THE BROOKINGS INSTITUTION

THE ROLE OF HIGH SCHOOLS IN PREPARING DISADVANTAGED STUDENTS FOR COLLEGE

Washington, D.C.

Thursday, May 14, 2009

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PANEL: HELPING STUDENTS PICK AND PAY FOR COLLEGE

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P R O C E E D I N G S

MR. HASKINS: Welcome to Brookings. My name is Ron Haskins, I'm a Senior Fellow here and the Co-Director of the Center on Children and Families, along with my colleague, Belle Sawhill, who, unfortunately, I believe is ill today.

We're starting a little late because Senator Bennet has been delayed, but he has – his staff has promised he will be here at 9:30 sharp, so we just adjusted the event a little bit to accommodate Senator Bennet. In Washington, we do everything we can to accommodate U.S. Senators, that's for sure.

And just in case he doesn't show up, we had a wonderful suggestion from Ceci, the three of us are going to do a song and dance routine that will last approximately 15 minutes. We hope Ceci will be the only one who sings. I've heard Kemple sing before and you don't want to be subjected to that.

We live in a time of increasing concern about the schools. In fact, you know, I think probably everybody in this room knows that we've had wave after wave after wave of school reform since the publication of *A Nation at Risk* in 1983. And then in 2002, as if we didn't have enough commotion, we passed the No Child Left Behind, which really altered the relationship between the federal government and the states, caused huge

controversy, even more controversy in each it seems than when it was originally enacted. So we certainly are living in a time of ferment and very high expectations for the public schools.

And if you judge by the stimulus package that we passed several months ago and by President Obama's 2010 budget, which I'm sure everybody here has committed to memory, and by the media tension that was given when Secretary Duncan was appointed, and to his various travels around the country, including right here on this stage earlier this week, I think it's a safe thing to say that the federal government is going to continue to expand its role in improving the school, so we're in interesting times.

And then within that broader education reform movement, American high schools have come in for especially intense scrutiny, and again, wave after wave of reform. And given the pivotal role of high school in preparing adolescents, plus all this ferment about education, the editors of *The Future of Children* decided it would be a good thing, we might have been somewhat influenced by Ceci, that it would be a good thing to focus an entire issue on high school. So this issue of the volume that we're releasing today is entirely focused on high schools. There are copies available out there. You can also get the entire book or any of the individual chapters from our web site, which is www.futureofchildren.org.

It's on your material there. So we hope many of you will read that or at least some of the chapters with pleasure.

So let me review the events of today. We selected one issue that was prominent in the volume and I think is becoming increasingly prominent in the United States, and that is specifically the responsibilities of high schools for preparing kids to go to college, and especially low income kids. And we'll talk more about this in a minute, but that is the focus of this event.

We are going to have a summary of the volume, but then we're going to focus the panel discussion, and we hope that Senator Bennet will focus on this particular issue. He may speak more broadly. We don't go around telling the Senators, here's what you're going to talk about, but he will talk about education, I'm quite confident of that. So we want to focus this event on the responsibility of the high schools for helping kids go to college, and I'll lay out a rationale for that in a few minutes. So here's our plan for the morning. When I get through, Jim is going to quickly summarize the volume, then I'm going to summarize the policy brief, and then Senator Bennet hopefully will be here to give the keynote address. If he's not here, I've already warned you about what will fill the time. And then we will have a panel of people who have been involved in this from various different perspectives, all of whom are great

experts on specifically the issue of high schools helping kids to go college. And that panel will be chaired by Ceci Rouse.

Jim and Ceci were the editors of the volume, and Jim and I wrote the policy brief. Actually, Ceci helped write the policy brief, too, but she was in transition from Princeton, where she's a Professor of Education and Public Affairs in the Woodrow Wilson School to the Council of Economic Advisors, where she now resides.

And Jim also has recently had a big change. He was for many years at MDRC, and ran their education research portfolio, and now Jim is at the New York City Schools, runs the Research Alliance for the New York City Schools. So, Jim, give us a good summary.

MR. KEMPLE: Thank you, Ron. Good morning. Yeah, I'll take a couple of minutes just to sort of highlight a couple of key themes, overarching themes that I think came across – that comes through in the articles that are presented in *The Future of Children* volume on high schools and that were at play as Ceci and I tried to put this together.

And let me just start by giving you a little sense for what the basic mission of *The Future of Children* is, which is to promote effective policies and programs for children by providing policy-makers, practitioners, and the media with timely and objective information based on the best available evidence.

It's a collaboration between the Woodrow Wilson School of Public International Affairs at Princeton and the Brookings Institution here. And each year the editorial staff and its collaborators and colleagues pick out two high profile issues for the focus of the two special issues that come out each year, and the spring 2009 issue is focused on the American high school.

And as Ron said, this is a particularly auspicious time to take stock of the challenges that are now facing U.S. high schools, and to consider what researchers and policy-makers and practitioners know about what works, what doesn't work, and when we find things that work, finding out more about for whom and under what circumstances. So with this in mind, Ceci and I assembled a group of experts and asked them to focus on the overarching challenges that high schools face, that all high schools face, that are particular daunting for and problematic for high schools that serve young people in urban areas, and where these challenges are especially difficult to address, placing large numbers of students at risk of school failure.

So many of these challenges and the articles that we picked for this issue really fall under five overarching categories and headings. First of all, we have a number of articles that focused on helping young people make the transition into high school, which is a particularly

problematic transition point for young people, for pre-adolescents as they move into a quite different institution and set of expectations.

A second key challenge that comes out throughout the volume is keeping those young people from dropping out, staying in school and accumulating the credentials they'll need to earn a diploma. A third theme has to do with upgrading the rigor and the relevance of the curriculum, what is taught in high schools. A fourth challenge was promoting high quality and engaging instructional strategies and improving the quality of the teaching core in high schools. And then finally, focusing ahead and looking ahead for young people on the challenges of preparing them for transitions to the postsecondary world of further education and the world of work.

So let me just step back for a second and give you a sense of what I think were three broad themes that came out, both through the process of our putting this piece together and for our work with the authors as they were writing their articles.

The first theme that I think comes through loud and clear has to do with the evidence base, and that evidence base, while improving, I think each of the authors found that it was quite lacking, particularly in terms of evidence about what works to improve low performing high schools. So I'll take a minute in a second to talk about what came through

in the articles and in this journal volume having to do with the evidence base. The second theme had to do with, the best evidence that's available does seem to reinforce the notion that there are no silver bullets, there's no easy fix to the problems that are faced by low performing high schools, but also that modest, but positive effects from these reforms are worth noting and building upon rather than starting over from scratch and having to keep going back to a blank drawing board as we look ahead to the future of trying to help improve low performing schools.

And the third theme has to do with the fact that we really found that the field of researchers and policy-makers and practitioners still continues to believe that high school reform and high school improvement is worth investing in, despite the appeal and, in fact, some of the evidence that suggests that investments in things like early childhood education may have a larger payoff in the long run.

So let me step back and talk a bit about the – about what we learned about the evidence base from our solicitation of these articles and from the articles themselves. So it turned out as we put this together that finding high quality evidence about the effectiveness of efforts to improve high schools and improve student outcomes proved, by far, to be the most daunting task for the authors. They found the evidence base to be strongest for describing the nature of the problem in high schools, very

good evidence on being able to articulate the nature of the problem, and also on being able to describe the individual and institutional characteristics that are correlated with those problems, rigorous evidence about effective strategies for transforming low performing high schools into higher performing institutions was really lacking and still at an early growth stage, although it does seem to be improving.

So this daunting gap in our knowledge base means that, although states and districts are now moving – and the federal government should be applauded for embarking on renewed efforts to increase investments in high schools, our sense, and I think the sense of many of these articles, was that much of this effort is likely to come to not unless it's accompanied by a commensurate investment in building rigorous evidence about which reforms work, why, for whom, and under what circumstances, and also garnering the evidence about what does not work.

And this is I think evidenced in the fact that over the past literally century of school reform in the United States, U.S. policy-makers have gone through long periods of – focus on a high profile problem during which we make a huge investment in creative approaches to investing those problems. Too often, however, that's complimented by – it's not complimented by commensurate investments in knowledge

building. So, as a result, we have a series of promising initiatives that are designed and well intentioned, even theory based intuition, but then are dismissed on equally kind of intuitive or anecdotal evidence about, you know, how hard it is to change things and why we're sort of stuck with these problems without really taking a hard nosed look at effectiveness.

So I think education policies should seize these new opportunities for innovation to leave a legacy of rigorous evidence so that the nation won't be faced with a similar situation with a lack of understanding of what really will make a difference as the next generation of students comes through the pipeline.

So the second theme had to do with being realistic about our expectations for making a difference in low performing high schools. So while the evidence base, as I just said, is pretty thin, the articles in this special issue were able to report on a variety of reform initiatives that really do, in fact, provide – did prove effective at reducing dropout rates, upgrading academic skills, and, in some cases, even enhancing the transition from high school into the world of work without compromising on young peoples capacity to go on to college.

But with a couple of exceptions, the effects of these interventions I think could be characterized at best as being quite modest, which reinforces the notion that the challenges that high schools face are

really difficult, but they are intractable, at the same time, though, there are no easy answers to these tough challenges.

The third broad theme has to do with the sense that each of the articles kind of surface the idea that it's worth continuing to work on the problems that are faced by low performing high schools.

So Ceci and I and the authors all recognize that many of the problems facing U.S. high schools have their roots in the often poor preparation that young people received in elementary and middle school, and even in preschool, preparation whose inadequacy, however, becomes most visible in high school, when the academic and social demands really increase dramatically. So policy-makers, and we recognize this, face a conundrum. On the one hand, should they invest more money to provide failing high school students with a chance to catch up and get back on track to a healthy transition into adulthood, on the one hand? On the other hand, should we invest that same money if we're faced with the tough choices about how to allocate our scarce public resources, to improve services for young children and prevent those children from facing these problems to begin with?

Although many advocates, including Nobel laureate, Jim Heckman, have argued strongly and eloquently with I think some compelling evidence that the marginal dollar should be spent on very

young children, it's hard to give up on a generation or more of adolescents.

