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IS OUR STAGNANT SCHOOL SYSTEM ENDANGERING OUR NATION'S FUTURE PROSPERITY?

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P R O C E E D I N G S

MS. RIVLIN: Good afternoon. I'm Alice Rivlin, and I have the pleasure of introducing and moderating this event. We are here to celebrate and discuss an important took called *Endangering Prosperity: A Global View of the American School* with three distinguished authors. It's a Brookings book. It's not a long book, and I urge you to get a copy and to read it.

Before we start, let me say that we will have a question period at the end. We are eager to hear what the audience would like to know, and there are index cards available for you to -- I think they're on all seats -- for you to write down questions. We thought that would be the easiest way to do it. So when a good question occurs to you as you're listening to these folks, write it down. We don't guarantee to get to all of them but we will try.

We are about to hear a message which is designed to shock you. At least it would be shocking to Americans who generally think we have a pretty good country here. We're on the forefront of economic development. We do most things right or at least a little better than a lot of other places. But the message of this book is our young people are not learning the skills in school that it will take to keep the American standard of living high and growing and right up there with other places in the world.

Now, you may not find that shocking if you've been paying attention for the last few years. You already know that American kids don't do that well compared to other countries on standardized tests, but you may have thought, eh, we've got a more diverse population. We test more students who would drop out in other places and our scores are being dragged down by a few

really difficult inner-city areas which have multiple problems or some other thing. Or even that it's kind of nice that other countries are finally catching up with us because that will benefit everybody in the world. Or you may have thought that economic growth is complicated and right now we ought to be focusing on getting our current macroeconomic house in order and not doubling down on some particular investment that will only have a long-run payoff.

But the message of this is not really about keeping up with other countries, although global comparisons fit in it; it's about the worrisome fact that most U.S. students are not proficient enough in math and reading and science to aspire to the knowledge-based jobs that will enable them to earn good incomes and have productive lives in the future. That matters for them and it matters for the influence of our country and the ability to do the things we want to do here and around the world. The analysis shows clearly that these skills matter for economic growth. That's where the comparisons come in. And excuses like diversity and city problems and higher testing rates all drop out. Our kids are just as proficient as they ought to be coming out of the bulk of American schools.

So if you buy all this, and I suspect you will, and you're about to hear it in a very cogent form, then we have to move on to the big questions. Why aren't more people more worried and worried enough to do something effective about this? And what should be done? We have a distinguished panel that will help us with those questions.

But first, let me introduce our principal presenters, the three authors of this book who are going to give their message in short form. Ludger Woessmann, who is a professor of Economics at the University of Munich and head of the Department of Human Capital and Innovation at the Eiffel Institute of

Economic Research and a coordinator of the European Expert Network on the Economics of Education.

Eric Hanushek, who many of you know, is a senior fellow at the Hoover Institution at Stanford University. He's been a leader in the development of economic analysis of educational issues for quite a long time and has been frequently called on for help in figuring out the question of what do we do now. His pioneering analysis in measuring teacher quality through growth and student achievement forms the basis for current research into value added by teachers and schools and is actually influencing -- I know because I've seen it -- what happens at the local level.

And Paul Peterson. Paul used to be here at the Brookings Institution. We've known each other for a long time. Paul Peterson is professor of Government in the Department of Government at Harvard University. He directs the Harvard program for Education, Policy, and Governance; is a senior fellow also at the Hoover Institution at Stanford; and editor-in-chief of Education Next. Paul is going to start off and then move to his colleagues.

MR. PETERSON: So let me see if we can get the screen up -- the screen down, I guess it is.

Thank you, Alice, for setting the stage so well. It's great to be back here at Brookings to discuss such an important topic and I find Brookings such an appropriate place to have such a discussion because Brookings always focuses on the long-term important issues, not necessarily the trendy issues of the moment. So thank you, Alice, for that introduction.

Now, if we can get that funny thing on the screen to go away. I probably very badly put it up there by making a dreadful mistake. There. This is

the 21st century skill I haven't acquired yet.

