic things. Because we're in a phase where everything is coming down, and

for better or for worse, anything new, even if it is as high impact as this, is perceived as just something new, and you've got to find a space for it.

And ideally you would be doing incredibly careful analysis of cost benefit and this would be at the very top. But in the real world, you sort of look at what you're doing and say, well, is there something I can drop, and that's a harder thing to go through, so I think that is a challenge.

The second challenge obviously is issues around privacy. I think there's a question about what the real rules are. I'm a lawyer, but I am not at all deep in this. But obviously there are issues around the sharing of personally identifiable information. You can do it under some circumstances. You can always do it with consent. If you don't have consent, there are exceptions. You can anonymize data and then share it more widely, but there's a set of issues there.

And then on top of that, there's also just perception issues around this that often create a sort

of penumbra of challenge, whatever is actually the core legal requirement in the achievement data space. The administration issued regs under FOPA, which is the educational privacy law, that clarified there are things you can do that you didn't think you could do that I think were very helpful. It would be interesting to look in this space. But obviously that's a second set of real challenges we can talk more about.

And the third thing I actually -- it's going to sound silly, but I think it is a challenge. I think talking about data is really boring. And because it is boring, people do not put the time into it that they need to get results. Something like this to get it through the administration requires really - - it is administratively hard and keeping peoples' attention on it is hard. I think that the conversations like this with data profile, the issues showing the power of these ideas, the power to get results we all care about, is it really a big deal? But that just is another challenge. This is not

exciting stuff. And as I said, it's hard to do in a period of constraint.

The very last thing I will say is, you know, I think that, particularly given sequestration, it is incumbent on the administration and for all of us who care about this space to think hard about how we're spending all of our resources and whether we can do better with what we've got.

There are investments like Pel grants that are, you know, there's reason to think that they are an incredibly powerful bang for the buck. There are other programs where it's a lot less clear. And I think having that honest, hard conversation is really important because to keep things moving forward, we're not going to be able to coast and we're not going to be able to just pour money into the systems and hope that things work out. So I will leave it there.

MR. GREENSTONE: Thank you, Robert.

(Applause)

MR. GREENSTONE: We're also very fortunate to have with us Nicole Farmer Hurd. And Nicole also

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has the goal of getting more people to attend collage and has a kind of different model and I wondered if you could talk a little bit about that?

MS. HURD: Great. And I'll say a complimentary model.

MR. GREENSTONE: A complimentary model, yes.

MS. HURD: And I can't tell you how important Caroline's research is. I mean I will tell you just right off the bat, I have a bias that I'm trying to get rid of which is everybody thinks that college access programs and all the work that we do in the field on this is just cumbaya, and we braid hair, and we sing songs, and we hug, and that's not what we do.

And so I wanted to spell that right away, because some of us -- a lot of us are taking this very seriously. And the challenge is to take Caroline's brilliant work and then move into practice.

So I can tell you what we do is, we've taken a problem, which we've been talking about for the last hour, we have too many low income, first generation,

under represented students not going to college, especially to our selective institutions.

This statistically keeps me up at night. There's a Georgetown study, over 146 most selective institutions, 3 percent are from the bottom quarter, 3 percent. Not acceptable on our watch, just let me say it, not acceptable on our watch. And so what we do is, we've taken this problem and then we've taken research. And so, again, this has been really important. We have eight key performance indicators. If we know our advisors do those eight things, we'll move the needle. And so it's exactly what Caroline's research points to, it's faster completion, it's getting kids a good collage match list so they actually know what their academic credentials are and where are the schools that are going to serve them well, things like graduation rates, things like default rates, things like what is your actual net price going to be and what is the cost going to be to you as a student and to your family as opposed to what the sticker price is.

And I think these are incredibly game changing points of information. And frankly, they're not rocket science, it's just our students don't have them. And so what we're doing is, trying to take really concrete things that can move the needle and then equip them into the brilliant minds of 22, 23, 24 year olds to be the messengers.

So what we do is, we recruit recent college graduates. We have 18 partner universities that are all selective institutions. So we started this at the University of Virginia. I was actually the dean of oversight undergraduate research and fellowships. And I've seen all these great kids go in to Teach For America and going into the Peace Corps and going to all these other things that take 10 percent of their applications.

And I thought, you know, I we can send young people to Los Angeles to teach, or we can send them to Ecuador to do water purification, why can't we keep them here in Virginia to get more kids going to college? Who better than people who look like them,

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talk like them, and just did it themselves and have crossed the finish line, what better messenger than that?

And so the Jack Kent Cook Foundation took a risk on us. We put 14 recent college grads in schools and we saw things go up, applications to selective schools, applications at large. And so what happened was one of those amazing moments in life that you never forget. I have a PhD in religious studies, I'm not supposed to be here right now.

As I tell Eric Bettinger, Caroline's colleague that does our evaluation, I can pray about the regression, I can't do the regression.

But what happens is, what we did is, we took these recent graduates and things went up, and then the phone rang, and the Jack Kent Cook Foundation said we're so taken by the model, what do you think about a \$10 million expansion grant, and I dropped the phone. And I said to my husband, I've never been involved in anything more important and I've never seen more active, amazing people than these 22, 23, 24 year olds

to carry the message.

So I left my job. We did a conversion, went out and asked other universities to join us, and now we have 18 partner universities. So we've gone -- 2007 was our launch. We had 62 advisors. This year we have 335 advisors and 389 high schools, so there will be 116,000 students. And the message is simple, if I can do it, you can do it, too. But I think the beauty of Caroline's research is that she's actually giving us the way forward. Then we can actually say look at what was in those beautiful envelopes. If we had every student and every advisor get that kind of information, what would that do?

And I actually believe that all of our students are under matching. It's not just the high achievers that are under matching, it's the moderate achievers that are under matching. It's the low achievers who don't think they can go at all that should be going to a community college and thinking about how to advance.

And so the idea is let's water the whole

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field, let's lift all ships, let's let every single citizen in this country reach their potential through education by making sure they get this information in high school.

And so, again, I think we know what works. The question is, do we have the will and do we have the ability to scale it and make sure that all these students and their families get the information they need?

I'll give you two really quick stories. When we first started in North Carolina, we had a student, an amazing student who was off being advisor, first generation, low income herself, and she was scared to meet with a student because she pulled her transcript and straight A's and this person is not going to need to talk to me, I'm here to help the kids that might not have the opportunities that this young woman has. She pulled this young person in, who had never taken her SAT. We're talking about a 12th grader in a high school in this country with a 4.0 who had not taken her SAT.

Got her to take her SAT, did great. The next thing, did know there were any fee waivers, thought I can't apply to college, there's no -- my EFC is zero, I can't apply for these things.

All of a sudden we got fee waivers in front of them, another brilliant piece of her research. The next thing we know, she was going to the community college down (inaudible) which is a very good and viable option for many people. And I do not want -- take away anything against community colleges.

But for this young woman with a 4.0, she did not realize she had other choices. And the advisor sat down with her and the next thing you know, she's applying to UNC and Duke because those were the two most selective options inside the state. And then, you know, she applied to Brown and Yale.

So we've gone from not taking your SAT's to applying to four of the best institutions in this country. And she just graduated -- well, she's actually just about to graduate from Yale. That is the difference one 22 year old can make in another

person's life. And so what I would just say, I was in with one of our investors, and we need more of them, but was with one of our investors in the South Bronx with our NYU chapter a couple weeks, and we had a bunch of first generation, low income kids, a lot of them first generation, new to this country, and they said -- the funder said to them, what has been the biggest difference, and they said when I came to my high school, everybody thought we were a two year school and now we know we're four year kids. And some of them were going to two year schools, but they said we now know because the names on the board and the acceptance letter these advisors put up, we can do it, too.

So there's something about creating a college going culture. There's something about telling our young people that things are possible. And there's something that I think all of us as adults and people who are active in this community need to make sure that we take the research, we marry it to this new generation of leaders who's so committed to

the social justice, so committed to equity, so committed to making sure that everybody has a chance, and make sure that we take incredible research like this and empower our students and our families with it.

And I think that higher ed doesn't care. You know, out of our 18 chapters, they provide 60 percent of the budget. I get constantly asked how do we get universities to pay for this when those kids aren't going to those schools. I'll give you an example. UNC Chapel Hill, 60 percent of the budget for those Caroline advisors that are in 58 schools across North Carolina comes from UNC Chapel Hill. Those kids aren't going to UNC Chapel Hill. Some of them will. Some of them will go to Harvard and Duke and all these other places. But a lot of them are going to go to UNC Wilmington, or UNC Greensboro, or to the community college.

And I will tell you one of the things that makes me proud is watching the chancellor say the reason why we do this is that not every kid is going

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to get into Chapel Hill, but as the public flagship it's my moral obligation to make sure every kid goes.

And I think if every president of a public or private school to that on, I think higher ed needs to be part of the solution. Everybody says, oh, this is a K through 12 problem, bologna, this is an American problem, this is our problem, and we all need to hold hands and do it together. And I can't thank you enough for guiding us with real research that shows rigor and shows us the way forward.