So doing so – even if we did decide to go in that direction, it seems to me quite risky given that we really don't know much about how to upgrade the quality of elementary and middle school education and still have lots of open questions about preschool education that may prevent those problems from occurring later on.

In addition, I think high schools really represent our last chance, the last institution that helps to serve a broad array of young people across the country before they head off into the adult world. So recognizing the importance of innovative and systematic interventions to help high schools better prepare their students for college and work, districts and states and the federal government and the private sectors now seem ready to make some investments in these kinds of interventions.

And building on a platform of small schools led, in part, by the Gates Foundation and others, as well as the idea of school to work transition programs, many of the articles in the volume focused on upgrading the quality of the curriculum, the teaching core, and starting at an earlier age to help young people strategize for their future lives as they make the transitions into adulthood.

More broadly, however, I think the nation – I think we're now seeing the volume highlighting the fact that the nation needs to conduct a dialogue about the goals of high schools in the 21st century.

Clearly, preparation for the work force has to continue to be foremost among those goals. But the real question is whether a high school education should be considered sufficient for today's young adults, and whether high school should be seen as the new middle school and be focusing more on a K through 14 or a pre-K through 16 sort of education system as the standard. So the evidence suggests that preparation for college and preparation for – the context for this I think is that the preparation for the transition into the world of work versus the transition into higher education need not be a zero sum strategy. So as you listen for the rest of the day as we shift our focus over to this college preparation, I think it's important to keep in mind that we're not suggesting that preparation for college does not also include and can't box out the preparation that we know all young people are going to need to make that transition into the labor market.

But I think at the same time, the combination of rigor and relevance reflected in the goals of the evolving landscape of state and federal education policy for high schools is consistent with what many

community colleges and higher education institutions are facing as we move forward here.

So throughout the volume, you'll see that the study suggests that incentives matter, which Ron will return to in a bit, and reforming the funding formulas to account for dropouts, the on time progression toward graduation, and the performance levels of students would not only likely generate an increase in student achievement, but also send the very strong message that, as a society, we value those outcomes. And so providing the right incentives to make sure that schools and our public institutions focus on the right outcomes and are incentivized to make sure that they provide the right incentives for people to aspire to those outcomes will be a key theme that I think you'll hear throughout the rest of this morning with this panel.

So with that, let me turn it back to Ron to talk a bit about our policy brief. And hold on for Senate Bennet. Ron's threatening to dance.

MR. HASKINS: Tell him to rest up in case we have to dance here. I have been studying for several years mobility in the United States, economic mobility, and I kept noticing as I was doing this how important a college education was, so that's how I come to this. I do not claim great expertise in this area, but starting about a year and a half ago, I really started to dig into what it takes to go to college, why some kids went and

some kids didn't and so forth, so I became very interested in what we could do at the state level and the federal level to increase the number of low income kids who go to college.

I became especially interested in this issue because the data on the returns to education are amazing. I think there's, you know, there may be a little debate at the margins, but the differences between not just the current income of a college graduate, compared with a high school graduate, compared with a high school dropout, not only is that difference spectacular, the average difference in 2007 between a college graduate, four year college graduate and a high school graduate was $33,000 a year. That's a huge amount of money. No government program has ever come even close to producing an average difference like that.

But equally interesting is the pattern over time. So people who go to college, two year colleges, people are get a four year degree, doctoral students and professional students, for the last 30 years, their income has been going up substantially; high school graduates, high school dropouts -- flat.

So, clearly, if we are going to address income and equality in our society, and increase opportunity for low income and minority students, college is really a very, very productive route. So we need to think about how we get more of these kids into college.

Not only would it produce mobility, I'm not going to get into kind of the sociological effects here, but I think everybody in this room recognizes that one of the most important benefits of a college education is, it gives you choices. And when you're stuck with low wage jobs, the thing that you lack the most probably is choices. You've got to take the best you can get, whereas, with a college degree, you have lots of choices, you're already experienced, you can get into additional training programs, so it really opens up the future.

So the high school should play a very important role in preparing kids for college. And the very first thing that we discovered, not a surprise given the things that Jim just talked about and the repeated reforms of the whole American education system, the high schools that I referred to in the opening, is that there are vast, tremendous differences between low income and minority kids in their preparation for college, as measured by standard achievement tests, as measured by their course work, as measured -- if we had such a thing that we could measure their ability to sit down and concentrate and study, take good notes, work with others in a classroom, all of these skills are lacking as compared with wealthier kids and non-minority kids. And, of course, this is a reflection of the education they get in the schools, in their neighborhoods, and family background, a whole list of things, but it's easy to believe the schools

could play a much more important role here. So the first thing that high schools have to do is increase academic knowledge. The second thing, completely different, is that it's astounding, and I was amazed when I first looked at these numbers, the college board puts out wonderful numbers on support for going to college, much of it for low income kids.

Income and need is a very important criteria. We are moving a little bit toward merit, that's more than we have in the past, that's a controversial thing, we may want to talk more about that, but there's a lot of money out there, it's a total of about, in 2007/2008 school year, the total was over $160 billion, between loans, tax breaks, and grants. Unfortunately, the smallest part of that is grants, loans is the biggest, they have to pay loans back, therein lies the problem, but still, there's a huge array of benefits.

But guess what, if you're 16 or 17 years old and in high school, and nobody from your family has gone to college, and you're worried about financing, and you see this huge array of federal programs, it's intimidating. Not only that, but the way you apply for it is, you fill out something called a FAFSA, which a very good researcher named Susan Nanarski says is more complicated than many of the tax forms, takes 15 hours to fill out. Now, can you imagine the intimidation? I mean if you want people to use something, you need to make ease of access, and

whoever dreamed this system up wasn't thinking about ease of access, they were thinking about finding out as much information as they could, I suppose to avoid fraud.

Well, we could have a little bit more fraud if we could have a little bit easier access, I think that would be a worthwhile tradeoff. But something has to be done about the federal programs.

Fortunately, the President has discussed this on several occasions. We did some fine reforms in the higher education act that passed on Congress last year, but there's still a long ways to go, and the administration has committed itself to making some of these changes, so we'll see what happens. But that's the second area.

Helping kids understand this system, how to apply for college, how to get into college, what kind of college would be best for them, and then how to finance it. All these are crucial issues. And it turns out that kids who go to schools, and they have a disproportionate number of low income and minority kids, have about half as many counselors per student, and it isn't clear that the counseling has all that high quality. So on the panel that you'll hear from in just a few months, maybe sooner than we thought, we have people who are deeply engaged in this business, including a very creative approach to using high school students to actually count, go back to high school, I'm sorry, college students to go

back to high school and counsel kids about how to get in, since they just went through the process, they're approximately the same ages, a little older, so maybe you could really have an impact, and so far the results look pretty good, although there haven't been good evaluations yet.

So those are the two big things that the high schools we think must do and that are discussed in this brief. We have a small set of recommendations in the brief. The federal government spends over a billion dollars supporting programs like Project Grad and Upward Bound, the purpose of which is to prepare kids to go to college. And there are at least four or five of these programs. There are many other programs that do not receive federal funds, and several of the programs have been evaluated. On paper they look wonderful, they look like exactly the right thing, they focus on academics, some of them even have financial incentives, but the evaluations are not too great. Now, this is a typical problem that we have in the federal government. I admire all these programs, I'm not condemning the programs, but the one thing that might hold promise is to subject them to more competition, especially competition based on outcomes. So this fits right in nicely with the whole educational accountability movement, and we think it would be very important to do that.

And as part of that accountability, we also think it would be very important to develop data systems, you know, social science always want data systems because they won't have anything to analyze if they don't have data.

But this is especially critical. We don't have a good capability, almost no state has it, to follow kids through the school, and then into college, so we can figure out how well they're doing and have at least some chance of evaluating the effectiveness of the programs and effectiveness of changes that we might introduce in those programs. So that's a very important thing to do. We already have some federal programs, the administration has already increased the support for what are called longitudinal data systems that are capable of tracking these kids, so we think that's a very important part, as well.

So that's an overview of our brief, and we now have arrived at the moment where we realize that Senator Bennet could possibly be late; indeed, he is late. So you have a choice, let's vote on this, whether you want to see us dance and sing – no? These are people who are not our friend.

Let's start with the panel. We actually have done this before. We'll start with the panel. When Senator Bennet shows up, we'll just stop, he'll talk, we'll ask him a couple questions, and then we'll go back to the

panel, okay. I'm sorry to do it that way, but I think that's the only choice we have. So let's bring the panel up.

MS. ROUSE: Okay. Well, it's a pleasure to be here, even if we're starting our panel a bit early, but, you know, this is great, it gives us a little bit more time to hear from our panelists. So I'm just going to introduce the panelists, starting on my right. So we first have Michael Carter from Strive for College. Seated to his right is Jenny Nagaoka, who's from the Consortium on Chicago School Research, and she was one of the contributors to our volume. To her right is Mark Dynarski of Mathematica Policy, is there a Research in there?

MR. DYNARSKI: Yes.

MS. ROUSE: Mathematica Policy Research. To his right is Sheri Ranis of the Bill and Melinda Gates Foundation. And last, but not least, we have Russ Whitehurst who is currently of the Brookings Institution. So should we just go ahead and take you guys in order?

MR. CARTER: Sure thing. Hi, everybody, my name is Michael Carter. To give you a little background on myself, I'm currently a rising senior at Washington University in St. Louis, Missouri. For me, this problem is a very personal one. I'm going to focus really on the last two recommendations in Article One, selecting and paying for college, and

then Two, accountability through data systems. To give you a little background, I transferred from a private –

(Senator Bennet arrives.)

MR. HASKINS: So we're very privileged to have Senator Bennet here. Senator Bennet has what I would call a really interesting and unusual career. He was a lawyer for many years, he is a lawyer from Yale, and then he went to Denver and took a fairly low level job with an investment company, I think within maybe three years he basically ran the place and did extremely well, then he figured out that we were soon going to have an economic crisis, so he got out of investing and went right into being the Chief of Staff for John Hickenlooper, the Mayor of Denver, Colorado, and soon enough, the position of School Superintendent came open, and he became the Superintendent of Schools, and that's why we're very pleased to have you here today, because this is about high school in general, but especially about preparing kids for college is what we're trying to focus on here today.