But, you know, we have been talking about rising to the top internationally for a very long time. You can go back to Ronald Reagan for the first Nation at Risk Study, but probably George H. W. Bush and all the governors gathering together in 1989 to commit themselves to bringing the United States up to the top of the world by the year 2000 is a key moment. And President Clinton carried the banner forward saying much the same thing. There was very little difference in the commitment of the Bush administration and the Clinton administration. George W. Bush focused on No Child Left Behind but was no less committed to bringing everybody up to international standards, and our current president says we know what it takes to compete for the jobs and industries of our time. We need to out-innovate, out-educate, and out-build the rest of the world. And he's been steadfast in that commitment. And we're going to hear more about that later on today.

So there's no question that the political leadership of this country, both nationally and at the state level, has articulated a strong commitment to the goal of the United States being one of the leading nations of the world. But yet, if you look at the actual performance of this country, in mathematics especially, although it's true in other subjects, to some extent or to a considerable extent, but in mathematics it's quite dramatic that if you compare the United States to the other jurisdictions that participated in the most recent PISA study -- there's a new one coming out later this year but the one that we have available at this time, we come in number 32. Whether or not that's going to change much in the next few months is something we're all wanting to see, but it's pretty unfortunate that 32 percent of our students are proficient in mathematics, placing us number 32. So

we think that number 32 is a pretty interesting number.

Now, other countries around the world have a much higher percentage. The Koreans, 58 percent. You can see all the numbers there. The Germans, 45 percent. The Canadians, 49 percent. Australia, 44 percent. You can see that 32 percent, which is where the United States is, it was way down compared to countries that we ordinarily think we should be competing with very successfully.

Oh, yes. This is how they do it in Finland, just in case you wondered how to get to the top level, whether that's a possible solution there, but maybe not. But if you look not just at the percentage proficient but the percent performing at the highest level, which is a way of saying, you know, it's not only the fact that we have a large minority population, and it's not only the fact that our disadvantaged students are not being well-educated, but even the students we think of as our best students are not being brought up to the highest level of performance. Only 7 percent of our U.S. students are at the advanced level in mathematics, making it number 30 among the countries in the world. We're not 32, but we're at the 30th rank.

So other countries do much better. In Korea, 20 percent are performing at the advanced level. In Finland, 16 percent. New Zealand, 14 percent. Canada, 14 percent. Germany, 13 percent. Australia, 12 percent. The United States, 7 percent. I mean, that is really shocking that our neighbors to the north, twice as many or as a percentage of the population are performing at the highest level. So that's how they do it.

But, you know, quite seriously, the United States is way behind. And is it catching up? Maybe we have gotten -- maybe we were behind but

maybe we're closing the gap. And so one of the things we've done in this study is to look at how rapidly improvement is taking place in the United States. And there is some improvement in the United States between 1995 and 2009. But there's been improvement in countries across the world. And the rate of improvement in the United States is right at the middle. Twenty-four countries are improving at a more rapid rate as best we can tell. Twenty-four countries are improving at a slower rate. We're right in the middle of the pack.

So here are some of the countries that are growing very rapidly. Some of them are in Latin America. Some of them are in Eastern Europe. But even Germany, which is a leading country, a high-performing country in the first place, has been improving quite dramatically in recent years. So we are fortunate to have Ludger Woessmann. Maybe he'll give us a comment on how the Germans made this move forward that we have not been able to make. So there we are, well down the list in terms of the rate of improvement.

Now, the price we pay for this is very significant, and I want to turn to my co-authors to lay out that case in some detail.

Ludger.

MR. WOESSMANN: Thanks so much.

So as we see, performance isn't so good. Does it matter? And as you can, some of the business leaders say, yes, I can attest your high school math teacher was right, algebra matters. Does it matter for the economy at large as well?

So the data you saw so far that Paul has presented derives for the state comparisons on the NAEP, your National Assessment of Education Progress -- students in eighth grade, they were referred to as kind of the class of

2011 to the 15-year-olds a couple of years later on the international Program for International Student Assessment, the PISA test.