MR. GREENSTONE: Thank you. So after that impassioned answer, I'm a little bit nervous to ask the next question. So I guess I will confess. I'm an economist. And so, Caroline, the question I wanted to ask you was, maybe you could talk us through a little bit some of the numbers of what would it cost schools to serve additional kids who probably can't pay full freight and what are going to be their benefits in terms of earnings over their lifetime?

MS. HOXBY: Right. Okay. So what we do in this study is, we calculate how much it's going to

cost if a student who say was going to attend a non-selective college or university, decides to attend a peer institution, one of the institutions for which his test scores and grades make him best prepared.

So even though it's going to cost him or her less, okay, they're actually going to pay less themselves in the immediate future because those colleges are less expensive for them, not more expensive. I know that sounds odd. It's kind of hard to get your head around that. It's like going onto a car lot and saying I'd like to consider this economy car and this Lamborghini, and they say, ah, the Lamborghini is free, but the economy car is going to cost you quite a lot of money.

But once we've gotten our head around that, someone still is actually coming up with the additional funds so that students can go to colleges and universities that have generous instructional resources even though they're not paying much of anything.

And we calculated that that was an
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additional \$50,000 per student over four years. In what's called present discounted value, that means right now we would have to come up with the \$50,000, and that over their lifetime, each one of these students, by being induced to go to a peer institution, would earn kind of a minimum of about half a million dollars more over their lifetime, again, in present discounted value, so right now. And that's under very conservative assumptions.

So you can see that \$6 for the intervention, which is hardly anything, plus maybe \$50,000, which, you know, some donors or someone has to put up in the immediate term, turns into at least half a million dollars.

And that's important because the half a million dollars really is the way in which we are able -- this sort of thing raises economic opportunity, changes someone's life, and also makes it possible to give opportunities to the next generation of low income students, because it is the fact that someone's life has been transformed, but makes that person into

a person who will give money for financial aid for future generations of students or who will be a tax payer who earns enough more that they contribute more taxes and that's what supports our college and university systems. So as an economic proposition, it has an incredibly high ratio of benefits to cost.

MR. GREENSTONE: Okay. Thank you. I'm glad that after Nicole's excellent answer, we didn't have to have a downer of an answer. Bill, I wonder if you could talk a little bit about maybe some of the broader benefits that, I guess based on your own personal experience, but then just observing the under graduates at Harvard having a diversity -- people with a diversity of backgrounds provide to the overall campus.

MR. FITZSIMMONS: We had a wonderful graduate, a good friend of mine who passed away a few years ago at age 107. He ran his first marathon London, 26 miles, when he was 82 years old, just to give you an idea how unusual a guy he was. He always would go on and on and on about how much he learned

and how diverse and how exciting. But the major thing about his learning at Harvard was what he received back from his 1923 classmates. So think about that.

Harvard was a little less diverse in those days. And colleges like Harvard were way less diverse. Even the Harvard I entered in 1963 was a different planet. It was four to one, male to female. It's now, you know, about 50/50. It had only about a quarter of us were on financial aid. Now 60 percent of us are on financial aid, and that 60 percent pays an average of 12,000 to go. You know, 20 percent are paying nothing. So that'll give you an idea how it's changed.

There were virtually no students of color, there were richly no international students, on and on and on. So today, let's say all kinds of colleges are turning out future leaders for this country and other countries, and if they go to school with a rich, highly talented group of classmates, they live with them 24 hours a day, they have meals with them, they're in class with them, they're on extra

curricular activities with them. Because of Facebook, and I'm sure, you know, Facebook's successors, they're going to be in touch no matter where they go, all over the world for the rest of their lives, and with all the things we're doing with the stem cell research initiative and the human genome projects and so forth, these kids are going to live forever. They're going to live another 70 or 80 or 90 years. So it's a very big deal.

When you're there -- and let's say you're in an economics class and you want to talk about, oh, I don't know, say public housing, the value of public housing, anyone ever lived in public housing in the old Harvard? Not many.

How about you want to talk about public transportation in a world in which many people wouldn't know what to do on a subway and on and on and on. It's easy to think about it in the social sciences. But let's think about it in let's say the humanities, where a lot of the characters -- I'm currently doing another one of the F. Scott

Fitzgerald. It's not Princeton, by the way. But anyway -- but, you know, there they are focusing on the rich and famous.

The Great Gatsby is very popular right now. This is the beautiful and damned. But a lot of literature if you think back, you know, classical and even up to this day is really focused on the rich and the well off. And you don't hear a lot about real people who are poor. So, you know, one could argue there's a whole literature out there that needs to be developed. And how about in the sciences? You know, are we going to look at the gini coefficients or those great reports actually that you turned out? Not a pretty picture for the United States, by the way, and so on. But are we going to try to figure out that the great science advances will help everyone and not just people who, at the high end of things, you know, want the very best of services?

Globalization, it's a great -- I'm a big believer, I'm a huge Tom Friedman fan, and I sat there with Larry Summers and Tom Friedman and Michael Sandel

taught this great course on globalization. But in the short run, they're awesome losers. And how are you going to, in a globalized world, how do you get to the best place 50 to 100 years from now with the least damage to the largest number of people, you know, leveraging the great things that our students, in fact, are producing for us?

So there are so many reasons I think why you want -- you don't want, again, for a country, you know, your leadership role in the world will be greatly diminished if you leave talent on the table. But for a university, your role, you know, a place like Harvard, if we hadn't done the things that Mr. Rubin and the gang, our corporation had allowed us to do to increase financial aid 81 percent since 2007, we were in danger of going back to being the boutique institution that we were many, many years ago, and maybe not so many years ago, even, to some extent, the time I was there. So I'm excited you're coming to Boston, which I think is a new announcement. But there are so many things we can leverage. But I do

believe that the educational value for the students who go to a diverse student -- to a college with a great diverse student body, it's really quite profound and it will last for a very, very long time.

MR. GREENSTONE: Thank you. So I should just mention you guys have note cards. If you have a question, you should write it on it and then pass it to the middle and there will be some time at the end. Caroline -- well, this is actually just a question for the whole panel. So there's the data revolution, Amazon shows me what I want to buy, and so then I buy it. And you've definitely focused on an interesting set of kids. But there might be other people out there. What else might we be able to do with this data and analytical explosion?

MS. HOXBY: So I really think that we started with the high achieving students, not because we thought they were necessarily the most interesting, but because we thought, well, if we can't figure out how to work with them, it's going to be even harder to work with students who are from a broader array of

academic backgrounds. But we think that the idea of making it easy for people to make smart choices for themselves is a very broad idea. So let's take a student who's college prepared, but is not going to get into any very selective college or university. That student actually faces a very difficult choice. You know there are a whole array of different colleges and universities. There are some non-post secondary options that the student might want to consider, maybe the military, maybe working first or doing something else, should they go to two year, four year, what major should they do, should they go to a college where they might have to take some remedial courses first, or should they go to a college where they can start off in the freshman year courses right away, should they take out a student loan, should they work part-time during college, or, you know, all of those things are decisions that students have to make, and they're only -- after all, they're only 18 or 19 years old, and I don't see why they should be experts in all of these decisions.

Now, there are a lot of data out there in theory to help them make these decisions. But there's a big difference between it being out there in theory and it being easy for the student to kind of put it all together and say, okay, now I understand I have option A, B, C, D, E, I can compare them on a kind of equal footing and figure out what's going to work best for me.

We think that our role as, what I think of as the back room data people or the analytic people, is to take this enormous amount of information that's out there and to turn it into something that is easy for the student to use, so that they're not obliged to go through that whole exercise. It's easy for them and all the hard work is done by someone else. And once you've done the hard work, frankly, doing it for another student costs you nothing, right. So I think that's a really important conclusion. And that's where we want to go in the future is, we want to help students with all kinds -- from all kinds of different backgrounds, not just low income students, but middle

income students, too, and moderate achievers and so forth, but with the idea that information is actually a very powerful tool.

And I should say one of the reasons I think this is important is that as a society, we really do not want to leave talent sort of on the table just because it was hard for the student to figure out how to use his or her talents best. That just seems like a loss of economic opportunity and a loss of our ability as a country to keep transforming ourselves into a greater and better place.

So I think we're not just interested in high achieving students. I think we started there because we thought they were the easy case. But I think now that we've learned how to do this, we should keep moving onwards.

MR. GREENSTONE: Thank you. So we're going to turn to questions from the audience. But before we do that, I just want to underscore why we at the Hamilton Project think this work is, just to echo what everyone else is saying, that this work is so

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excellent. And so last night when I was thinking about how I would talk about this, you know, it turns out you actually don't need to buy dictionaries anymore, you can go to dictionary.com.

In there I looked up crisis, and so that's - - the definition of crisis is stage or the sequence at which the trend of all future events, especially for better or worse, is determined. And so now that I actually have a proper understanding of the word crisis, it doesn't just apply to our children failing to go to bed on time, I think it's safe to say that we are, although the word is overused, there's a crisis in education.

And let me just give some facts. You know, 30 years ago the United States led the world in BA's, depends how you calculate it, now we're in the teens. I think in light of that, it's not surprising that there's been wage stagnation for many Americans, outright declines for others.