And then once Salazar was appointed to the Cabinet, he became a United States Senator, a Junior Senator from Colorado, and we're very pleased that he's able here – able to come today to address us. So, Senator, thank you so much for coming.

SENATOR BENNET: Thank you, I appreciate it, thanks, Ron. Thank you all for being here today. I'm sorry to screw up the program and I'll try not to go on for too long. I do want to say and acknowledge our former governor and a great superintendent, Roy Romer, who I see in the audience today. He is my neighbor in Denver and was one of the people that I called when I was thinking about whether I ought to apply for the superintendency, and was one of three people, another, Joel Kline, who said this is the best job that you will ever have, and I think that's probably right, I think it probably was the best job I will ever have.

I had two kids in the school district, as well, while I was the Superintendent of Schools, of my own, and of Susan's, and they were actually under the delusion the entire time I was Superintendent that they were actually running the Denver Public Schools. They would come in and say things about lunch and believe that I had actually responded to their critique. Or when it would snow, they had something to say about whether we should close school or not, and the answer was all the time, even if it was snowing in Grand Junction, because inevitably it would get to Denver.

And we had many conversations like the following, where we were sitting in our mini van, actually parked across the street from

Governor Romer's house, and the second daughter, for no reason at all, started to say there was a creature that lived in the water, and it crawled out of the water and it became a lizard, and that lizard turned into a monkey, and that monkey turned into us. And by then, I was far enough along in my superintendency that I was beginning to consider myself an educator, so I, of course, asked the question, well, what do we call that, and my oldest daughter responded, recycling, which showed me that we had more work to do on our science curriculum. But they are – you'll be relieved to know they're now turning their attention to the United States Senate, where they are proud to represent the State of Colorado.

I want to thank Jim Kemple, Ron Haskins, Cecilia Rouse, and each of you who contributed to the Journal on America's High Schools, thank you for your work, and thank you for the opportunity to be here today.

The work you do at Brookings is essential. If we're going to change the way we approach the critical task of improving our public schools for all students. Throughout history, our public schools have allowed America to make good on her promise to the next generation. I believe that is very much in doubt today.

As Robert Balfont says in his article, the American high school over – our history has provided means of upward mobility, served

as an engine of economic growth, and played a vital role in community building. But our current public education system is tragically falling short of these ideals. Most of our high schools in urban America in particular have become traps perpetuating a cycle of poverty and fostering mediocrity. And I think the stakes here are enormously high. When you consider the fact, just to take one statistic, that there are 100 million Americans today living in households whose real wages are lower than the wages of their parents, it begins to suggest a very unhappy trend.

If we believe, as Americans, that part of our obligation and part of our creed is to leave more opportunity, not less to our kids, and to our grandkids, on a number of aspects of our economy and our culture, far bigger than we're dealing with here today, we really are at risk of falling short of that idea.

So your attention I think is focused in exactly the right place. The current issue of The Future for Children journal provides evidence of our failure to prepare poor and minority students for college in the 21st century economy. Just a few statistics; 1.2 million children drop out of high school each year. Nationally, only 40 percent of white students, 20 percent of African American students, and 16 percent of Latino students are meeting minimum requirements to get into college. Of the kids we sent to college in Denver, 30 percent needed remediation when they got

there. Only 11 percent of all kids from the bottom fifth of family income get a college degree. If you start to look at the statistics internationally, what you're starting to see is that there are a number of countries in Europe where your mobility from poverty to something else is actually higher than it is in the United States today.

John Tyler and Magnus Lofstrom personalized this economic loss in their study, showing us that women who drop out of school earn 65 percent of the graduate counterparts, and male dropouts earn only 70 percent. This estimates the cumulative effect of dropping out of school on earnings over a lifetime is a loss in income of $260,000.

Yet despite all of these facts, and I'll give you one more, when I took over as Superintendent of Schools in Denver, in a city of 550,000 people, 75,000 children in the school district, on the tenth grade math test, the test administered by the state, in that whole city, there were 33 African American students proficient on that test, and 61 Latino students proficient on that test. That's fewer than four classrooms worth of kids proficient on a test that measures a junior high school standard of mathematics in Europe. We have treated this like it's someone else's problem for decades, and if we don't change it, we really are going to reap the world wind here.

I know that change is possible, just as Roy Romer knows it's possible, it's very hard. We drove achievement every year I was Superintendent. We made hard decisions to close schools and stop spending money on empty space and spend it on kids instead. We increased early childhood education by over 300 percent. We went from having 500 kids, four year olds in full day early childhood to having over 2,000. We increased full day kindergarten by 25 percent. We radically changed the way we pay our teachers, which I think is a huge part of this story.

It took a year of threats to strike during the Democratic National Convention, but we got it done in the end, and 80 percent of our teachers supported the changes we proposed.

And we changed the way we measure progress in our high schools, as well. There's some discussion about this later here. But to create a new school performance framework, to really measure longitudinal growth over time rather than the apples and oranges absurdity that No Child Left Behind has suggested is the right way to measure our schools. But I would say we had enormous success in Denver, but I'd be the first to say we only got to a starting line.

In terms of changing outcomes for kids to make a material difference in whether or not poor kids were going to move into something

other than being poor, that their zip code that they were born into wasn't going to define the zip code they were going to end up in. We only have reached a starting line. A much more radical change has to happen before we're going to be able to deliver on our promise.

We know that these challenges are not insurmountable. A recent study from Johns Hopkins determined that 51 percent of the nation's dropouts come from only 2,000 high schools across the country. We can improve these schools. The policy brief by Ron Haskins and James Kemple highlighted three critical ingredients to improve our high schools, increasing intellectual skills and knowledge, providing help for students in college selection and planning, how to pay for it, and creating an accountability system that allows schools to determine whether college preparation programs are enabling their low income students to graduate from college. I just want to touch on each of these briefly and then I'll shut up. The first of these, increasing intellectual skills and knowledge, as Tom Cochran and Megan Cylinder find, teacher quality directly affects the dropout rate.

We do a horrible job of supporting and training teachers in this country and selecting teachers in this country. We do a horrible job of the way we compensate teachers in this country. I want to give you one example. I was hoping there would be a white board here, but this is the

one lesson that I want to impart to you. If nothing else I said is of any interest to you, please take this away.

If I had a white board here and I were to draw for you the compensation schedule for teachers in the United States, this is what it would look like, current compensation. A 25 year old teacher, until the end of my career, I have a rate of rise that goes up like this, I get to about step 13, 13 years in, and it caps out basically, except for a COLA and sort of flattens out out here, okay. Is everybody with me? Sorry about this. Are you with me? This is important. Now I'm going to draw you the curve for total compensation, okay. This is your current salary plus the benefit to you as an employee for staying one additional year in the school district for your retirement. This is no different than if you're working in a company and you say to yourself, what will the company – what contribution will the company make in the next year to my 401K, got it. Current comp, pension.

It goes like this, remember this line like this, this line goes like this. I'm 25 years old, I get to be 42 years old, my lines are exactly the same, current comp and total comp, exactly the same.

Then I get to be 42, and it goes like this and like this and down here. So the last ten years of my career I'm making 50 percent of what I will make as a salary or in compensation for 30 years. But the first

20 years of my career, what I earned in total – in retirement is what I've contributed to the retirement system. So ask yourself whether any of you would sign up to that.

Ask yourself whether a system that was designed when women had two professional choices, one was being a nurse and one was being a teacher, is it in any way relevant to the labor market that we have today, but that's the system of compensation of training that we have today. We have got to build an incentive structure here. By the way, this goes far beyond performance pay. We have to build an incentive structure here that incentivizes people to do this hard work, to get better at this work, because we're lousy at it right now, and to stick with it. They're not going to stick with it for 30 years, that's not going to happen anymore.

The idea that – this romantic idea that somebody is going to teach Julius Caesar every year for 30 years of their life is not going to happen in this labor market. And we have got to find a way to migrate from a system that drives people away from our kids into a system that pushes them toward our kids and incentivizes them to sharpen their skills.

And I will say, if there's one thing that I think is largely ignored in the policy discussions around teacher effectiveness and teacher training in this country, it's the issues that I'm talking about right

now. They deserve a lot more attention than we've had. They're a very difficult policy problem here.

I also believe that in order to address the chronic under achievement issues in high school and everywhere in our system, we've got a lot more work to do around alternative licensure. We've got to open up the pipelines so that we get more talent embedded in our school district so that we're doing teacher residency programs along side the traditional programs that we have as a way of improving the traditional programs through compensation.

As the papers observed, assistance in selecting and paying for college is critical, vitally important. We were very lucky in Denver, we had a local philanthropist who gave $50 million to something called the Denver Scholarship Foundation, to provide scholarships for kids to go on to college. And the rules we established were that the kids had to apply for three other scholarships if they were going to be eligible for the Denver Scholarship Foundation, which created enormous leverage.

I think last year we spent $3 million out of our scholarship fund, but the kids generated $15 million in scholarships. It would have gone used if we had not pointed them in that direction.

As important as the money were the future centers, which is what we call them, that we set up in each one of our high schools, staffed

by people not from our College Counseling Department, but from the Foundation itself, to walk kids and their families through every step of filling out the federal financial aid forms, filling out the scholarship form, being able to see what universities and colleges were available. That work has to start in the ninth grade, if not before, and it has to be carried on annually with our kids.

We saw dramatic changes at Lincoln High School in South Denver to take just one largely Latino high school. Last year, 400 kids graduated, and that's up from 110 when I took over the superintendency in Denver, and a lot of those kids are going to college. Eighty percent of the students that applied through this program were accepted into college.

The last thing I was going to talk about was improving accountability. You know, we need to improve our data systems dramatically to track students after they leave high school. Your recommendations to expand data systems provide continuous accountability, allow for a quick response for students that fall behind and to track students through college. And they're ambitious, they need to be, and I support them.