Now, PISA isn't the only or the first of the national student achievement tests. There have been TIMS, a very similar study that is still ongoing, but actually, it goes back much further since the mid 1960s, countries have started to do international comparative tests of math and science. So what we did is try to combine all these different tests from the '60s to the early 200s to get like a proxy for the average achievement of the current population in terms of math and science achievement and want to understand whether that's at all related to the economic growth of the different nations. We look at economic growth over the long run, since 1960 -- over 50 years, 49 years of data. And look at the growth in GDP per capita, the average annual growth there. And if you put these two things together, and the only other thing that's behind this picture that you don't see is that you know for a fact that countries that are far behind initially in 1960 have it easier to grow because they can first start to imitate what other countries have been doing and the ones at the top may have to do the innovation part and you see this convergence there. If you take that out, this is what you see. Down here you have these international test scores, how well countries have been doing on these tests, and here you've got the average annual growth rate and your GDP per capita.

There are two main things to note about this picture. The first thing is all countries are pretty closely grouped around the line, meaning this model can explain actually more or less most of the difference of why some countries have grown in prosperity and others have rather stagnated over the past 50 years. And you can see the U.S. somewhere right in the middle down

here. Actually, as is Germany.

The second thing is the line is pretty steep. So countries that have performed better really have dramatically higher economic growth rate over the very long run than countries that have performed poorly down here. So you see a few of these Asian countries down here, lots of others in the middle. You see a few countries like South Africa or Peru down at the bottom. It is nearly perfectly explained by the fact that the countries up here have very well educated, highly skilled populations, whereas the ones down here do not have that.

Now, of course, lots of things could be behind here. Isn't this a causal thing? We've done quite a bit of research on this so you could imagine that we tried to think of this as meaning that better educated people give you more economic growth. But couldn't it be the other way around -- growth allows you to spend more on education or could (inaudible) factors be around specific Asian values that explain why they have higher test scores and higher growth?

We did quite a few things on that and some of that is really just for people who try to enjoy econometrics, which I hope not everybody in here is. But let me give you a couple of things. So one thing you can easily do is actually break down the timing. So you look just at test scores that have been done until 1984. And then look at the economic growth since 1985. So you really have test scores that all precede the actual growth rate. Or can it be the other way around, that growth explains test scores? What you would see is actually exactly the same picture, only that it's even steeper literally.

A second thing that we did to think about, is it all about specific institutions of countries or cultures of specific countries? We just do away with

any level comparisons across countries and just look at how countries changed over time. So if the whole story is true, you should see that if a country improved over time in terms of its test scores, then did its growth rate improve? And actually, it is nearly a one-to-one association between meaning the countries that managed to increase their test scores indeed increased their economic growth over time.

One additional aspect of this year is until recently what researchers have done is tried to measure the education of a country simply by the years of schooling, of high school, of college that on average the population has. Now, if you do account for how much these kids have actually learned in school, which we mean by these test scores in math and science and you just keep the remaining variation and the years of schooling, the picture you get is exactly this. So here is the years of schooling. Here is the economic growth rate. You've got like no association whatsoever, meaning education, of course, and the length of education, of course, is very important for economic growth, but only to the extent that it leads to actual learning. So it's not about sitting in school for a long time; it's about what you really learn and take away from it that matters for economic growth.

So how much does it matter? How important are these things? One way we could do it was try to do projections or simulations of what would happen to your GDP if you achieved the performance levels already achieved by other countries and we just take the picture you just saw. Assume that the historical association between test scores and economic growth will keep on in the future. Let's assume that and then let's assume what's going to happen to your economic growth if you manage to actually improve the test scores in

school.

So, of course, this won't be immediate. Any relationship between education and the economy has to be long term. I mean, there's at least three factors why. The first thing, I mean, any reform in your school system will take time. Actually, in the projection we're going to do we assume it's going to take 20 years until you reach another level of performance. It won't be overnight. But secondly, more important, if you improve schools right now today, it won't have any impact on your economy in the next several years because the kids are still in school. So this has to be very long run until these kids really enter the labor market and then make a big chunk of the labor market.