In our 13 facts document, which was handed out today, it'll show that a third of all children are

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being raised in families with fewer resources than comparable kids 35 years ago. And at the same time, we had this incredible increase in earnings at the top. And so let me just return to the definition. It's a stage and a sequence at which the trend of all future events, especially for better or worse, is determined. And so my fear, our fear at the Hamilton Project is that these trends I just talked about are bleeding into social mobility. And as Bob Rubin talked about, social mobility is really kind of at the heart of what holds the country together. And there's many facts that you could point to. But in the last 30 years, there's been an increase in the college completion rate. It turns out if you look at the kids from the bottom quintile, bottom 20 percent, their college completion rate has gone up by about 4 percentage points.

If you look at kids at the top, who were raised in families in the top quintile, their college completion rate has gone up by 18 percentage points, more than 4 times. And so a lot of these trends are

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actually bleeding into social mobility.

And I think that fits my definition of, or not my definition, dictionary.com's definition of a crisis. It's a stage and a sequence at which the trend of all future events, especially for better or worse, is determined.

And so what we're here today to do is to talk about Caroline's proposal, which is a small piece in trying to counteract that. And the Hamilton Project will have an event in November where there's some other ideas to surface on how to confront some of these trends. But I really think it's a crisis that we should be throwing everything against the wall and trying to see what works. Okay. So let's turn it open, and we have such a great audience here. And we have some questions for Caroline. What is the role for philanthropy in the next phase of the eco project?

MS. HOXBY: So I should start by saying that philanthropy has been -- is the reason why the eco project exists. It is partially funded by the Institute for Education and Sciences, which funded

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some of the randomized control evaluation that's the sort of survey work that we do.

In addition, we've received funds from the Gates Foundation, the Melon Foundation, the Spencer Foundation for support of research on education, the Smith Richardson Foundation, and a consortium of colleges and universities, all of which have put in a little bit of money.

Actually it turns out that the project is not that expensive to fund. As I said, it's only \$6 per student. So even if you're giving it to 25 or 30,000 students, it still doesn't add up, you know, you can do the math yourself, it doesn't add up to all that much money.

I think what philanthropy can help us with as much as anything is making sure that the financial side is something that's easy for us to handle, so that then we can turn to the part that's more difficult which is how do we really find a way to give advice to students that works for them. So philanthropy, we are hoping that we continue to get

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support. We are doing new projects. We're continuing with things. But our sense is that most of -- we just want to take the financial issues off the table. You know, we went into this thinking, this is a period of fiscal restraint. State governments don't have a lot of money. The federal government, we've discussed the fact, Robert discussed the fact that, you know, there are serious financial constraints on the federal government.

So we thought hard about what can we do that's inexpensive first, and that's why we came up with an intervention that was so inexpensive that really probably it can continue to get funding, you know, can continue to be done for a number of years.

MR. GREENSTONE: Thank you. There's another question that -- maybe Robert is the right person to answer this. So what is the first set of data that we're going to be able to release to researchers, that's feasible, and what are the hurdles that we have to get over to do that that would kind of aid and abet these data mining efforts?

MR. GORDON: Caroline would probably know better than me.

MR. GREENSTONE: But I think the question is coming from the feasibility side, which I suspect you're (inaudible)

MR. GORDON: Yeah, I think so. So I think -- I mean I'll just tell one story. In the course of putting together the regulation, the gainful employment regulation, which was the regulation of for profit colleges, which (inaudible) I think mistakenly put a stop to, but putting that together, one of the things that the administration needed to think through was, how are we going to get reliable data that link student debt levels with student earning trajectories, how much money they're making and do they have jobs, and that involved connecting up schools and the Department of Education and data at the Department of Education about debt levels with wage records at the Social Security Administration and making sure that we could have those be interoperable.

And, you know, that kind of -- when you talk

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about getting students useful information over the long run, I think the question of when you graduate from school, what kind of job can I get? Can I get steady work and what am I going to make is obviously hugely powerful and important.

If you go right now to the college score card that the administration has put together, there's a placeholder for that data about employment and earnings because they're still in the process of putting this together. So hugely possible. Challenging just to make the links happen.

And then there's an additional level of challenge when you talk about not making the links within the government, but making them to a third party, whether it's ECHO, or the College Board, or ACT. I would actually, not to answer a question with a question, but would be interested in what your experiences have been so far and how you think this is going.

MS. HOXBY: Right. So let me just say that we work right now within the Family Educational Rights

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and Privacy Act which is a federal law that protects everyone's educational records. And Sarah Turner and I and my co-authors were very used to working within that set of constraints and it's really not a problem.

Because I think when people start talking about data mining, they often think about internet companies that, you know, you put in a search or you have information on your computer about what you did and they're mining off that information. And, you know, they do actually want to know that it's you, okay.

That is not really what we're aiming for. Instead, what we want is something that's at a more aggregate level. So, for instance, what Robert just talked about is that we would like to know about earnings differences or outcomes differences between colleges and universities. That's not that I'm interested in looking at an individual person's outcome, but I want to know what percentage of these people, you know, graduate on time, get a job, how many of them are unemployed, you know, what is a sort

of typical earnings trajectory so that if I were advising a student, I could say, look, if you go to college X, you can expect this, and if you go to college Y, you can expect something somewhat different.

So that's a level of aggregate data that does not require us to violate any kind of individual privacy, but rather is more a matter of making the links between different federal administrative data sets.

I'll give you another example. Probably the most valuable data for us at this point would be the data that is gathered for the purpose of distributing federal student aid. So, of course, the federal government cannot give out student aid without students filling out the FAFSA form. That's the free application for federal student aid.

Well, there's a lot of data that are there from all of those students filling out those FAFSA forms, and that is the data that would make it easiest for us to find low income students and identify where

they're likely to be, what high schools they're likely to be in, where the need is greatest, right.

So again, we're not so much interested in finding out John Smith, information from his FAFSA form. What we want to be able to say is, gee, we look at this high school, and we can see that the students from this high school have a lot of financial need, and that a lot of them aren't going to college or a university or they seem to be making college/university choices that don't look like they're getting very much advice. Again, it's sort of making the connections between the data. So let me just make a point on the data. I agree with Robert that data are boring, okay. The only people who love data are people like me because, you know, it's a fault of mine, I realize.

But that being said, you know, well, it's fun for some. Okay. Anyway, every time I say I really am interested in data, the only thing you can say that is worse is like I'm really interested in taxation, which I teach, by the way, okay.

But it does not cost a lot of money, okay, to put together these data. And it is not an impossible thing because we're not asking any sort of privacy laws or confidentiality laws to be violated. It is really bureaucratic challenges.

And at the end of the day, if I were a U.S. citizen or a U.S. taxpayer, I would want to say to my government, look, get over your own internal challenges because it's my money that you're spending on federal student aid and I would rather that it be spent well, and, therefore, if the only challenges are the people from this agency have to work with the people from that agency and it's not a priority, let's make it a priority.

MR. GREENSTONE: Okay. I think we have 30 seconds left. Nicole, one question for you.

MS. HURD: Yes.

MR. GREENSTONE: You'll have to answer it offline, but how does one get their school into your organization?

MS. HURD: I'll be doing that offline?

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MR. GREENSTONE: You can answer quickly,
yeah.

MS. HURD: So just come find me. (inaudible)
that will be the easiest way to do it, but yes -- can
I just say one thing because you teed it up so
beautifully and I can't let the moment go by? It is a
crisis. Please, those of you out there who are
telling young people that it's not worth going to
college, stop it, stop it, stop it, because it effects
-- I mean one of the questions that's been teed up to
me was, you know, what is happening in our low income
high schools right now, they're believing it.

They're believing that college isn't worth
it. They're believing that they're going to end up
working at Starbucks, that they're going to have all
the student loans up. We all see the student loan
charts going up and up and up. I don't think student
loan debt going up and up is a good thing, but there
are ways to manage that. There are things called loan
forgiveness. In public service there are things like
making the right selections and going places that are

going to serve you well financially. There's ways to handle that. There are ways to not put loans on credit cards and all the things that people are doing while they're scared. So for those of you out there giving messaging, you know, if you look at who isn't employed in this dip, it was not people with college degrees, please, it's our low income first generation and it represents students that are hearing college isn't worth it. If that's just one takeaway, college is worth it. It's the way out of poverty. It's the way to employment. It's the way to dignity. It's the way to lots of other things. And it scares me to death when I walk into a high school and kids say, oh, I don't need to go to college because I saw on TV that it's not worth it. Sorry, but you said crisis, so --

(Applause)

MR. GREENSTONE: Let me add in a one-tenth as convincing way that if you go to fact number 10 or 11 in our 13 fact book, we will show that the rate of return to college is much higher than basically any other investment people could make, so okay. Please

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join me in thanking this all star cast.

(Applause)

MR. LEONHARDT: Thank you all for being with us. I'm David Leonhardt of the *New York Times*. It's a pleasure to be here today. We have a fabulous panel for you all, and we're going to dive right in and have a discussion among the five of us, and then later on we'll open it up to conversations, and I'll switch places with Michael. And I'll go back to thinking about the Supreme Court for the rest of the day, and Michael will moderate the questions. But it's a real treat to be able to be here and talk about this incredibly important topic.