Many states and districts are starting to implement teacher identifier systems. And Denver Public Schools recently became only the fourth school district in the country to track its graduates up to six years

after they leave high school. This is a sad story. Just to give you one school district's example, Denver's class of 2002 began in first grade with 5,152 students. In the spring of 2002, 2,854 students graduated. Of those graduates, a third would enroll in college within a year, and within six years, 1,777 would have spent at least one month in a two year or four year institution of higher ed. Of the graduating class, 1,497 were low income. Just 39 percent of those, 583 students, enrolled in college for any length of time within six years of graduating. Only 149 low income students would earn a college degree of any kind, from a one year certificate to a master's level.

Our estimate, I can't prove it because we haven't had the data long enough to be able to prove it, our estimate is that right now, today's ninth graders in Denver, only nine percent of them are going to graduate from a four year college, which means that 91 percent of them are not. And the beginning of all of this, any path like this means that we need accurate information about what's working to change the odds for our kids.

I want to just close by saying that, like Roy Romer, who's here, and other superintendents around the country, you know, I've become quite radicalized on this question over the time that I was the Superintendent, because we have inherited a school system in the United

States, and more to the point, our children has inherited one, where the incentives and disincentives in the system are completely unaligned from the objectives that we all have for our kids.

And the policy debate that's gone on in Washington is so unbelievably irrelevant to fixing the issues that we face, that the work that you're continuing to do and trying to do becomes that much more important.

What I would urge people here to do is to think as big as you possibly can, to imagine a world where you did – forget the politics just for a minute and think about what we would do if we had a blank sheet of paper and how we would redesign a system that is essentially a broken assembly line that was built deep in the last century and has almost no relevance to kids achieving success.

Those numbers I was reading earlier about the dollars that we were spending, I sat on a Saturday morning in my office trying to calculate the amount of money that we were effectively spending, creating college prepared college goers. I started with a kindergarten class and I projected 13 years forward. And my estimate was that we were spending roughly 88.5 percent of our money not preparing kids to be college prepared college goers. We've got to radically change the system. I appreciate your having me here today. Thank you.

MR. HASKINS: It's not widely known, but I have the power to control the mic, so if anybody says something that's offensive, we just turn the mic off.

SENATOR BENNET: Mine is already off.

MR. HASKINS: Senator, thank you so much for coming. The speech was exactly what we were hoping you would do, it's very responsive, thank you. Let me ask you just a couple of questions and then we'll take a couple questions from the audience. It's clear that the direction of the relationship between the federal government and the state government since 1965 has been more power to the federal government to impact the public schools. '65 was a big change, and, of course, 2002 with No Child Left Behind was another big change. No Child Left Behind is up for reauthorization. Do you support this direction? How direct do you think the federal government should be? What do you see as the federal role in education reform?

SENATOR BENNET: Well, I'd say a couple of things. You know, it's humbling from the federal point of view to remember that we account for only nine percent roughly of what we spend on K-12 education nationally. And authors like Matt Miller have written well about the problematic governance structure of having thousands and thousands of school boards and superintendents all over the country with no R&D

structure, with no common way of approaching things, each deciding what curriculum to acquire based on a lot of political decisions often that have nothing to do with – that's where we are as a governing structure.

I think the federal role is incredibly important. No Child Left Behind had one excellent outcome, which was, it revealed to everybody this incredible gap that exists between kids that are poor and kids that aren't poor in the country. That was essentially the extent of what it provided. It didn't inspire us to actually fix our schools, and it didn't attract anybody to the teaching profession.

So I think there are three things briefly that the federal government ought to be thinking about. One is how to refine the accountability system, and how to create a set of national standards, common standards I guess is the politically correct way of saying that, and invite states to accept those standards as theirs. I don't think you can impose it yet, but I think you can say to states, we're going to – what we're going to do is go out and find the half dozen states that have the fewest number of standards at every grade level, because part of the problem we've got is, we've got too many standards at every grade level that aren't being covered well by anybody.

We're going to cut that number in half, we're going to benchmark them against international norm so we stop kidding ourselves about what

our kids are learning or not learning, we're going to create a test to measure right direction, wrong direction, that's not going to be incredibly burdensome, and we will pay for the administration of that test for states that want to use it, and then they can spend their money on early childhood education or whatever they want.

And we're going to measure kids on a longitudinal curve so that we're looking at this year's fifth graders and asking how did they do as fourth graders, not how did this year's fourth grade class do compared to last year's fourth grade class, which is what we're doing today. So we've got to get the system refined. I think, second, that there is a role for the federal government to play in recruiting this new army of teachers that the President talked about on the campaign trail. That means supporting school districts and schools that are interested in alternative licensure.

The current system, you don't even have to pick a fight here, in my view. The current system of preparing teachers is clearly not giving us the math teachers we need, the science teachers we need, the English language acquisition or special ed teachers we need. We don't need – there's not – it's just true. Not to mention the fact, by the way, it's not giving us the diverse work force that we need in school districts across the country.

And I see nothing wrong with creating some teacher residency programs in school districts like Denver, for example, where we are creating one, to be able to see whether or not there's a more effective and cost effective way of training people than the one we have right now. So that's a second point.

And a third point is, I hope that we can get to a place where, if we have an accountability system that actually makes sense, that the federal government is using that nine percent or some part of that nine percent to inspire people to do something different, to incentivize school districts to do something that they wouldn't otherwise do, or schools. And I think that's what the President and the Secretary of Education are trying to do with the race to the top money. And my hope with that money is that they set the standard very high for what reform really looks like.

And they don't need to tell everybody what to do, but they ought to have a very high standard. And I would rather see them not spend the money than spend the money on reform efforts that are really only half measures. Because I think not spending it would send an important signal about how serious we are about change.

So I would – that's – and we've got to move fast the debate, just to finish the thought on the federal side, where you've got one party basically saying let's spend more money on old programs, a greater

amount of money on old programs that don't work, and you've got another party saying we don't really want to say we're not going to spend money on education, but we're going to devise an accountability system that's going to create a bunch of disincentives for success, which is what we have right now.

MR. HASKINS: I'm glad I asked you that question, it's a great answer, thank you. Let me just ask one follow-up question, having been in a school of education at one time. You said it very diplomatically, but the effect of your, at least one of your ideas about teacher training would be to bypass or somehow certify teachers and train them other than through schools of education, something that I would greatly support, and I think a lot of people would, but schools of education don't. Surely you had experience in Colorado with schools of education. What are you going to do about that?

SENATOR BENNET: Well, I mean, look, the – let me say it this way, there has for years been a chronic shortage, as I just said earlier, in certain parts of the work force, math and science is a good one. And, by the way, math and science, to take nothing away from anybody's training or what anybody does, but you don't become – in general, not always true, in general, you don't become an elementary school teacher, a fourth grade teacher, because you've got a great conceptual

understanding of mathematics and that's where you really want to apply it. You know what I'm saying?

I mean you become it for lots of other very good reasons, but that's not one. Our kids need people that do have a rich conceptual understanding of mathematics in their elementary school years if they're ever going to be able to succeed as mathematicians in their high school years or their college years. And the system that we have, the incentive structures, the training system, has no theory for how to do what I just said. And if we think of that as a need, then we ought to design a training program, whether it's in a school of education or in a school district or wherever else that helps us get to that objective rather than try to imagine or pretend that the current structure is going to get us anywhere we need to be.

Schools of education can continue to do exactly what they're doing, that's not my – I wouldn't even argue. I do think they need to change what they're doing. But all I'm saying is, let me go fill out the shortage areas, let me go after math and science teachers, let me go after English language allocation teachers as a superintendent, let me lash them to a master teacher for a year to give them the pedagogical background that they need to do the work, let me train them, not on every curriculum, but since we teach every day math in the Denver Public

Schools and not -- and math, let me train them on every day math as they get their conceptual understanding, because they will be, for the seven or nine years that they will be a classroom teacher, hopefully, which would represent an extension, they will be more effective during that period of time than they will be if they're trained in the traditional way, I believe, or at least let me practice that theory and we'll see. Let's study the data and see. But in a world where we haven't even had teacher identifiers, and we haven't been able to link them back to the graduate programs that produce them, we've gotten what we deserve, which is outcomes that are not – I shouldn't say we deserve them, we've gotten outcomes that none of us want as a result of that.

So none of this is going to come without controversy, like what you talked about earlier. But I guess from my point of view, one of the reasons I was able to sleep at night fairly well was that I thought it would be almost impossible for us to do any worse than we were doing, you know.

I didn't think it was, you know, people would say to me, Michael, aren't you – don't you know that not all kids are going to go to college, and I would say, well, you know, if the number nine percent -- give me that number or even 15%, but I think it's closer to 9, is right at a four year college. We're fooling ourselves if we think that we're putting

kids in a position to make the decision for themselves whether they want to go to college or not. If they want to decide to do something else and it's up to them, that's fine with me.

But I didn't hear anything different from the trades; from the carpenters or from the other trades than I did from college presidents. They were all complaining about the remediation they had to do in mathematics. In fact, we passed -- well, I'll stop there. Let's see if there's a question or two from the audience.

MR. HASKINS: Yes, audience; questions. Right here in the front. Please tell us your name and ask us a -- question; thank you.

MS. KUBZDELA: Okay; I'm Kashka Kubzdela from the National Center for Education Statistics. I'm glad to hear the support for -- data systems. But I have a question about the systems. They are currently being built differently by every state. The data elements have different meaning under the same labels. So for example, you have a data element called that you are -- the school, but the meaning of it differs not only between states, but even between schools because each school decides how much of a day a kid can miss before it is called absent. So who is responsible for making sure that the data, that are now being collected and the data systems that are being built, are actually usable and will not be misleading when we analyze it?

SENATOR BENNET: I actually don't know who's responsible so I'll defer on that. But I will tell you that you raise an incredibly important point because most of the school districts in this country, the urban -- most of the school districts in the country period don't have the kind of data systems that are necessary to be able to produce anything that's all that useful.