And the third thing is the economy has to adjust to any differences. You think about this as meaning like people being more creative, being more innovative. It means that actually the whole economy will adjust to these new technologies. All this takes time and that's built into these simulations.

So the one simple thing to do is just trace the GDP per capita of your country that you can expect at any point in time in the future. This is what this picture does. Here is the GDP per capita and here we go down from today. Let's assume we're going to do a reform, get it done today. It takes 20 years to fully enact. And then how is GDP per capita going to trace over the next 80 years, which is a long-run perspective. It's basically the life expectancy of a child born today.

And without any reform, you still actually will get economic growth, like we just assumed that what you generally saw in terms of potential growth over the past 20 years, so you will be getting richer even without any reform. But what would happen if you managed to improve, for example, to the level of

Germany in the sense that the pictures that Paul has presented to you. It's like some 25 points on the PISA scale. Given the historical experience, I would actually give you this second line so you would for a while actually not see much but then actually you are nearly 20 percent higher at the end. Or you improve to the Canadian level, 20 PISA points higher or even to the Singapore level, which would really mean a big thing.

What does it mean in terms of long-run prosperity? Of course, any dollar you get down here, I mean, this is all in real terms but nevertheless, you want to discount the future. If you do all that and try to pull down what this means on average, and let's take this middle of the reforms that you reach Canadian level, it would literally mean that on average over these 80 years, even though initially it's not a big deal, in the end it's such a big deal that on average over these 80 years the income that every worker receives every year is 20 percent higher than it would be without any reform. Or the total value, if you just discount all these future benefits that you've seen of sensory reform would be $77 trillion, which is like 55 -- sorry, five times today's GDP. If you relayed this to the most severe recession that we've seen since the Great Depression, which has been estimated at around $4 trillion since 2008. If you compare these numbers you see what a huge impact education reform can have.

Now, of course, any of these future projections are somewhat uncertain. So would it be $80 or rather $70 billion of cost? We cannot be sure. But even if it were only half the size of this -- and we're pretty sure that that can be based on the historical experience -- these numbers are so huge that you've got to care about this.

MR. HANUSHEK: So the approach or perspective of the book is

that the numbers that Ludger just showed you are so large that it warrants taking a serious look at how we react in terms of our schools. And we put a lot of emphasis on the schools as the instrument by which we can improve our performance.

Now, what we also do in the book, while not choosing a way to fix our schools -- we don't spend much time on that even though we've all had certain presumptions or statements about what we think is appropriate -- but what we did try to do was to respond to a number of criticisms that we've heard over time about this analysis.

So I've listed five that I think are important that have been talked about. First, tests don't mean anything. It's other things that count. Second, society, and not schools, must change. Thirdly, U.S. growth really doesn't depend on achievement. We've been doing quite well, thank you. Fourth, the solution is that we just haven't put enough funding or money into the schools. And fifth, the problem is simply intractable. So that is the range of opinions. They're not all consistent as you can tell.

Let me just talk a little bit about them.

The first one is that there's been a lot of criticism of standardized testing since it began. Testing began at the beginning of the 20th century actually, and more recently people have said, well, it's not really testing; it's called noncognitive skills, how people get along and so forth with others and how they work together. We know of no evidence to suggest that having better skills harms you in noncognitive areas in your ability to get along with other people. In fact, there's some evidence that they're complimentary. But what you do see from the pictures that Ludger put up, is that tests really have an impact, a

measurable impact in relationship to economic growth. So we just assume that that's the case, which I think is right.

But the bigger question then that people get into is the second one which is society and not the schools must change. And people have objected to what we've done by saying, well, you're blaming the schools, but in fact, we know that the U.S. has higher poverty rates than other countries in the world. It has a bunch of other problems -- more immigrants in the population, and so forth. So you shouldn't blame the schools.