Before I get to the panelists, I just want to take a second -- maybe you've already heard this, but if you haven't had a chance to pick up these 13 facts that are in this brochure, I strongly recommend you do so, even if you just spend a couple minutes looking through the charts. I mean, it's really an excellent overview of what's going on, and I think one of the main messages it really delivers is that higher

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education can be an enormous force for economic mobility. In fact, it can be the single best force for economic mobility. The chart in here is showing how well -- at least this is the way I read it -- how well kids who grow up in low-income families but get a college degree, how well they do is really striking.

And yet, we know that most kids who grow up in low-income families are not getting college degrees. And it's that gap between the reality and the potential; the potential for higher education to be an enormous force for economic mobility, and the reality that it isn't coming close to living up that potential. And I think there's a fair argument that there are ways in which higher education is a force impeding mobility in this country.

People often go too far to suggest that a college degree isn't worth it to which I always say, "I've yet to meet the college skeptic who isn't saving a lot of money to send his or her own kid to college." If you know of such college skeptics, I'd be happy to meet one. Most college skeptics are skeptical about

other people's children going to college. They've made up their minds about whether it's worth it for their own kids to go.

And so, we're not going so far as to say college isn't worth it, to say that higher education can be a force impeding mobility. We're saying that it's not living up to its potential, and that's what the four of us are going to talk about today.

I'm going to ask each of our panelists to give a very brief little opening remark, and then we'll go into questions, and I'm going to start with David Coleman who runs the College Board.

MR. COLEMAN: Thanks, and I'm honored to be here, which is a cliché, so I thought I'd say why here at the Hamilton Project. I knew about the Hamilton Project the day it was announced because this is not the first time in our country's history where Congress has appeared beleaguering and discouraging to someone who hopes that ideas a fine action would shape the world. And then came this idea from one of our great public servants that there would be this thing, the

Hamilton Project, where ideas would be developed drawing on the ideas of economists and their expertise. They would give away forward in a non-partisan way trying data to action.

I read one of the very first papers by Robert Gordon, Tom Cain, and Doug Stager on evaluating beginning teachers based on their performance on the job and found it stunningly lucid, and I have learned one thing in life. There is no fine writer who has not also a fine mind. All three have become close friends, and I've collaborated with them over a decade -- no, I guess, 2006, you know, for over the last five years, in depth, due to finding them through that work and through this project. And I hope today will soon only be seen as a moment where the Hamilton Project again announces to this country that there are ideas that can and should be done, that are doable.

And with that in mind, what I have to say to you, and I'll add some detail, is a very simple statement. Nicole said, "Not on our watch that this shall occur. That 3 percent of low-income kids shall

be educated in this way." I want to send a clear voice to you today, not on my presidency as the new president of the College Board, and not on this College Board's watch.

What I mean by that is we are engaged in a full-scale campaign that we are calling "Access to Opportunity." We are willing to hold ourselves and myself accountable for the results, and those results are changing these numbers. Not that we invested a lot. Not that we worked hard. Not that higher education was a problem. Not that it was difficult, but rather we believe that we can and must shift these numbers and are willing to hold ourselves together with our partners but finding ourselves finally responsible for that outcome. We believe this can be done. And, Caroline, thank you for blazing this path and for your fellow researchers for showing the way.

I'm going to say seven quick things because of the brevity about what that campaign means, but I want to express it. The first is we have scaled what is called the Hoxby Intervention. We will donate to

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15- to 20,000 kids this year, and let us end my voice and listen to the voice of students, if you put it up. So, we sent out 7,000 packets, and kids tweeted things like, "I got a huge packet of goodies from College Board which included eight college application fee waivers!" And if you go to the next page, my single favorite Instagram message says, "When College Board just sends you roughly \$400 worth of college application fee waivers for absolutely no apparent reason other than the fact that you're just that awesome." (Laughter) This is some of the power that is unlocked with this information.

So, first, we are scaling the intervention. Number two, we are engaging our members and partners. That includes some so many people represented here: Brit, Nancy, others in higher education. They are our members. We know this is an institutional problem as well as student-demand problem. With the great Bill Fitzsimmons at Harvard, we will work together to deliver and navigate the barriers that arise. We know we may face failures at first, but we are devoted to

completing and achieving the goal. Those partners are also school counselors who are also our members in high schools around this country, and also partners like Nicole's group who we came together with Data Mobilize to get direct to these kids and mobilize them.

Third is we will broaden the research partners involved in this. We're working very closely with Caroline and her team. We're also working with the great Chris Avery, who she works with, and his Harvard team at the Center for Education and Policy Research. They're thinking about things like tweeting kids directly and other interventions, and we're evaluating everything we do on does it change the numbers. And we will quickly innovate and find out what's most powerful.

To give you an example of something we have learned today, which is not formal research but very exciting, is, of course, PSAT data almost perfectly predicts SAT data.

And then we've learned we can learn other things about students earlier like that their parental background, the background of the parents, and the high school they're going to strongly predict they will not pursue their opportunities. So, hence, we can act far earlier in student's lives in a targeted way based on earlier information and help states and districts intervene before this whole series of events goes where students do not pursue the opportunities they have earned.

Finally, we will widen our circle. That is, this begins with low-income high achievers, but it must spread. It must spread to other low-income children who I think Caroline's research and this other research at least hints at severely that through lack of information, poor choices are made that substantially limit that future. That might be a decision to get extra help when you need it. Imagine if we can get that information to low-income kids in all stages of their work so that there are more of them then in this pool at the end.

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And finally, there are two principles that must guide this work. One is privacy always matters and is always sacrosanct. We will share, not for blood and money. We simply shall not share this money with any organization to sell these names or do anything like that. We will always keep individual student data utterly inviolable, and only students can give us the right to share it in any way, simply.

And the second, if I may say so, race matters. That is, our embrace of this work does not mean this College Board thinks income and race are simply the same idea. Within the group that Caroline and others have so rightly defined, 30 percent of them are diverse students, of diverse backgrounds like Latino students and African-American students. We will take special care, as we preserve this broad opportunity, to make sure we are absolutely unwilling to let any of those kids go. Those kids who have earned the opportunity, particularly low-income, and especially among the diverse students, must go forward. It is the view of this College Board that

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these students who are within our programs are within our care, and hence it is our responsibility that they take the opportunities they have earned.

MR. LEONHARDT: Thank you, David.

(Applause) I'll call on Jon Whitmore next. John is not only CEO of ACT, but spent many years working at universities including as president of San Jose State University.

MR. WHITMORE: Thank you. Just a few comments. Number one, ACT is rededicating itself to helping everyone be successful. That's been our mission since 1959 when we were founded. We give, the ACT, 1.6 million tests a year, and one in four of those are students with low income, so 25 percent based on our analysis, but it's gone up 20 percent in five years. So, there's an increasing number of students taking the ACT who are low income, going up at a rather rapid rate. We are committed, as is the College Board, to seeing that this changes.

We're new to the ECO Project. We've invited Caroline and Sarah to come this summer, and we have

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some exciting ideas about how some new things that ACT is doing can fit into and maybe enhance your program, so we're looking forward to your visit.

We're dedicated to the mission that you've set out for your project, and so we want to commit to that, and we'd be happy to work with the College Board and you so that we're not replicating or duplicating things because we should have one clear way of reaching students, or at least with the same information. Maybe different methods of reaching them, so that we're not confusing them in some kind of way because there are some students, quite a few, that take both the ACT and the SAT. And so, I think it's important that we coordinate that in some kind of way.

But ACT has had its own initiatives in regard to helping underserved students. One of them is a new college and career readiness campaign that we started this year. Started it in six states, and in those states we worked with state leaders to identify really outstanding schools, programs, and companies that are helping to advance under-represented and low-

income students. And we had identified several students who were of the kind that you're talking about in your report.

Just one -- I like to give specific examples -- Sharee Gremlin. She graduated from Rogers High School in Florence, Alabama, and Sharee has lived in foster homes all of her life, and she got a 33 out of 36 on the ACT, and a GPA of 3.98. I've met her and talked to her, and she is an outstanding person.

What ACT wants to do is help thousands more of these kinds of people with this kind of background be successful. And I think by working together we can make sure that that happens, and America needs this. Our future as a country needs this kind of dedication, and ACT is very excited about working with you because a combination of things we have in play and what you have in play could maybe leapfrog some of the work that you've been doing.

I'll just give one example. We have a new social media platform that's being beta tested, that's going to be interactive with students, which we find

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is their preference in terms of communicating. And I'm excited about talking to you about how we might be able to transfer some of the things that you've been doing into this interactive social media format, which I think has a huge potential for maybe more identifying certain students.

And the last thing I'd say is that we test every high school student in 15 states. That is 15 states require the ACT to be taken by every student in their state, and I think in those states we have a rich database that will more easily maybe find the students that you're looking for, and so, we want to explore that with you as well. So, thank you.

MR. LEONHARDT: Great. Thank you. Nancy Cantor not only runs the leading private university now, Syracuse University, but previous ran or helped run two leading public universities: the University of Illinois at Urbana-Champaign and the University of Michigan.

MS. CANTOR: Thank you.