And I used to -- that's a critique actually that I also have for a lot of journalism that covers schools because so much of this is based on opinion and conjecture and so little of it is based on actual facts. And we had to build an entire data architecture in the Denver public schools which was funded by Dell and by Broad to create a data warehouse -- silo. Data systems could actually talk to each other and so that we could start to draw useful information out of that at least based on their observations about the work we were doing. There's not anywhere near enough of that going on in the country. And then the other problem that you raise is absolutely correct which is that the inputs are completely screwed up.

So when I got there, there was no consistency in how course names or course codes were applied. So if you were trying to do research on high school, you're trying to do research on, you know, what curriculum, what algebra curriculum seemed to be showing better results than another; you couldn't even tell which kids were in Algebra II because

it was called something different in different places and it's all a skunk work kind of effort to recover the data.

And I have to say you put your finger on something that is very, very important because as we think about how we spend this federal money and we think about how to drive success across the country, there are some very basic architecture problems that have to do with data systems, as you were pointing out, but also personnel systems as well. I mean my HR department when I got there was staffed not by people that knew HR, but by people that had been administrators in schools that in for one reason or another had gotten themselves in some difficulty and ended up in the HR department.

Well, if you're in a world where you've got a chronic shortage of teachers in high needs areas, you need a 21st century HR department to do that work and my only point in this is that we focus a lot on teacher quality which is where our focus needs to be because that's the endpoint but we should be cognoscente of the fact that in these super structures there is not the professional development or incomprehension to be able to drive the heavy lift that's in front of us. That's another very big issue that we face.

SPEAKER: Ceci or Jim, do you want to add anything to the answer of the question about the data systems and the requirements for

data systems? There is a lot going on, I can tell you that; Achieve and the America Diploma Project are -- they have I think 38 states or a member.

They are having exactly the problem you're talking about which is getting time and data elements and getting rid of old systems that are not very useful. And there's also the federal Longitudinal Data System, I think it's called, which was small and the administration had already increased it I believe. And the administration has made a big deal of having these longitudinal data sets. So people are aware but they're working on it. I don't know how much progress they've made but they are making some progress. Do you have time for one more question?

SENATOR BENNET: Sure.

MR. HASKINS: One more question; right back there, the lady -- yeah.

MS. FAULKNER: Hi, my name is Renee Faulkner. I'm from the Office of the State Superintendent of Education of D.C. I was slightly comforted to hear that only 9% of students in Denver are graduated from college only because --

SENATOR BENNET: Four year -- four year college.

MS. FAULKNER: -- four year colleges and only because that's exactly the number that we're dealing with here among public schools -- students in D.C. 91% will never graduate from high school, or

never enroll in college, or never graduate from college. I was wondering if you could share any of the specific programmatic or policy initiatives taking place in Denver that are designed specifically around that 9% number.

MR. HASKINS: Future Senators.

SENATOR BENNET: Yeah, I mean I'd say that the future Senators have had a huge effect and this Denver Scholarship Foundation had a huge effect. It's sort of crude but it's work. I shouldn't say that, it's not crude. It's a great example of what I mean when I talk about incentives and disincentives.

I talked about pay earlier and I won't talk about that with you now but to the extent there are people that are interested in continuing that conversation at all, in going forward, I'm very interested in continuing that. But because at a basic level, let me remind everybody that what we have is a system that imagines that somebody teaching elementary school in an -- school should be paid the same as somebody who's a Special Ed teacher in a high poverty high school in Denver or D.C. That's where we are.

So anyway, before we even have a conversation about performance and pay, that's where our existing theory of how to drive student achievement is on compensation. But think about it this way.

Joe, you're a ninth grade kid and you're three levels behind in reading already, which is many of our children, and it's not apparent to you that anybody's doing anything differently to catch you up, either institutionally, in other words, we're not changing the way the school day looks, we're not changing the way the school year looks, or in the classroom.

We're not differentiating our instruction to deal with the fact that you're three years behind, which is the case in most high schools in the United States right now. And I'm imagining a child that is maybe not a great reader but a pretty good mathematician so he or she is now doing a present value calculation and is saying okay, here are my choices.

I can stay here for three more years, not learning how read or I can go out and get the same low wage job I'm going to get and help to support my family in real time. That is what kids -- that's the decision kids are making every single day and I know that not because I'm reading research but because that's what I'm hearing from the kids that are in my school district. Why should I stick around?

So part of what we've got to do is make sure that the environment is compelling enough in the school for kids to make a different present value calculation, which is if it's going to worth it to me to stay. That's -- there's no one thing. That's everything, okay; in terms of what the school environment looks like.

But then there are other things like this scholarship foundation where we change the incentive structure and we said to kids, you know what, if you graduate and you get accepted to college, finances are not going to be a reason why you're not going to be able to go. And we're going to make sure that you have to endure the sessions on the FAFSA forms, and the sessions on the scholarships, and all of the rest of that, and we're going to have individual meetings with each one of you and we're going to track you as you go through.

That has made it enormous, just that act and it's so small. Made -- the numbers of the 110 to 400 at Lincoln High School and Mount Bellow High School as well, where I think we doubled the number of kids going to college in a three year period. That was basically all about taking people and saying, who by the way weren't the first time college goers in their families, and saying to them you can go to college and here's how we're going to get you there.

I'm not saying they're all prepared to be there and I'm not saying that a huge number of them are not going to make it through because regrettably a lot of them are not, but the data are also very clear that even if you get one year in community college, it makes a difference in your lifetime earnings. And then just to close it off, once people started to see

their older brother, or their older sister, or the kid down the block going to college, all of a sudden the way they thought about college changed.

And I think it will build on itself and it will also take one more excuse out of the system because now what we can say to everybody in Denver is that if we can get our kids through and we can prepare them, they're going to be able to keep going, as opposed to saying, it doesn't really matter anyway because they're not going to be able to afford college. There's a whole huge issue here with undocumented kids but I'm going to leave that for another day.

MR. HASKINS: Senator, thank you very much for coming.

SENATOR BENNET: Thank you; appreciate it.

MR. HASKINS: And we hope you'll come back.

(Pause.)

MS. ROUSE: All right; well, we will then get back to our panel. I have asked for them to speak for just a couple of minutes shorter so that we'll have plenty of time left for questions as well; so, Michael.

MR. CARTER: So as I was saying --

MS. ROUSE: Right back up -- pause.

MR. CARTER: -- yes, so I'm a rising senior at Washington University in Saint Louis and for me this experience is personal. I transferred from a private to a public high school my junior year. It was

the first public school I had ever been to. In my community kids who went to public school were seen as going to work at Burger King and kids who went to private school were seen as all going to Stanford, whether that was true or not.

And so when I got to this public school and was in the honors and AP classes there, what I saw were a lot of peers who had great GPA's, pretty good SAT scores, and only thought they could go to community college because they were low income.

And there were two reasons for this really; one was one of the guidance counselors had been there 35 years and gave the same advice he gave 35 years ago which was if you are low income you can only go to community college and that is the cheapest route for you to go, which for low income kids who do qualify for four year colleges is not always necessarily true.

And in fact, in most cases it's not because four year colleges will cover part of your room and board and living expenses while you go. And then there was another counselor who was my counselor. She was a Middlebury College grad and she came to my high school for one reason. She saw a lot of talented test scores and GPA's for the low income population there but saw that they weren't going to four year colleges.

And she was so overburdened with paperwork, scheduling, there was only one guidance counselor for every 750 kids, so she never got to reach the kids she wanted. She only reached myself and my friend Ari who is at MIT and she said that's because we were both -- and were always in her office.

And so, you know, as I looked on this I really enjoyed the college application process. I'll readily admit I'm pretty weird; for me it was fun. And so I helped a couple of friends through it who were low income and didn't think they could go. I was getting e-mails from all of these scholarship opportunities for low income kids that I didn't qualify for so I would pass them onto them.

And once I got into Washington University I was fortunate to get a Merit Scholarship there and, you know, said how can I give back. I've been very fortunate and, you know, I don't qualify for financial aid and I want to make sure that kids who do know what's out there and can go. And so I e-mailed my scholarship director for our scholarship program; it's a program for the common thread between all the kids who win, as we all did community service in high school. And so I told her why don't we go into an inner city school in Saint Louis and help college counsel low income high school kids. I said we are the perfect group to do this.

High school students are blind to the process themselves. The best example is I advised one of my buddies with a 1,300 on the old SAT, 3.7 GPA, first generation Latino, that he should apply to some local schools when in reality he probably could have gone to Stanford or Harvard with those stats. But to me, and to any high school kid, it doesn't seem like real people go to Harvard and Stanford, you know, it seems so mythical.

And so high school kids couldn't do this because they were blind to the process themselves. And then it struck me that adults would have a hard time with this because part of what was so special, once we started going into the school, was the connection we were making with the students. You know, the principal told me once, you know, I've never seen so and so open up but he was opening up because as Counselor Regis who, you know, had Flood Rowanda and was sharing his life story and saying look, I did it; you can do it too. It was very empowering to the students.

And so, you know, I had a lot of friends who wanted to start chapters at their schools of this same model where you'd have college students, one on one college counseling low income high school kids, and so I said okay, I'll commit full time during college and full time after to create a national nonprofit, as a platform to do just that.

And I can't, you know, iterate enough as we're wrapping up year three really. We scaled nationally to five universities now on no money and so now we're going -- trying to look for -- based on what we've seen works with free volunteers and where we need staff. And I can't reiterate enough that what we found is what, you know, Ron and Jim find in their article which is that, you know, it's very important that we're going to have good data systems to measure our accountability, to make sure we're impactful and if we're not to adjust.

But it's also very important that we create a tech system so even for kids who don't get the Strive service, they can at least use this tech system which can be their virtual counselor and help match them to possible schools. That might fit for them as well, as well as ensure quality and that we're giving a diverse array of options to the kids who we do counsel. So thanks very much for your time.

MS. ROUSE: Okay; Jenny.