And we want to discuss that partly because we're not blaming the schools. We recognize that probably the most important input to achievement is the kid himself, the student. The second most important input is probably the family. And then third comes the schools. But, but, if we think about this as a public policy issue, the thing that we know how to change and the institution that we have given the responsibility of this is the schools. And so that's why we concentrate on schools -- not to cast blame but because that's our hope.

What we do see, by the way, is that if we look at which -- whether schools in the past have been good at improving at the bottom end goes along with improving at the top end. Schools that do improve have shown that are on the bottom is reducing those that are below proficiency and the top is essentially getting to advanced levels. It's states that do well at this, like Massachusetts, do well at it. And so it's not an emphasis on the bottom or the top that matters but both.

Now, the third argument that leads to the complacency I think is that the U.S. has done fine. Even if our schools or our achievement has been mediocre for the last 40 years, the U.S. has done well. And I think that that is

absolutely true. We are about three-quarters of a percent per year above Ludger's line in terms of U.S. growth compared to what you would expect from our achievement level. We attribute this to a number of factors. First, we've had the best economic institutions in the world -- free and open labor and capital markets, relatively limited intrusion of government, good property rights, and a variety of other things that economists think are important in growth, and we've had that. Secondly, we've had universal secondary schooling for longer than all the other countries of the world. Thirdly, we have the world's best universities by most standards. And fourth, we borrow skilled people from abroad in terms of immigrants who come into our schools and then stay or are induced to stay.

The point is that you can think of all of those advantages as going away relative to other countries. Other countries are working on each of these dimensions so that the U.S. is now 17th in the world in terms of the percent of students completing secondary schooling. It's no longer the top, and you can go right down the list. We have concerns about what the immigration policy of the country will be in the future, whether we can, in fact, rent these good students.

Fourth, we have the solution of money. And what we do here is just show the history of the last 20 years. We can look at states' growth in terms of how much they spent, how much they've increased expenditures in real terms over the last 20 years, and we can look at how much their achievement has increased according to the NAEP test. And what you see is this flat line; that states that spend a lot sometimes get good results, sometimes don't. States that spend a little sometimes get good results, sometimes don't. There is no consistent pattern here. The star, of course, is Florida, that spent in real terms virtually no more in 2010 than it did in 1990 and yet they've been one of the top

four states in terms of improvement. So it's how money is spent, not how much.

Finally, let me talk about the problem with intractable. Ludger gave you a few examples of countries -- or Paul -- did of countries that had grown very rapidly, so countries like Poland or Germany have expanded rapidly. They show it's possible. But we also have experience in the United States to suggest that it's possible. What we've done here is put up two states -- Maryland and Massachusetts. Maryland is the fastest growing state in terms of NAEP performance over the last 20 years. They went from 26th rank in the states to fifth. Massachusetts is also a fast-growing state going from seventh to first. If the entire United States had been able to reproduce what Maryland and Massachusetts had done, we would, in fact, be near the top of the international rankings.

What's happened? Well, there's the other bad half of this story. Iowa is an example that everybody should understand. In 1992, Iowa was first in the nation in terms of achievement by the NAEP scores. They managed to show that you can go down to 22nd by policies of keeping your schools constant without doing anything, which may be just complacency. Oklahoma, in the middle, does about the same, showing that you can go from 19 to 32. It's not where you start, but if your schools are improving, you improve. And then there's Iowa and Oklahoma and a number of other states.

So that's our complete message. It's possible, by international experience and national experience to improve. It's extraordinarily important for us to do so.

MS. RIVLIN: Thank you very much, gentlemen. And now we have a panel to look at these results from different points of view and react to

them and then we will get you into the act with your questions, which I hope you're already thinking about and writing down legibly, of course, because you went to a very good school, so that I can read them. And we will collect them after a while.