MR. LEONHARDT: You're next.

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MS. CANTOR: Thanks. Well, I want to really start off by just saying how incredibly important I think what Hoxby and Turner, and what Nicole is doing, and the two of those things together. We're really at a moment where higher education has to be told face to face you can do it. We can move the dial. And I think that's what their work, for me, is fundamentally doing. It's telling us, those of us, Brit, Nye, and others who -- and Jon used to, who lead major institutions, no more excuses. You can do it. You can get out there.

The second thing I want to say is that the contribution that higher education can make to social mobility is two-fold from my perspective. On the one hand, it's what I would call a person-based contribution, and that's what I think this work does. It's saying let us get out there and bring to these institutions and support in these institutions America's future talent pool.

The other side of the coin is what I'll call a place-based intervention or a community-building

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intervention, and higher education has to do that too. We have to get off our proverbial hills, you'll excuse this. Syracuse is up on a hill looking down at a rust-belt city in desperate need with great assets to be built upon. We have to get out of the ivory tower and make really comprehensive partnerships on the ground to community build. The analogy I'll use, and forgive a college president for using an athletic's analogy, but the analogy I'll use is between what major league baseball does when it builds farm teams in communities versus what basketball coaches do when they go in and find extraordinary talent and bring that talent to universities. We need to both recruit for basketball and build farm teams in these communities.

Let me give you an example of a farm team in Syracuse that we are building. With the Say Yes To Education Foundation, the Syracuse City School District, the county, the mayor, the Teacher's Union, everybody and their brother, anybody we can bring to the table literally, we have built a comprehensive

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intervention across all 21,000 kids in the Syracuse City School District: pro bono legal work for all the families who have kids in the district, health clinics in the schools, before-school, after-school, summer school, and most importantly, support for teachers on the ground in professional development, et cetera, et cetera. But the real kicker there is that it's a commitment to the community by the community to cultivate kids all across the continuum of potential talent, and at the end of the day what do they get? If they graduate from the Syracuse City School District and qualify for admissions to any one of 34 private institutions including Harvard and Syracuse and everybody and their brother that I could recruit to the table, or all of suni and puny, they get free college tuition.

How do we do that? We make everybody accountable. What is most important there is that it's a farm team in the community; that the community is seeing talent grow and be cultivated. So, it's a way of saying that what Caroline and Nicole are saying

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is exactly right. There are kids in the community waiting. We just graduated 57 of them at Syracuse this year from the city of school of Syracuse. We Say Yes has sent 2,000 kids to college based on this program already, and it's only 5 years in the making.

The point there is it can be done. It's a kind of proof of concept point, and that's what -- even though your work is far more than just a proof of concept. For me, what it's saying to university administrators is okay, excuses are off the table now. This can be done, but it requires both person-based interventions like Caroline and Sarah's work and Nicole's work, and community-based building interventions. Building farm teams and then sending those kids from the farm team onto any of a variety of institutional teams around the country.

Final thing I would say on that is that this cannot be an either/or. It can't be selective in -- and I know that isn't the intent, but it can't be selective institutions and we leave off community colleges. This has to be an investment in the whole

ecosystem. When you build a farm team in a community, you are looking at a pathway from 3-K through community colleges, sometimes stopping there and sometimes going then onto 4-year institutions. So, our commitment, for example, in Syracuse, involves deeply bringing to the table Onondaga Community College, Oswego. We've got a variety of institutions at the table who are sending students all along the continuum of cultivated talent to a variety of institutions and to a variety of futures. To me, when we take anchor institutions all across the geographies of opportunity in this country, we could move that dial, and I think their work is really showing us that we better move that dial.

MR. LEONHARDT: Thank you. I'm going to embarrass Brit Kirwan and say he has been running a major public higher-education institution for 25 years now. Is that fair? The University of Maryland - College Park, Ohio State, and now Chancellor of the University of Maryland system, my home system. Chancellor Kirwan.

MR. KIRWAN: Thank you very much. Well, I want to come back to Michael's point about the crisis we're in. I think he spoke very eloquently about it, but it is a point that I think cannot be overstated or over-emphasized. We are in a crisis in America, or at least at the leading edge of a crisis over social mobility. And obviously, higher education has become the key to addressing this crisis.

Higher education is, of course, about much more. A college degree is about much more than just getting a job and getting a good salary. Higher education degrees, of course, improve the chances for a high quality of life. It's correlated with better health, better civic engagement, lower crime rates, so there are lots of reasons why we should encourage young people to go to college, but it is also about economic opportunity. Now it hasn't always been that way. In decades past, it wasn't the economic gain. It didn't provide the economic gain that it does today. Actually, as you can tell by my white hair and that I've been running universities for 25 years, I've

attended my 50th high school graduation ceremony.

I've actually attended my 50th college ceremony as well, but I've been to my 50th high school, and when I got back there I found something very interesting.

A lot of my high school classmates, some of us went to college. Some of us went straight into the workforce, and I observed some very interesting things. Those that went straight into the workforce were all now retired and living in Florida, and here I was still working. But today, that's not possible. Can you imagine someone with a high school degree 50 years from now retired and living comfortably? It just isn't the nature of the economic circumstances that we're in today, so higher education has really become the gateway that people have to pass through in order to have this chance at a high quality of life.

And we're failing in this regard in the United States. The 13 points were -- this report was put out -- I also commend everyone to read and study and think about that data. It's very compelling, but one piece of data, one graph in there that we all need

to think about is where does the United States rank in terms of social mobility and income disparity?

Now, in there there's a graph of 21 leading economy's nations, and of those 21, we rank 15th or 16th, I can't remember which, in social mobility. We're the land of opportunity. We're the upwardly mobile society. That's the way we are viewed in this world. We rank 15th or 16th in social mobility. We rank behind England in income disparity, and that is we have greater income disparity than England. Now, you may remember, we fought a Revolutionary War to rid ourselves of the class system that England represented at that time. They have less income disparity today than America, and so we can't be the America we've always thought of ourselves as being or the America we want to leave to our children and grandchildren if we don't address this issue, and that's why I think this work is so incredibly important. I mean, it points us in a direction where there are interventions that we can afford and that we can undertake.

But I also want to pick up on Nancy's point. This ECO, this strategy, is a piece of the solution, but it's not the entire solution. We have got to find other means of addressing this access to higher education for low-income students who maybe aren't of the top ten in ability. And this is going to have to be driven by community efforts, by organizations coming together, and David, I hope as we go along we might have a chance to talk about what some of those examples might be.

But I just -- picking up on David's comment, we are on the verge of losing the America we inherited from our ancestors. We have to do everything to ensure that we don't pass on where we are now to our children and grandchildren.

MR. LEONHARDT: It's Figure 2, right? Figure 2? And a brief plug. I would also commend some of the journalism that Jason DeParle did in the *New York Times* last year on this same subject: mobility, including one piece on education.

Let me start by asking any of you, all of you, the following. So, my guess is that there are a lot of people in this room who would say, yes, these are really difficult problems to solve. They're expensive to solve. They require creativity. They require vigilance, but we're really making progress here. We've got a lot more attention on this in the last decade, and not only that, but higher education leaders are committed to really improving this. I'm guessing a lot of people in this room would agree with that. I think it's the views of a lot of the authors who've done some of this work that we're citing.

I think there's a second view. I will put my cards on the table and say I lean a little bit more toward the second view, which is a little bit less optimistic. Not that we can't solve these things, but I'm not yet persuaded that higher education writ large actually really wants to, and so I'd like you to engage with that, and I'd say there are two pieces of evidence that we should have some skepticism for how much higher education actually is committed to doing.

One is, not all this stuff is a huge mystery, right? The University of California system has shown you can take large numbers of kids from community college and bring them in and get a lot more economic diversity that way. Harvard, under Larry Summers and Bill Fitzsimmons; Amherst under Tony Marks and Tom Parker; and a lot of other people at both those schools have really increased their numbers. They didn't do it some secret way. Right?

They took hard work, but there are a lot of other schools like Harvard, like Amherst, like the University of California at San Diego that could be doing a lot better than they are. And the fact that schools haven't, despite work not only like Hoxby/Avery, but like *Crossing the Finish Line*, like all kinds of other work, suggests there are impediments to this whether it's money, whether it's the fact that institutions aren't yet fully comfortable with class diversity, whatever it is. Whether it's the fact that you look at an application, no matter how well-meaning you are, and you know a kid

who spent a summer teaching in Sichwan Province. That is more impressive than a kid who spent the summer working at 7/11.

And so, I guess I'd like to ask each of you why hasn't education made more progress on this? And why should we be confident that they're going to do so now that we have such a clear distillation of the problem?

MS. CANTOR: Just two thoughts to start the conversation. One is we cannot underestimate the influence of things like, pardon this, but *U.S. News and World Report*; the kinds of rankings that basically give colleges and universities more points for who they reject than who they reach. So, that's point one, I would say.