MS. NAGAOKA: Hi, I'm Jenny Nagaoka from the Consortium on Chicago School Research. I also wanted to kind of acknowledge my co-authors on the chapter, Future of Children, Melissa Roderick and Vanessa Coca. I'm probably going to actually be repeating some of the themes -- a good thing that Ron, Jim, and the Senator kind of brought up talking a lot about the importance of data, but I'll also be trying

to draw in a little bit more detail in terms of college readiness, as well as the work that we're doing at the Consortium on Chicago School Research.

I think, you know, one of the big themes is that we've all been talking and with a great sense of urgency about how important it is that students are going on to college and that they eventually get college degrees. I think part of the really good news is the fact that this sense of urgency is actually shared by the students themselves. And we've seen over the past 30 years that the percentage of high school students who have stated they want to get at least a four year degree has nearly doubled. So basically now, the vast majority of high school students are saying that they want to get a four year degree.

The other piece of good news is the fact that college enrollment rates have gone up so they're actually being able to get into college. The bigger issue though is the fact that even though we're seeing higher college enrollment rates, we're actually not seeing increases in four year degree attainment rates. So it's really becoming clear that the problem that we're facing is not a matter of getting more kids to go onto college, but actually making sure that they get through.

So I think, you know, there's kind of this general consensus that one of the key pieces of this is going to have to be getting students better prepared for high school. So this means that we're going to have to make

sure that they have the kinds of content knowledge, the types of skills that it really takes to succeed in college. You know, but I think one of the tough parts about this though is the fact that this is really a new rule for high schools to be taking on.

I mean in the past there were college preparatory high schools; there were some students within a high school who were sort of deemed, oh, you're going to go to college. But this whole idea that everybody is going to be going to college, everybody needs to get prepared for college, is something that's actually quite different and I think a lot of high schools are really struggling with trying to figure this out.

So there's a lot of need here to have research and evaluations and really to kind of dig deeper to understand what our high -- do high schools need to be doing in order to make sure that their students are not just going onto college but they're actually succeeding once they're there.

So I guess there's -- there's a lot of ideas out there too about what works. You know, I mean we're seeing things that -- achieve where they're really thinking about what kind of things -- college readiness and trying pushing high schools to be aligning their curricula with what college readiness standards should be.

We're seeing that more and more states are raising their high school graduation requirements so they're much more aligned with what

they need -- the students need to get into a four year college. There's a really big push to increase the numbers of students in AP. Allow two minutes; -- this really quickly.

So they're -- we're seeing a lot of this where there's this really, really big push to get students -- the problem right now, which Jim and Ron pointed out, is the fact that all of these things seem to be good ideas. I mean striving for college is a great idea. But what we really need to do is to have some evidence that these works to really be able to provide the types of guidance that schools and districts have -- can have so they can understand it.

I mean I think one of the things I was kind of struck by, as we've actually already heard, the number of students who are going -- ninth graders who are actually going to eventually get a four year degree from Denver and D.C. Now I know the number is 9%.

And Chicago's is something that we've actually known this for five or six years at least through in our work, but at the time we are kind of -- because our number I think was 8% and we're kind of like 8%, is that good; is that bad? We actually had no idea. We're kind of like throwing this number out there.

So there's really this tremendous need to have these data systems there that are not just -- that are actually tracking students from high --

from elementary school, to high school, to college so that high schools can actually know what's working, what's actually happening to their colleges. I mean I think this is really accord to actually seeing any sort of improvement.

We also need to have college readiness indicators that are actually validated so that you know what your performance in high school and how that's actually linked to what students are doing in there. And we also really need to have ways of reporting back to high schools about what's going on and for districts and for states. I mean there's been a lot of movement in this.

You know, one of the ways that I think we've been successful in Chicago with really pushing high schools is the fact that we feed back information to the high schools and to the district so they can really start to understand what the dynamics of what's going on in high school and doing it on a much deeper level because, you know, as we're really pushing high schools to be facing this new challenge of trying to get all of their students to be ready for college, and hopefully succeed once they're there, it's really not terribly useful just to be pushing them or sort of saying all of these are a lot of good ideas until we really have evidence. It's really hard to actually make sure that they know what they're doing until there's data, there's evidence, and it's actually information that they can use.

MS. ROUSE: Okay; terrific, Mark.

MR. DYNARSKI: Thank you very much. I want to thank Brookings Institution for the invitation to talk. This was actually a very interesting conference on America's high schools that was last spring and it's a very interesting volume. I actually think it's in many ways a milestone in scholarly and academic work in thinking about the American high school.

And one indicator of its success has such as that as I was reading it, it just basically was throwing off ideas in my head about where we might go next and I think that's an indication that it's very rich with analysis and with thinking. One -- so I have three of them. One is that it really points to, and I think the work of the Chicago Consortium also points to the astounding potential for using longitudinal data here in ways that cause behavior to change.

And I was struck, and the Senator touched on this theme as well, that none of us should underestimate the way technology has transformed our lives in the last 20 years. And so just imagine, if you will, that a young person entering a high school in the ninth grade is, with certain kinds of characteristics, is handed an informational packet which indicates that the kinds of kids like them who have come to that high school have attended these colleges, you know, in the last four or five years.

That's actually not so difficult, I suspect, because when my own daughter was applying for college, the school had signed up for some web service which basically would tell her precisely how students who applied, who were from her high school, which colleges they applied to and whether they got in or not, their success rates.

And it's -- in a way it's a rather remarkable use of web technology, longitudinal data, and I don't think in that sector it's considered particularly innovative. It's just a nice use of data. Yet one could imagine pushing that down for the ninth grade and using it as an indicator of -- that kids like you go to college, here they are. You know, not their names but just their characteristics.

And especially if you're trying to deal with viral -- the Senator was referring to viral kinds of behavior. You want to change norms in high schools, which are often characterized by the norm of dropping out. You're trying to just flip it upside down and say no, the norm is going to college. Here's a set of kids just like you who went to college from your high school, stop thinking about dropping out.

The second point is that college readiness here is being depicted as a goal. One, I don't know -- I wouldn't characterize it as an unfortunate side effect of no child left behind, but basically no child left behind has created adequate yearly progress around performance indicators.

If you depict something as a goal, to a high school, but their first thinking is but I don't have to do that, right. So if it's only a goal; if it's a performance standard, however, now I have to do it. And high schools were just handed in October a very substantial charge of having to track their drop out rates correctly, their high school completion rates, and consequently they're now worried about dropping -- the dropout rate as being the indicator they need to track.

And so college readiness is going to be perhaps the next thing down the road, but it would probably be very, very challenging for them to have to do these things in the near future because they're first going to have to worry about the fact that they're not graduating very many students after four years.

It was just yesterday actually that California reported that they graduated 68% of its students. That -- for the country's largest state and one of the world's largest economies, that is a really challenging statistic.

And finally, the third point is that a lot of the -- and if I had a white board I'd show this to you. A lot of what the ways in which college readiness is being conceived here is you have kids whose motivation is up here but the high school is capping them out by an inability to show them positive ways to get to school and so the mechanisms that we're talking about, would essentially do that, and help the kid then go on to school.

But there's a set of kids for whom their motivation is actually here. They don't want to go to school, they don't like school, they've done poorly in school, they don't get validated by a school, and in fact they're not evening thinking of completing high school and in many high schools, as the Senator pointed out, this is actually a norm.

So the real issue is what are you going to do for college readiness for young people who aren't even real high school ready? And so the kinds of programs that were touched on in the brief, Jim mentioned it earlier, there hasn't been very good evidence that we can actually take these young people and make them the highly motivated young people. And so we need to start thinking about mechanisms that just go right out of the box here for program structure. And I think the -- I'm just going to offer this as an idea, I realize there's downsides and upsides, is that we really have to think about pay to stay kinds of programs.

So for example, if young people are actually paid to stay in the high school in their junior and senior years and their first two years of college that will change the incentive structures quite a lot. So with that, I will stop; thank you very much.

MS. ROUSE: Terrific; Sheri.

MS. RANIS: When -- very great pleasure to be here. I thank, Ron and the Brookings Institution for inviting me on this panel.

When Ron asked me to join he said he wanted me to talk about the Bill and Melinda Gates Foundation commitment to high school and college going, and also to be forthcoming and provocative. But now, he should have known better. Forthcoming is not exactly a term that is associated with the Foundation official.

But what I would like to try to highlight in our few minutes together is -- are two things which I think actually are underlying all of our comments today and certainly the Brookings policy brief, as well as the full volume of the Future of Children, which I recommend to all of you as I think very rich reading, as Mark has suggested. The two terms are frank appraisal and the second is invention.

Frank appraisal and taking stock of where we've come in high schools is what the Future of Children volume is about and as Jim spoke so eloquently, it indicates gaps in an evidence base -- it does also indicate a lot of attempts to work along different fronts, both in terms of preparing kids for the entry to high school, to upgrade instruction in curriculum, and lastly to try to track and understand trajectories from high school into post secondary education.

So the reason why the Bill and Melinda Foundation felt it was important to support this volume was that we felt after eight years of investment in high schools, a very deep commitment to the improvement

of our children's futures that this kind of volume was very necessary. So again, applaud our editors and very good work by all of the chapter others on this as you know.

So just briefly, the Foundation's goals and commitment to high schools is very strong, very real, and perpetual. Over the past six months or so we've talked about, in public about newly refined strategies, a new -- for our investment going forward. We, as always, have big, hairy, audacious goals as we call it, BHAG. The one for our high school reform is simply this, to make sure that 80% of our students are graduated from high school, college ready by the year 2025.

Similarly, we have I think maybe even a more ambitious goal, which speaks to post secondary success that we've been talking about all morning, which is to get twice as many post secondary degree completers by that same year, 2025.

On the high school preparation side, our focus has maybe three or four major bullets and the first -- and all of them by the way are I think very focused on the classroom which is for us something that was always certainly important but now takes on a great deal of urgency.

We're looking at, and we are refining our approach to how best to improve instruction, how best to measure teacher effectiveness, how best to support student learning, and how best to think about some of those out

of the box solutions, innovation, that I referred to earlier. So we celebrate the invention, actually, portion of this panel today represented by Michael, but actually which has a rich series of I think -- we think stimulating and hopefully exemplary programs and responses to what's not going on in our high schools right now for our children and for our teachers.