I think, as I mentioned, there are really two big questions about these results. One is, why aren't people more worried about it? We don't have a full-court press to improve the schools in the United States. Why not? Actually, I suspect that part of the problem, and it's illustrated in this book, is that the message has been a bit abstract and academic and not the kind that propels people to action. It's in terms of growth of GDP, very abstract concepts to most people, and keeping up with other countries. Individuals may not see how much that affects them. Unless this message can be recrafted to one that connects proficiency to better jobs and futures for individual Americans, I don't think we will galvanize priority action. Also, individualizing the message makes it easier to make clear that one of the reasons for improving the schools is to increase economic mobility, the ability of people to move up in the income distribution over time.

The other part of the message that I think needs to come across to get action is that it's not just about high schools. It's also about adults. If we're going to get -- to improve proficiency of our labor force, we can't wait until people now in school enter the labor force. We've got to think hard about improving the skills of the people who are already there and will be there for quite a long time. That includes Paul and me learning how to do these devices.

The most serious question is, what is to be done? The authors suggest some things in this book but they didn't -- they suggested improvement

is possible. States have done it. They don't talk much about what they did. So I hope that this next part of the program can move to those questions.

We have leading off Maureen McLaughlin, whom I've known for a long time. I reminded Maureen a few minutes ago that I was at her wedding 30 years ago, and Maureen has been an impressive figure on the education scene now for quite a while. She is currently senior advisor to the secretary of education and director of international affairs at the U.S. Department of Education. In this position, she has led and coordinated the department's international activities and engagement for the last three years and has spearheaded the development of its first international strategy designed to strengthen U.S. education and advance international priorities. And I hope we'll talk a little bit not just about international comparisons but about what we might learn from other countries as we look at what they have done.

Maureen.

MS. MCLAUGHLIN: Thank you, Alice.

And thank you for the opportunity to be here on this distinguished panel.

I'd like to take up the challenge that Alice mentioned, which is to talk about what we're doing at the Department of Education in terms of what we're learning from other countries that we're factoring back into our policy and our thinking and before I get into those details I'd really like to say in a nutshell what we've heard in the presentations today and from what Alice has talked about is our educational performance is not sufficient. It's not sufficient for individuals, it's not sufficient for the economy, and that that's something that we very, very much need to both improve the average performance and we need to

reduce the gaps. We need to improve the equity as well.

So then we look, and I think really we have put much more attention into looking at the international picture over the last couple of years. In fact, I'd say that it's been a pretty unprecedented level of looking at other countries to see what we can learn and that the strategy that we developed for international that Alice mentioned has as one of the three key objectives learning from other countries to improve the educational performance of our system here at the U.S. And we've done this in a number of ways. So let me talk about that.

Benchmarking, which is what we've seen here today -- seeing where we stand up relative to other countries -- is really the first step. It allows you to see where you are, see how you perform, and then the question is how do you delve more deeply behind those numbers to see what other countries are doing, how they're doing it, is it applicable to the United States, how might we transfer that learning into what we're doing here in the U.S..

And I think one reason that people don't pay as much attention to some of these results is that usually in the U.S. the international results are reported on a national level. So it's pretty easy if you're in Massachusetts of you're in Maryland or you're in any other state to say, well, that's the whole country but it doesn't apply that much here at the state level. What we've seen in this report are estimates of what's happening at the state level, but if we were able to get state data, over time of a similar kind of nature, I think that would help bring the conversation and the results more clearly down to a state level to be able to say how do I, in this given state, perform to another country?

Some of that is happening. In the recent TIMS study that we heard about, nine states did participate. Massachusetts, which was mentioned

here today, came in -- their eighth grade students in science came in number two among all of the education systems that participated in TIMS with Singapore ahead of them. So, yes, it is doable on a national level and it is doable on an international level.

In the next PISA results, which will be released in December, and it will be interesting to see -- more than interesting -- important to see how the U.S. does in the next round of PISA. Do we stay sort of where we've been over time, which is average, middle of the pack, not much improvement or do we see a different picture? That will be December when we find out. And in that, three states did participate, so it will be a way for those particular three states -- Maryland, Florida, and Connecticut -- to be able to use it and the results more at the state level to effectuate change.