The second point, I would say, really has to do with how you get colleges and universities to believe that a good business plan is really to figure out how to recruit the fastest-growing populations who will be college-going for the future. And I think we really haven't - for many of us this has been a -- I'm

a social psychologist -- this has been a social mission, but really, this is the real pragmatics to recruiting. Who's going to go to college? The Social Science Research Council just did a great opportunity index map of the fastest growing metros in the country. Brookings has done this too, and what's the social mobility opportunity index in those different phases? Where are the first generation of college-going potential kids growing up in this country, and who's recruiting there? And we're missing out on that, so we're not making the business plan argument, and I think that has to be made a lot more.

MR. LEONHARDT: David, what do you think of our colleges? Do they really want to change?

MR. COLEMAN: I'll say I'm going to take more pressure on myself first, David, which is always fair in matters of ethics to not point fingers before you do it yourself. I think the College Board must change, that is, in the following way. It is not any longer good enough to give assessments, and say we gave an assessment of a high quality. We must go

beyond delivering assessments to delivering opportunity.

So, if I'm successful and we're successful, the "P" in PSAT will stand for discovering possibility and delivering opportunity because this is the real work. The real work is not just taking the exam. The real work is holding ourselves accountable to what happens down the path. What happened after that exam? If we are to claim that assessment data is going to get kids who need help, that help will come, then it is a failure on our part when that help does not come. If we think this data can compel kids of opportunity, we must follow the chain. So, I think that those of us in all parts of this chain need a broader sense of our responsibility.

And the second thing I would say is this, David. This is my hope and my fear at once. The only possibility here is moving beyond the individual heroism of certain leaders like Tony or the wonderful president of Franklin Marshall who's gone from 5 percent to -- he's amazing.

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SPEAKER: (off mic)

MR. COLEMAN: Dan Porterfield, yeah, totally, right? The individual heroism will not save this -- they are leading lights, but as someone who worked the common core standards and saw 45 to 46 states abandon their state health standards and work together in common, at this moment the idea that ourselves as membership institutions can break down barriers and create a collective act of will that gives each individual college president and admissions officer cover to do what they each individually want to do but may not -- I don't think individual courage scales, but I think through social-societal pressure, policy, and other things, you can prompt collective action that gives everyone what they need to move forward. I think that's the only possibility here.

MR. LEONHARDT: What about the costs? I mean, this is obviously not a time in which higher education is flushed with money. What we're saying is, "Hey, please replace some of your full paying

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customers with some people who need much more discounts." Is that a fair thing for society to ask, at this point, of higher education?

MR. KIRWAN: Well, I do think the current fiscal situation, higher education, is a huge factor. There's no question. It's felt maybe more so in the public sector than the elite privates with the large endowments, but the decline in public support for higher education complicates the situation. But I personally feel that the leaders in higher education today, because of this social equity issue, have a responsibility that no generation of leaders before has had because we are the gate keepers, and we have to collectively work to address this problem. So, I'm one who is constantly saying we in higher education, particularly in the public sector, have got to find lower-cost means of delivering high-quality education.

And 10 years ago, I would have said that's an oxymoron, but today I'm beginning to believe it's possible because of the convergence of two developments. One is the power of the Internet and

information technology and intelligent software that can be made available ubiquitously. The other is what we are learning from cognitive science or the learning sciences. We actually know now what are the triggers that get people to learn materials or understand things, so I think we're at the very early stages of some really exciting developments in combining the power of information technology with the learning sciences to begin to find lower-cost means of delivering high quality education. And I think that has got to become an imperative, particularly in the public sector.

MR. LEONHARDT: I'd be curious how, Jon, first, and then maybe David, if you want, how do you grapple with this problem with testing? It seems to me there's no way to avoid testing, although I know there are people who argue perhaps we could. With testing, it's very difficult to avoid the idea that kids with the most resources and the most sophistication are going to have an inherent advantage. How do you each think we can try to make

sure that the standardized tests that we have, and I would argue we need, don't have an inherent advantage for the kids who can prepare the most and then do the best?

MR. WHITMORE: Well, ACT's vision of the future is a suite of tests that go all the way down to the 3rd grade, but aligned to the ACT college entrance test. It would be the first aligned system available that would begin in the 3rd grade, which is where we would start predicting whether people are on line for success in the ACT and then college and beyond, and so corrective action could be taken earlier. So, we're changing from an assessment company to an insights company to use the data from the assessments, so the assessments are a way of getting data about individual students, and then mining that data to help individual students know where they are or are not, whether they are off track or on track for the future. And that scales up in a more complicated way as you move through the grading system.

So, the idea is that the assessments become something very useful to parents and teachers and students because they provide insights on next steps to make sure you're on track to be successful. Our goal would be in working with you, in the longer run, to produce more low-income students that fit that high-quality educational capacity. And it won't be easy, and it won't happen overnight, but I think assessments done in this way, which is quite different, can be very useful for solving some of the problems we have.

MR. LEONHARDT: I think what you're saying is there's a way in which assessments can actually help kids with fewer resources more because kids with more resources are going to come from families where if those kids are going off track, the family may steer them back.

MR. WHITMORE: But part of that would be to guide them to -- and parents -- to sources of learning; one, how to approach the teachers and say, "We've learned through this assessment that my son

can't add fractions. How do we solve that issue so he can move on to higher-level math issues?" It might be directing people to Khan Academy where they might be able to solve that problem. So, there would have to be a number of ways of saying here's the issue. We've identified it. Tell the teacher that that's an issue. Tell the parent that that's an issue, and provide as many sources of solving that as might be possible. And the Khan Academy is just one example of the power of the intelligent software and the Internet.

MR. COLEMAN: In a friendly way, I'll both agree and disagree just to create some fun, I guess, which is that I'm super-excited as is Jon about earlier assessment done well and provoking meaningful action. But I disagree with him. Well, ACT is keeping ACT the same. I've decided as the President of the College Board together with my members that the SAT itself must change. That to break the grip of test preparation, we have to dare to redesign that which you're aiming for, that which is the highest stakes, that which is the statement of what matters

most to your future because I think there are flaws from the origins of the assessments in their design that are worthy. Now I say as the president of the College Board that I think our two instruments are, as Caroline said, the finest instruments, and I would, of course, say ours is slightly better if pressed. But let's go a bit --

MR. LEONHARDT: You'll get a rebuttal.

MR. COLEMAN: But that's not my point. But let's go a bit deeper now, shall we? XXXThe next sentence makes no sense to me-please checkXXX A test preparation regime where kids feel, in the face of both these assessments, that the only way to prepare is exaggerated by the privileged few has totally taken hold in this country as an entirely corrupting to our aims to change this country. So, in my view, as we look to redesign SAT in collaboration with our members, we need to make an assessment structure that rewards work with (inaudible) that is far more (inaudible) than either of these tests have been visibly aligned to the most important work kids are

doing in school to the few things that disproportionately matter most to their success in college, which newfound evidence has revealed.

It's not enough to say you're testing math and 10 percent data, 20 percent geometry. There are a few core areas of math that are remarkably related to your success in college, and we should focus on those. We should reward productive practice. We as ACT and SAT should dare to take responsibility for the preparation our assessments inspire. That is, it is not okay to say we made a great test. It's just the preparation that's bad. We need to take responsibility. We need to design the assessment to encourage the kind of practice which is most productive.

To give you an example and to take a knock at myself and our own institution, when you think of an SAT word today, you typically think of a word you might never hear again or someone who's quite eccentric who uses them. (Laughter) Shouldn't instead SAT vocabulary be words you will use over and

over again that are worth practicing, that give you an inheritance of possibility. What I mean by that is words like transference or transformation or syncopation or synthetic. These are words that can be very difficult depending on their context and they're worth practicing, but when you master them, they open up possibilities for you. So, I think we have a commitment, and it should be incumbent on us to make high-price coaching, high-price test preparation services under great threat and duress by making more available to all students productive practice to prepare.

MR. LEONHARDT: It seems to me those are two somewhat different things, which is that if you're saying I want to make sure that we're not going theoretical math, but we're doing the kind of math that people actually use later, and I want to make sure that SAT word comes to me in a really useful but tough word, I'm not sure that moving things in that direction would necessarily reduce the advantage that some kids have. It would be an improvement.

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MR. COLEMAN: Everything that I did where we're practicing things that are more widely useful and more widely available mean that no longer the royal road to understanding these assessments; all the mystery should be taken out. The blueprint should be obvious, and it should be obviously worth it so that kids don't have to because then we can, by enhancing schooling and other work that kids are doing during the school day, make it really productive preparation and not obscurity, and not mystery that enhances the hand of those who say you have to come to me. So, I think there are great strides we can make in simplifying and making the work evident, and I'll say one last thing.

It is also not just about the exam but the process by which it's developed. Today 80 percent of AP teachers which we do -- accept the AP as a fair judgment of their kid's work. How many teachers do you think -- what percentage trust ACT, SAT, or other standardized tests as a judgment of their own work? Anyone know? Nineteen percent. So, as we look to

redesign SAT, we're not doing it ourselves, we're doing it in collaboration with teachers in this country, so they see their finest classwork reflected in the instrument, so that their finest work is seen there, so that the work they're doing with kids every day is expressed in this. If we don't engage teachers in this redesign, then it is hopeless, David, but it's a deeper project than the redefinition of the exam. It's working with teachers in the country to make sure they're engaged with us.