Strive for College, the National College Advisory Core, which was mentioned in the Brookings policy brief, my new state of Washington's dream project, based at the University of Washington, and many other programs that are trying to leverage the energy and the goodwill and the urgency felt by our young individuals who are graduated from college, who are in college for the case of Strive. That is the kind of innovation that we need to think about harnessing, that we need to test rigorously as we've all been saying today, and that we need to think about scaling.

Similarly, and this is very important, the Chicago Consortium put out a report called the Potholes to College Report last year. It's referenced heavily in the chapter and Future of Children; that report talks about what mechanics break down as kids think about the different things they have to do to get to college.

One thing that they've focused on was FAFSA, incomplete -- being not completed by a large group of people, and FAFSA tracking, actually week to week reports about what kids had done or not done in terms of

getting their FAFSA on record and in the system, actually was created by the Chicago public schools in reaction to the Potholes Report. That's the kind of real change and practical application of research.

So underlying that was very ingenious linking of data systems and data is the other theme by the way today; the third one, perhaps. It needs prioritization, it needs smart engineering, and it, in best of cases, actually helps kids directing.

The guidance counselors and principals that were receiving those weekly FAFSA reports were eliminated. Absolutely revolutionized in a sense about the way they have to reach out to their children and their students. So I wanted to say again thanks and I'm going to finish my remarks right there. Let it to Russ to be provocative.

MR. WHITEHURST: Well, I will be provocative I think. But let me not be understood and start off by saying that the huge disparities in this nation in high school completion, college enrollment, and college attainment rates are our embarrassment and they seriously -- the future of the nation and so doing something about that is extremely important.

At the same time I wanted to raise an issue about what seems to be the college for all mantra and while I very much appreciate the volume, I think it's wise, the Haskins and Kemple Proposal brings this to a head for me. It says that the premises that "the best way for disadvantaged youth

to boost their income is by achieving a degree from a two year or a four year college." That's true.

It's also true that the best way for youth, in general, to increase their income is to get a professional degree. It's also true that if you're going to get a professional degree, the best professional degree is law. I'm glad about that because my older son is graduating from law school this weekend and we have an invitation on the kitchen counter to a graduation party. It says we're just one lawyer short of a perfect world.

My pointer is sure that those are the outcomes but it doesn't mean we want everybody to be a lawyer and that high schools should be preparing them for that, or that we want everybody to have a professional degree and high school should be preparing them for that, or that we expect every student to go to college and therefore it's the responsibility of high school to make every student enter a college, a college degree program and be held accountable for that.

Just some relevant statistics and all I'm suggesting is we need to think about this. I'm not taking a personal policy position on it. I looked up yesterday the Bureau of Labor's statistics projections for employment in this country through 2016.

In 2016, 70% of all -- it's actually 69%, I'm rounding up. 70% of all employment and job openings in the U.S. will not require any post

secondary education or training but to become fully qualified in that occupation.

The net value of a college degree -- we've talked about it here in a variety of ways. The National Association of State Universities and Land-grant Colleges recently calculated the net present value of a four year degree as $121,000. That's good but it's not the million dollars that we often hear about and the evidence is clear that for some students, for high school students with very low grade point averages, the net present value of getting an Associate's Degree is negative compared to going into the world, the world of work.

We know that there are similarities between what it takes to be prepared for college and to be prepared for work, but I'm not sure we're thinking carefully enough about the differences and what the core of those similarities is.

There's some advocates that take the position that they are the same set of skills. -- for example, says that "the skills needed to get and keep good jobs, both white and blue collar, are very similar to what colleges demand of incoming freshman." And they go on to write that "those in the construction industry today all need algebra, geometry, trigonometry, and physics to be successful in their jobs." Really?

And I'm in the process of buying a house in Washington. Somebody in a construction trades came to do an inspection yesterday and didn't bring a ladder. I'm not sure, you know, what his physics background was but there were some soft skills related to construction and other things that weren't taken into account. Reviews by -- reviews of employers indicate very consistently that they are interested in soft skills; they're interested in persistence. They are interested in reliability; they're interested in the ability to carry out a social exchange, to be responsibly. And I think we need to pay attention to those things.

We need to give students training that's appropriate for the world of work if they're heading in that direction. We haven't mentioned here today career academies so Jim Kemple has been very responsible for evaluation.

It demonstrates that linking high school to experiences in the world of work has no effect on college attendance, but has a substantial labor market effect that's equivalent -- that is giving high school students some experience in the world of work while they're in high school as an economic effect that's essentially equivalent to one year of community college.

So my position is that yes, we need to do a much a better job in making high school an effective experience. It should not be the new

middle school where we put off the job of transmitting basic skills to community colleges. It should give students core skills that are necessary for successful work or movement into college.

But we also need to give options to students who are unlikely now even to graduate from high school, options to get the kind of experiences that are going to better prepare them for the workforce in ways that will allow them to be successful there, and that college for all is a useful aspiration but it may, in some circumstances, divert our attention from providing students the experiences that are going to be best for them in terms of their immediate and long term outcomes; thanks.

MS. ROUSE: Okay; I actually don't have a watch so I'm not sure how much total time we have. But I guess I get to still kick off the discussion but I'll just limit my questions; thank you. Are those those soft skills you were talking about? Okay; we've got ten minutes.

So I actually want to start where Russ left off because I have the same questions and I think I kind of have that question because I'm coming from the administration where the President has challenged everybody to at least try one year of some form of post secondary education whether it's a community college, four year college, vocational school, but to do something that's -- we need something beyond high school.

So I -- and I'm going to just open it up to the panel because I think if I try to go down we'll be here until noon. So first off all, is four year college really the goal that we have in mind and that's a little bit of a -- to your four year college? I think that the Chicago Report paper, in particular, seems to talk about four year colleges and kind of dismisses two year colleges and I'm just rushing for the -- inches in time. But I want to first ask about, for the panel, the value of some baccalaureate degrees.

And the second question is, especially if you have people who may never even try that one year of something past high school, does that change what we want high schools to do? Because in some sense you can interpret the college for all idea as more of a messaging around core skills or -- and take it -- or you could take it more literally. So I guess really that's the question is, do we want to take that literally or are we soft skills and maybe Russ has answered the question but I'm not sure? But I would like to get the take of other people.

MS. NAGAOKA: I think at least like how we're trying to define what college readiness is and I think this is actually also in our chapter. I think the soft skills piece is actually is a really core piece because then you really -- you really cannot succeed in college if you don't have any sense of how to study; how to do any kind of time management.

And these are clearly a place where there is a lot of overlap between what you need for work and what you need to succeed in college.

I think -- so I think in some senses there are definitely -- I think there are differences between what you need to be ready for college and what you need to be ready for work but there's also a lot of similarities and part of why we push the four year college is the fact that this is actually what the students themselves are saying.

I mean maybe they're just buying into this whole idea of college for all, but on the other hand if somebody actually says that they wanted to get a four year degree or higher and this is what their ultimate goal is, I don't think a school system -- saying well, you're just saying that because you've been told that that's a good idea. I mean if somebody actually states that this is their intention, I think we need to sort of take that at face value and that high schools sort of need to take this as their mission as to actually helping students fulfill what their goals actually are.

Well, also not ignoring the fact that there are some students who say that they don't want to do this or -- they're going to be dropping out from high school. So I think there is -- are different roles that high schools need to be playing but one of them clearly does have to be preparing students for four year colleges.

MS. ROUSE: Can I just push this one? So I've actually had conversations with people who've said look, most of the kids are not going to go to college and shouldn't we be preparing them with a skill.

MS. NAGAOKA: -- all right --

MS. ROUSE: I have literally -- I had this conversation just yesterday.

MS. NAGAOKA: -- power of the role of college -- power of the role of high school is actually -- you know, I think that's -- I mean that's actually something that's going on in Chicago right now is that they really are trying to sort of say okay -- I think the way they're actually sort of framing it is the fact that they're sort of working on this assumption that when students leave high school they're going to be needing another piece of paper, which means that it could be a four year college degree, it could be a two year college degree, it could be a union card, it could be some kind of certification. There is this idea that, you know, eventually people are going to need something beyond a high school degree if they really want to be successful.

And I think you do want to provide kids -- us skill, whether it's the skill to succeed in college or if there's -- if a student really has a clear idea that they don't -- that college is not right for them; that they actually will

have the opportunities available to them to learn some sort of skill that can be translated into a job once they leave high school.

MR. DYNARSKI: Could I, you know, one way to think about the college for all message and put it in the context of the recently released results from long term -- which essentially show that 17 year olds today score about the same as 17 year olds in 1973. Okay; this is disheartening. But imagine that the college for all goal is simply an instrument by which we are trying to send the signal to high schools that this is just something which needs work effort, programmatic design, curriculum design, breaking the kinds of strictures of teacher training that the Senator talked about, and so the whole idea is just to give them another goal that moves us away from 1973. I mean I don't know that that's actually what's happening but I'm -- it's easy to interpret the context here as basically saying we -- another goal is necessary; high schools as a terminal institution is not working.

MS. ROUSE: Okay; I've fallen some -- a lot of time but we do have about ten minutes left for questions. I will start with Jim Kemple.

MR. KEMPLE: Just one quick question for the panel. How would one figure out who -- sorry. How would one figure out who it is that we should say is not going to go to college? Who would get to decide that? We have a pretty, I think, desperate legacy of having race, parent's

education, income, and zip codes being the primary determinants or factors that are, you know, determining who ends up being the ones that we say are going to go to college. So where would we go if -- where would we look, how would we go about the process of figuring out -- and who is it that gets to decide?

MR. WHITEHURST: Well, since I'm the one who got the conversation going I would say it -- unlike many European systems where there is explicit tracking somewhere around that ninth grade, you go into the vocational track or you go into the pre-college track that all, I think, that follows from my -- the points I made is that there should be a richer range of options available for students as they're entering high school, including valid vocational tracks for students who are interested in going in that direction.