So what kinds of things have we done in the Department of Education in terms of learning from other countries? One is that when we looked at other countries, one of the things you see is that the countries on the education systems that have performed well tend to have high standards. They apply those high standards to all and they stay the course in terms of their education reform. So rigorous, internationally benchmarked, career and college-ready standards are a key part of what we're trying to do at the Department of Education, and that effort is reflected in what the states have been doing as they came together to craft the Common Core State Standards, which almost all of the states and the District of Columbia have adopted. These standards are, again, internationally benchmarked, highly rigorous standards, that set the same goalpost for all states. States implement them differently but they set the same goalpost.

And if you look at the results either in NAEP or the results that were reported here today and you see the differences by states, some of that reflects the different standards. You have a different goalpost if you were in one state versus another. The Common Core State Standards set a goalpost that would be the same across all of the states. That is something that we've learned from other countries, and Race to the Top helped to incentivize states to pick up and be in the common core, but states that didn't get Race to the Top money and put together proposals frequently went along and implemented those proposals even not getting Race to the Top money. No one who was involved in the development of those standards back some number of years ago could have predicted, I think, the rate in adoption of the Common Core State Standards. So that's one less that we very much learned from other countries.

Another is about teaching. We heard mention of teachers today, and teachers are clearly the most important factor sort of out of the family, et cetera, about learning is the teacher. There's lots of evidence that a high quality teacher has long-term ramifications for students' performance. Yes, are there differences in the home? And yes, are there issues of poverty and the kinds of things that have been mentioned? There are those differences, but teachers and good teachers can help to overcome those differences in opportunities.

And we started something in 2011, which was the first international summit on the teaching profession. And Secretary Duncan, together with OECD and Educational International, which is the umbrella group for teacher unions worldwide, and with our teacher unions and chief state school offices here in the U.S., brought together the ministers and the union leaders of the high-performing and rapidly-improving countries around the world. And the

ministers and the teacher union leaders sat at the table together to say what is it that we all can learn from each other about how to elevate and enhance the teaching profession in order to improve educational opportunities.

That was such a successful endeavor and we had no idea entering it how it would all work out, the countries asked us to hold it again in 2012. Then, the Netherlands did it in 2013. This year, New Zealand is. It has become, I would call it, an international community of practice for learning about what you can do to elevate, enhance, and improve your teaching profession. Out of that came some very direct impact on our policies.

This here is a publication which you could get off our website called *A Blueprint for RESPECT*. This is an initiative which is to elevate and enhance the teaching profession, and RESPECT stands for Recognizing Educational Success, Professional Excellence, and Collaborative Teaching. And as you look at the pieces in here or if you read this report, you can see lessons distinctly drawn from what we learned from other countries. Countries that perform at very high levels tend to attract their teachers from the top high school graduates. They tend to prepare them very well. They tend to have different kinds of career opportunities over a lifetime that allow you to be able to do different things as a teacher and to progress. They tend to pay well. There are a variety of kinds of things that are similar conclusions across very different educational systems that really have helped to have strong teaching professions, strong teachers, and a highly respected profession. So that is very much reflected in here. And this is something which came directly out of the international summit and also comes out of a statement that we worked on with the unions and with the chief state school officers on transforming the profession.

So this was very much of a joint activity of the states, the unions, and the Department of Education. So that's one clear example of something that we've done.

Going forward -- and there are some other examples. We've also done quite a bit of work with countries about how do you turn around your lowest performing schools, and we've gotten examples from countries of what they do. So Shanghai, for instance, takes teachers and principals from high-performing schools and partners them with lower-performing schools, sometimes even transfers the people into that school, draw up a contract, and they work to improve the performance of the lower-performing school. They build into the career track for the teacher the expectation that you would teach in one of the lower-performing schools as well as the higher-performing schools. So these are just a couple of examples of how we have taken what we've learned from other countries and incorporated them into policy.