MR. LEONHARDT: I don't know if this says something disturbing about your test or about me, but I can still remember not only the exact date I took the SAT, but the song on the radio when my mother was (inaudible). (Laughter) *Fisher v. the University of Texas*. Does it matter? How?

MR. WHITMORE: So, I was president of Texas Tech University when the Michigan judgment came down. At the time in Texas you could not use race as a potential point for admissions. When that happened, University of Texas, which is in this case, in

particular, it opened up for Texas the ability to use one of many judgments for admitting student's race, and as president of Texas Tech, we presented a plan to our regents of doing that, and they readily accepted it. And so, that's in place in Texas now at Texas Tech and at University of Texas. It seems to me like what came down, although I'm no lawyer, to understand it maybe fully, allows what is being done at Texas Tech, and I think Bill Powers said today what is being done at the University of Texas to continue because we used rigorous standards and narrow definition in order to do what we did there.

MR. KIRWAN: I actually was --

MR. LEONHARDT: No, both of you.

MR. KIRWAN: I was actually quite encouraged by the decision. I think there, first of all, at least talking to my peers in higher education, most of us thought the decision would go the other way, and the fact that it didn't was, I think, a very positive thing, but I think the court also, in handing down this decision reaffirmed the value of having diverse

student bodies at universities. I mean, that's what the decision says. Now, how you get that diversity, you've got to be very careful. It's narrowly tailored, et cetera, et cetera, et cetera, but the principle has been reaffirmed, so that's one thought I have.

The second is sometimes I hear people talk about the Affirmative Action and class-based decisions as an either/or, and we shouldn't do that. We need both. We need to all be working on ensuring that more low-income students have a chance at a college degree, but we also need to be doing things to ensure that we have a diverse student body. So, these two have to work hand-in-glove, in my view, to create the kind of classrooms we want in higher education and the America we want to see in the coming decade.

MS. CANTOR: Yes, I was going to say virtually what Brit said. Having been the provost when we did the Michigan cases and having been the social scientist who pulled the social science data together for that about the educational benefits of

diversity, I think the key thing in this ruling is focusing the national attention on the educational benefits of diversity, which are benefits that come from not abstracting or disembodied race or class or identities of various sorts from each other but come from the mix that is at the table in higher education.

So, two things, I think, come out of this ruling. One is the positive emphasis on that. The other is to say to higher education, understand, and this will also reverberate for testing, understand what it means to holistically construe diversity within a student and across students. And don't just tell us that it's race or it's class or it's X or it's Y. That's not going to be an easy thing, so I do think it is a stricter standard in that sense, but I think it's very much in line with the notion that as David or Jon rethink about the SAT and ACT, higher-ed educators will also be thinking about what are the various attributes of diversity that really make for the mix, that really create the kind of global citizens that we need to be training.

MR. COLEMAN: David, just to return to your earlier anxiety, I was delayed --

MR. LEONHARDT: Which one? There have been a few.

MR. COLEMAN: I don't want to talk about your song or -- but that's a little weird. (Laughter) But I would say this. Fisher was encouraging in that we can sustain, as College Board, our commitment to diversity, to excellence in equity, but I feel also, hearing the ruling, like a ticking clock of anxiety that time is running out. It was said by Sandra Day O'Connor, in 25 years we must heal this underlying rift that makes this necessary. And I am worried we are not alert and we are not moving fast enough, and shame on us.

So, let me give you an interesting example of this. We have data that of 10 kids who, on PSAT, are ready for advance placement in math. Today in our society, 6 Asian students will go on to take AP math, 4 whites, 3 African-Americans, 3 Latinos, and 2 Native Americans. This is the fact today after all of this.

After all of this talk that we are doing everything we can to catapult kids of diverse races into careers and stem, we're leaving on the table disproportionately Latino and African-American and Native American kids who have demonstrated their abilities in mathematics. Things that make you go hmm.

So, I fear that this stay that has been received will be a terrible lost opportunity if we do not hear the forces in our society. They're losing their patience, and if we do not act very forcefully, I fear that if higher education, in the face of research like Caroline's, does not substantially change over the next 5 years, the number of low-income students that are in its care, it shall abandon its seeming place as that which repair societal inequality rather than repeating it. And so, I think it's a very high-stakes moment. I am also, as I can say, extremely hopeful that together we can shift towards that future, but I hope people are feeling a newfound urgency that while there was a momentary stay, we can't bank on it for long.

MR. LEONHARDT: I think stay is an interesting notion because as I read the decision, I think what the court is saying is, it is pushing colleges through other courts more toward the 10-percent-type plan and less toward the add-on plan. That I think what they're saying is that we no longer want to trust colleges; that you need to do affirmative action this way. I see some agreement and some disagreement, so maybe --

MR. WHITMORE: I think that clearly they're sending the signal that the tests, the strict scrutiny, is going to be much more rigorous, and it's going to be left to the courts. And universities are going to have to demonstrate that they are meeting a higher standard in this regard, but I personally feel universities are up to that task.

MR. LEONHARDT: Do you disagree that it's pushing in that direction, Nancy?

MS. CANTOR: No, I actually don't think it's pushing to the 10-percent solution in large part because that isn't going to work. So, the 10-percent

solution depends on highly segregated, at the moment, on highly segregated school systems. It doesn't work if you don't have highly segregated school systems to diversify. It may work for other things, but it won't work to diversify. This country isn't going to put up with that for long. So, I think higher education is going to have to come up with a kind of holistic analysis that is face-valid and therefore will be taken as fitting our scrutiny.

MR. LEONHARDT: Come up with the kind of holistic analysis that it is not thus far?

MS. CANTOR: Right.

MR. LEONHARDT: Yeah.

MS. CANTOR: Exactly.

MR. LEONHARDT: Okay.

MS. CANTOR: No, I do think it raises the bar.

MR. LEONHARDT: Yeah.

MS. CANTOR: But I think it does not mean that the right answer is to go to the 10-percent solution.

MR. LEONHARDT: Yeah.

MS. CANTOR: And so, that's all.

MR. LEONHARDT: Yeah, okay. I think this is my time to hand things off to Michael, and although we are not done, I am, so I will thank the panel.

SPEAKER: Thank you. Thank you, David.

(Applause)

MR. GREENSTONE: Thank you, David. Okay, so I get to play the Washington Bureau Chief of the *New York Times*, and I think questions -- you guys should start sending questions here, and while we're collecting them, one thing that was -- I think you were touching upon in discussions that I thought might be worth spending an extra minute or two on is I think there's a lot of agreement that higher education is -- in terms of social mobility, we're running out of options, and so we're kind of down to higher education now.

But institutions of higher education do a lot of things. They have been an engine of social mobility; there's no question. There's also graduate

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students who they spend a lot of time on, and there's research. And I guess I'm most interested in hearing from people who run or have run universities. Are your boards ready for a shift in focus? Are you going to be able to get new resources for that because it's not going to be for free in the end. It's a change in the - it's still something you were always doing, but it's going to have to have greater emphasis.

MR. KIRWIN: Well, I think, obviously, higher education isn't a monolith, and so different people would answer the questions in different ways, but speaking for my own board, I think they are very committed to this social equity issue, and it's become a huge priority within our system. And I think we're doing good things. We've got a lot of work to do, but we're doing good things in that direction, but I think different boards would answer, as I say, in different ways; however, in part because of this great research and in part because the *New York Times* and others are writing about this issue more and more, I'm not discouraged. I think more and more people are going

to be swept into this concern, and so I'm really quite optimistic that in time -- higher education moves at glacial rates -- but we get there, and I think we're going to see momentum build around this issue.

MS. CANTOR: Yeah, I would just add quickly that I think if you look at the membership on university boards, it's largely corporate, and corporate leaders get complete truth that their workforce of the future and their leadership of the future needs to represent this country.

MR. GREENSTONE: Jon.

MR. WHITMORE: I would agree with that. Also, there's such an incredible array of institutions. I mean, we're talking today about the highly selective ones, but there are a lot of universities out there and even community colleges that help people advance their lives in ways where this is a way of life. When I was president at San Jose State, you know what the Caucasian population was? Twenty-eight percent. Twenty-eight percent. So, one wouldn't categorize that as a super-highly

selective university, but it's built into the DNA of that institution that that is what is already there, and that is its future.

MR. KIRWAN: Michael, could I --

MR. WHITMORE: And it delivers a good education to the students.

MR. KIRWAN: Could I make one -

MR. GREENSTONE: Can I give you an even harder task?

MR. KIRWAN: Yeah.

MR. GREENSTONE: Are we going to lose anything among the other things that universities do in the process?

MR. KIRWIN: Well, the universities --

MR. GREENSTONE: You didn't raise your hand for that one.

MR. KIRWIN: No, I didn't. But, I mean, the answer is, yes, we will. I mean because there's a fixed resource, and so it will be a matter of choices and priorities. I think one simple thing that needs to be done, and there's some movement in this

direction, is we have to move away from this pernicious practice of buying high-ability students at the expense of low-income students who need more financial aid. And we have policies within the university system at Maryland to address that issue, but that's a step that can be taken by institutions and that, I think, can begin to help the situation and in that sense, what do you lose? Maybe the average SAT of the entering class isn't what it was, but the greater good for America is --

MR. GREENSTONE: Okay, so that leads directly to a question that just came in from the floor here. So, unfairly, now we're putting everything on universities to deal with this social problem. Now, a general role for solutions to social problems is to -- government often times participates. So, what is it that any of you would wish in a functional Congress and everyone getting along, holding hands and working together to solve problems, what should the federal government do to be helping, or state and local governments, for that matter?