But I personally would be opposed to any kind of formal tracking system where there is an examination that cuts off options for students who aspire. We are a nation of -- that readmits itself and where people get second, third, and fourth chances and I personally think that's a very positive portion of our nation that we should remain committed to.

MS. NAGAOKA: I mean I think it's -- I mean I think ultimately it is the students' decision about where they would be going but I think -- I mean I think it is something that we really do have to struggle

with and again, the -- we have been pushing four year degrees but it's also clear that there are a lot of students who are failing most of their classes. They maybe actually make it to graduation but they're going to have below a 2.0 GPA. They're going to have ACT scores which, you know, are around 14. I mean it's really difficult to say that this is a kid who should go to a four year college. And so it's also pretty obvious that you need to figure out what other options these students have and you have to be preparing them for something else that's not just a matter of them having that high school diploma.

MS. RANIS: I'd just like to say that, you know, the idea of giving children and individuals opportunities to make choices about track, whether it is a post secondary track or a career, is based on the -- what they'll receive in terms of skills and content knowledge in high school through the public education system, actually, that they are subjected to.

And we do not have an improperly ambitious or place, floor, or basis for what the essential skills and content are. And as a society we were examining that and happily -- the National Governor's Association, the Council of Chief, the CCSSO, and others are galvanizing the energy at the state level to call for reexamination of essentially what we think our kids should be equipped with before they leave our public school system. But that's essential. We have to think more ambitiously about what they

have -- what we need to have; what each individual needs to be equipped with before they're enabled to make the choices that they have to make.

MR. CARTER: And I think for organizations like Strive it's really important we, you know, organizations like Strive focus on who are you going to serve. So for us, it's kids who are qualified to go to four year colleges, so A+ kids, B kids, C kids, trying to dispel the mess for each one.

And then looking at there's always some cases where a student who wasn't chosen by the high school guidance counselors and principals wants to do it. You know, if they want to do it, like Russ said, it's a country of opportunity and you say if you want to come and do this program, nothing limits you from doing that.

MS. ROUSE: Okay; question --

SPEAKER: --

MS. ROUSE: Okay; in the back.

MR. COPES: My name is Jaracus Copes. I'm from New Destiny, LLC, and since you said that who determines where the kids -- Jim I guess said that, you know, where -- who determines if the kids go to college. What about kids that don't have that opportunity because they had poor teachers in elementary school where they didn't have that foundation and also, you know, you want them to take AP tests and stuff

in high school, but they've never had the basics in order to even like school or to have that option taken away from them?

So what should we do prior to high school instead of looking at high school and college readiness; what are we doing in the earlier years besides taking money away from schools that are already at an economic disadvantage?

MS. ROUSE: Actually, I'm going to go ahead and answer that mostly because I think we completely recognize the importance before high school, but today we're really focused on what the role, you know, what we can do at the high school level. But I think we all recognize -- future of children.

We have a volume on school readiness; we haven't done one in elementary schools yet or middle schools, but that's coming. But we -- I think your point is well taken. But I think today we want today's discussion to really be focused on high schools. Although all of the questions were --

MS. FRIEDBERGER: My name is Grace Friedberger. I'm from the National Council for Community and Education Partnerships. We work with the federal Gear Up Program. And one of the things that I've been hearing a lot of is that these students, underprivileged students, need to be -- have the opportunity to go to college. However, one of the

big barriers when I speak with these students, and that I'm aware of in my work, is the economic ability to go to college.

They just don't have it and that's something that I haven't heard anything about today. So I'm just curious what do you guys think about these students who want to go to college but to them the biggest barrier is not necessarily the sociological pattern in their communities, but their, you know, ability to do so financially?

MR. WHITEHURST: Well, I can just say -- I mean one of the problems here is that students who would be first generation college students often severely overestimate what it costs to go to college. They look at sticker price as opposed to what they will pay -- net loans, and loans, and grants.

There's a need for more financial support but I think one of the things that can be extremely powerful is earlier and more accurate information about what it will actually cost to go to college. The Federal Government has done a pretty good job, including recently boosting Pell grants, to increase affordability and community colleges remain a great value and that -- Pell grants can make it quite affordable for students to attend college.

MS. RANIS: I think we did actually address your question a little bit. We talked a lot about FAFSA today and it's a terrible acronym but

simplification and access to FAFSA, both through the federal side of approving the forms and perhaps integrating them with the tax forms, which is one of those brilliant ideas that I think maybe moved on, or actually providing FAFSA access to families through private providers.

We've got an experiment in Ohio, North Carolina, where H&R Block tax providers are actually filling out FAFSA forms for families and for individuals. I mean there's a lot of energy there. We also heard about the -- Senator speak about Denver's scholarship fund but there's a lot of creativity in terms of private sources helping students think about both the incentives of going to college, but also motivating them to stay in high school to do that, to be able to get through that navigational process.

So again, a great deal of energy there. What's missing very often is just sort of the coalescing and zeroing in on those lessons and the inspiration that they provide so they can be replicated. And that's the part that we -- that I worry about.

MS. ROUSE: Okay; I'm going to take one more question.

SPEAKER: I'm -- American here. I've been working for almost 20 years in Sweden, Norway, Finland, Japan, France, and to some extent also in South Africa. -- to address this issue of how to help improve education. I can assure you and I've down now a foundation -- to see. I can assure you that in those countries, which are sometimes reference for

you, the problem sometimes are more acute, including for the secondary level.

So you don't -- you need to know what -- European Union. Our conclusion is, and I would like to ask your opinion about this, the problem we have, a more and more great problem, whether in Japan, in Sweden, and France, is the children of families, the -- as well, they don't know how to make sense of the worth.

Having access to all information so just to guide them that they can get the job and they need one or two years training and the training -- they don't know. So to make sense of the -- and to know his own or her own backyard, it's our challenge in Europe or -- so to have a more -- easy to understand work and to guide their children. Our -- at this stage, preliminary one, that this has to be handled at local community level. So I was in -- earlier where their -- even in South Africa, or in Norway, as soon as the children are -- I took European project or -- high quality content about the -- so we persevered three years.

Several families took initiative, then to ask the local government and others to educate their children. So our challenge in Europe, as well in Japan, you may have heard in Japan about -- the alienation, so even in rich families alienation is a problem. So how to create a motivational,

inspirational guidance environment by type of local community is our challenge. We will continue to persevere with this.

So the challenge is how to motivate and inspire to make sense of the -- it's alienation in Europe and we are confronted with this in European Union. So I very much like to learn more here. Well, I just set up a foundation in Washington, D.C. and with -- the solution will come more from U.S. than from Europe, or -- if I may address this challenge. So how do you address this alienation effect, the cultural divide? In Europe, the -- have much bigger problems than -- I'm sorry to address this --

MS. ROUSE: Okay --

SPEAKER: Sorry.

MS. ROUSE: -- so why don't we get the response from the panel, if anybody has --

MR. CARTER: Well, I think in terms of, you know, grassroots' local efforts, I really do think they work. I mean Strive, even though it's a national organization, it's what happens on the ground that's the magic. It's the college student going into an inner city high school in their area and telling a low income high school student who's only one or two years older than them, look I'm here. You know, I mentored a kid my freshman year who said shoot, you're no different than me; you're there, I can do it, and I was like exactly, that's the point, that's why we do this.

And so, you know, for me I really believe in the grassroots' movement in creating local, you know, communities where you do have young people reaching out. You know, for Strive it's imperative. We know that just getting them in isn't enough. It's the network you build in college that allows you to succeed. And so, you know, when I look at even how Strive has been built, I've used my network, which I'm blessed to have because my dad's a professional and he's a lawyer and so he knows friends, and I met them, got introduced to others. And I looked at it and said, you know, what does the low income kid do if their parents are professionals? Who do they reach out to for all of this help?

And I think it's really important that we -- to college students that they have networks that they can share, not just with their friends. In a quid pro quo, you know, you help me, I help you. But they can really share their networks with, you know, disadvantage youth who otherwise couldn't meet these people who can help mentor them and guide them on a path that they deserve because the startling thing is all of the data points to there are a lot of low income kids who don't go to four year colleges and -- I think the latest stat was like 400,000 and, you know, further than that.

There's millions more who should go to better colleges than they do or get better aid than they do and they just don't know. And to me that's an injustice because they've earned it, you know, they've done the work.

MS. NAGAOKA: And I think there's also a really big role for schools to be playing on this because I mean schools are the place that it's easiest to reach students. I mean there's -- I think grassroots has a tremendous part but it's also -- there's an importance of having a system so that it's actually -- so that schools are organized around the whole idea about students thinking about their future, figuring out and relating what students are doing in school currently to what they're going to be doing in the future.

I think it's also -- would be a tremendous way to actually link the performance of students within the classrooms if they realize, you know, there's actually meaning to going to class everyday; it's not just something that you have to endure in order to get a diploma, you really have to be thinking about the fact that working hard today in class, learning what you need to know, can actually potentially pay off.

So if you do want to go to college, it's not just a matter of having to go to class everyday, you should actually be thinking about what you're learning and realizing that this may actually have some payoff in the future.

And I think there's really -- quite often in schools they're sort of lacking his connection and so part of -- I think part of the reason why when you're pushing high schools to really sort of say, you know, part of the

college for all mantra is the fact that you're giving students the means and you're building a culture around the idea of college going and providing different types of support, both academically, socially, and all of these different pieces of, you know, filling out your FAFSA, how do you fill out college applications, how do you think about college, so that there is more college knowledge embedded within the schools and the students are sharing it with each other, the teachers are sharing it with them, and all of the adults within the school are sort of working toward a common goal of making sure that all of the students within the high school are prepared for the future.

MS. ROUSE: Well, on that note, I think I would like to thank our panelists for a very lovely, lively, and informative discussion. And I thank all of you for attending.

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CERTIFICATE OF NOTARY PUBLIC

I, Carleton J. Anderson, III do hereby certify that the forgoing electronic file when originally transmitted was reduced to text at my direction; that said transcript is a true record of the proceedings therein referenced; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were taken; and, furthermore, that I am neither a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

/s/Carleton J. Anderson, III

Notary Public in and for the Commonwealth of Virginia

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Expires: November 30, 2012