MR. COLEMAN: I think that given the unlikelihood of such a Congress, that I prefer to talk about the world in front of us today and say this. I think this is a time when governors can come together once more. Governors and leaders like Brit -- I feel a lot of power here, guys. The individual courage of each board level is impossible, but if governors and other leaders were to come together and say over the next set of years, the top 220 institutions will accept 20 percent low-income, no ifs, ands, or buts, and those who already have 20 percent, 20 percent more. We can prove, based on data, if you include community-college transfers, which are a really important part of this equation, those numbers are reachable. We can do this.

Like, we can create societal -- and I will say, without being in any way not loving of the field of economics, I'm somewhat offended, frankly, that we talk about the value or economic value of an education. When we asked Brit, "Will it be worse?" No. As somebody who went to college, like us all, to

have (inaudible) Yale, if I can dare say it, where I think where 8 or 9 percent of the kids are now, to think if my Yale had 20 percent of the kids been low-income, I think there's a lot of economic research that peer affects are very powerful in your learning. So, do I think, like, another nice building compared to a much richer class -- and frankly, I would have been much -- I went to public school, and I found some of that stuff for those fancy (inaudible) so weird, and it was such a weird environment, even for me, that the chance to interact with the diverse kids of the sort we're talking about here, in terms of educational outcomes and educational quality, I just think, just to say it. So, I distrust the zero sum view.

MS. CANTOR: Could I just add to that. I also think that what governors in particular can do is to really see education as economic development. And what we're really talking about here is education as economic development, and part of my comments earlier about community building really has to do with schools as centers of economic development in cities that are

revitalizing themselves. And so, governors have a lot of power in that. I mean, Governor Cuomo, for example -- I chair the Economic Development Council for Governor Cuomo in central New York, and there's just no question that universities are anchors to revitalization. So, it's not so much the typical Congressional action, but it's much more the kinds of partnerships, both local, state, and federal that can be made. It's more HUD than it is Congress, for example.

MR. GREENSTONE: Okay. There's a lot of excellent questions here, so it's a little hard to choose from. I'm going to combine two or three here into one. I think there's a question that's come across a couple of these cue cards. I'll state it more boldly than they did. "Isn't technology and beaming out lectures from other universities to tons and tons of students and scaling that way, isn't that where you can find some resources?" And then, I should mention that the bottom of that card it does say, "Go Terps." (Laughter)

MS. CANTOR: Well, then, you better answer that. (Laughter)

MR. KIRWAN: Well, I think we are at, as I said earlier, at the very early stages of the power and impact of technology and its use in addressing the quality of education, so I definitely believe we're going to find ways in which technology can lower the cost of education.

What I think we have to be very careful about in higher education is not jumping on band wagons before we know that they improve the quality of learning. So, just to embrace some particular strategy or form of technology without knowing do students actually learn better, are the results better, or the outcomes better, I think would be a mistake and a disservice. But if we do careful research and analyze how to use new learning strategies, cognitive science, technology, I definitely believe over this coming decade we're going to see a real revolution in teaching and learning.

MS. CANTOR: So, while I agree, I also want to remind us that we just five minutes ago talked about the educational benefits of diversity, and the educational benefits of diversity come from real structural diverse interaction on the ground. And you're not seeing that in many mooks right now, so I just want to put a little bit of a caveat on what we can do through technology right now.

MR. GREENSTONE: Okay, this is a question that was on two or three cards, as well. "What can the higher education community -- how can they effectively respond to the frequent criticism that college isn't for everyone, and then touching upon the student debt crisis to the degree there is one? So, why aren't -- we all know, we've all memorized Fact 11. The returns to college are extraordinarily high. Where is all this coming from?"

MR. WHITMORE: So, ACTs take on this is to say post-secondary education is necessary for everyone, and there's a variety of post-secondary opportunities including community colleges and 4-year

institutions and highly selective institutions. And our take is -- our data tell us that to go right into the workforce now, you really need the same level of math skills, in general, that you do to be successful in the first year of college or community college. And so, we believe that people ought to be in high school preparing themselves for post-secondary education, and then there's a variety of ways that can be filled. And so, I believe everyone should go to college of some kind, not necessarily, maybe, everyone getting a 4-year degree in order to be competitive in the future.

MR. COLEMAN: I'll build on that because I think ACT has done a really nice job with work keys and with the range of what you do to show that there's excellence. You see, I think snobbery is our biggest enemy here. What I think you have a country responding to is if we say college is the only way to become excellent, that will kill us because there are many people who, for many grounds, don't believe that. I think it is instead our task to render career-

technical and other environments also excellent. So, I appointed a head of career-technical education for the first time in the College Board's history.

We're embracing career readiness as well as college readiness, not in any way to diminish the transformative power of colleges for many, many kids, but we've got to work a lot harder to deliver viable pathways out of that. And what's so exciting is while my board is composed, as all of you know, of higher education leaders, they were excited about this. That delivering rigor and opportunity, we need a broader card-hand deck to play here, and if we get narrow we will lose this game, but if we broaden, actually, I think we'll bring more of the country with us.

MR. GREENSTONE: Okay, so there definitely a couple questions that were pointed at our two test makers here, and they were upset, as David Leonhardt had memories of taking it. SAT and ACT, these people obviously had memories, as well, and not very fond memories, and I think we can skip those questions.

(Laughter) Maybe this will be the last question.

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MR. COLEMAN: I love that. How did we convince you to do that? Good job.

MR. GREENSTONE: If you want to comment on it.

MR. COLEMAN: I could talk about the questions that gave me a hard time.

MR. GREENSTONE: I guess, are there -- this question is here. "Are there separate rules for public universities, private universities, and then the testing organizations? And what ways are they distinct, and how can the groups work together?"

MR. WHITMORE: Well, I would say first of all, our ACT entrance exam is based on survey information about what colleges across America expect for the ability levels of their freshman to be successful in their courses, and the way we get that is to work with universities for them to help define what their expectations are, so that then our -- and that's done every 3 to 4 years. And then we also look at curriculum and text books in the high school and junior high school environment and to match up with

what's being taught as to what's being expected. And so, there's a lot of interplay required in order to get that right, and so we're dependent on universities for helping us understand what they expect, and that helps develop our standards.

MS. CANTOR: So, I think first and foremost, there's no question that in the great land-grant tradition of 150 years ago in the Morrill Act that public institutions -- and I'm at a private one right now that's about as public as a private can get -- that public institutions have an enormous responsibility in a broad sense within their state, and Brit obviously lives that every day. On the other hand, the way our American higher education system is so diverse itself, if private institutions opt out of that public good responsibility, we're in trouble. So, I think private institutions have to be at the table, and I think the work that Caroline and Nicole and others are doing really demonstrates that right away.

In terms of collaborating with testing institutions, absolutely we have to do that because clearly if we're really going to figure out how, for example, the SAT changes, it has to come in coordination, and that's, of course, what Jon was saying about ACT. So, I think collaboration is clearly the name of the game, and we're all going to have to build that kind of rich network of collaboration.

MR. COLEMAN: I think that together -- as a membership institution, I think the College Board at its finest does two or three things. Number one is it turns individual courage into collective courage and makes more possible, to do more. That would make me so happy if this College Board could give you guys, real leaders, more room to maneuver through collective force, and that may change by segment of different kinds of colleges, but a lot of it are things held together.

But the second is to share quickly technologies and insight, like information. Let me

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just give one example. We are embarking on an effort because we're making completion the core of our agenda on a study of success in the first year. So, while these institutions are different, everyone cares about completion, and success in the first year in diverse institutions is overwhelmingly predictive of future success.

So, can we learn things using data that are evidentiary and then share them rapidly through collective action of our members to collectively achieve a surge in completion, which is one of those beautiful -- everyone wins. Through better completion of these kids, it helps to finance this higher education, and we get better results. So I think that's the finest role we can play. We have to go far beyond being testing companies, to be frank. We have to be membership organizations delivering these kinds of actions to make a difference.

MR. KIRWAN: You know I - just real quickly, I think what makes me hopeful is we're beginning to see community-based collaborations. I happen to

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belong to an organization called the Business Higher Education Forum; sixty-four of the biggest major universities, largest corporations. There's a Cities for Success Project, and a good example of that is Louisville, Kentucky has come together with the business leaders, the community colleges, the local government, the universities, with a strategy and plan to produce 55,000 more degrees in Louisville, Kentucky. That kind of community collaboration makes me feel like the need for what we're talking about today is really getting into the larger body politic, and gives me reason for hope.

MS. CANTOR: That's a good end.

MR. GREENSTONE: That's a good end.

MR. KIRWAN: That's a good end.

MR. GREENSTONE: Okay, I want to thank our first panel, and then, of course, this discussion which was just fascinating. Thank all of you.

(Applause)

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