Going forward, Alice mentioned about adults, and there is a new international assessment coming out on October 8th called PIAAC, which is the Program for International Assessment of Adult Competencies, and this is looking at the education, skills, and jobs of people in the U.S. population between the ages of 16 and 65 to get a comprehensive picture on, again, what education levels they have, what skills they're using, how they have developed them, and what their employment prospects are or where they're working, where they're not working, what skills they're using. This is a real effort to address what Alice mentioned, which is not only do we have to care about our 15-year-olds or younger children; we have to care about the whole population and the people who are out in the workforce now. Also, there will be a new PISA, and that

comes out in 2012 (sic), and we really will be paying very careful attention to that and to what's in there. Secretary Duncan will again participate in the international release with the head of OECD to bring extra attention to those results here in the U.S.

And I want to say that in the learning from other countries, it's a two-way learning experience. While we are learning from other countries about what they do, we feel better than we do, they're also learning from us, and they're very interested in certain things that we're doing. They're often interested in the creativity, in the innovation. We were meeting with the Singapore minister or the then-minister of Singapore one time and the secretary said, "Well, why do you come here to look at our education system?" And he said, "I really come and I look at the best schools in your country. What you're doing in your best schools. And I'm learning about what it is that's in your best schools, in your best colleges, and I'm taking those ideas back and trying to implement them in my country." So again, it is a two-way street on learning, and that is an example of both learning and then a deliberate implementation and reflection of those learning put into practice.

So again, this is my last sentence, as Rick said, this is possible. We can see it internationally. It is possible to raise educational performance and reduce gaps, and we've seen it nationally. So it is doable. It's not easy, but if we're committed we can do it.

MS. RIVLIN: Thank you very much, Maureen, for a very helpful presentation.

We have two more commentators. One of them is the commissioner of education of New Jersey, who actually runs a state school

system, but I don't believe he is here yet. He was coming on the train from New Jersey, so I will put ahead of him, if I may, my esteemed colleague from the Brookings Institution, Isabel Sawhill. Belle is a senior fellow in the Economic Studies Division here at The Brookings Institution. She serves as co-director of the Budgeting and National Priorities Project, which is dear to my heart, and as co-director of the Center on Children and Families. She also started a very ambitious project called the Social Genome Project, which seeks to determine how to increase economic opportunity for disadvantaged children.

So let me ask you, Belle, to give us any comments and thoughts from your perspective.

MS. SAWHILL: Thank you, Alice. And Maureen, I'm so glad to hear that the department is looking at the experiences of other countries and having the kinds of meetings that you just described. I just can't imagine anything more important. I say that because I've been frustrated for a long time about the fact that we are so self-centered here in the U.S., so self-referential that we never think we can learn from other countries and that's been a big mistake. And it sounds like we're finally correcting it and this book is a big help on that front as well.

Now, the problem with coming last on a panel like this is that everything has already been said. And the only thing is not everyone has said it so I will put in my two cents in my own words. I'll say just a couple words about the problem itself, and then a little bit about the diagnosis, and then finally what should we do. By the way, I think this is a terrific little book. And by the way, I use "little" in an admiring way. I am so tired of great big, long tomes that nobody ever reads, and the wonderful thing about this book is it's very well documented

and it's very analytical but it's written in English and it's highly readable.

If I could put in a brief advertisement, our book that has subchapters or a big chapter on education is also out here called *Creating an Opportunity Society*.

I think on the problem, I really agree that we are dead in the water as far as education is concerned in the U.S. You know, we're not just dead in the water, we're not just treading water, we're actually sinking. And, you know, the wakeup call that's in this book is important just for that reason alone. I also think the book makes a really important point that we have to focus more on what kids are actually learning. We put way too much emphasis on how many years of school they've completed or how many credits they've accumulated or whether they graduated or not. What differences does it make if you graduate from high school but you don't know much? And employers are beginning to hire college students to do jobs that used to be done by high school graduates because they no longer trust what high school graduates actually know and can do.

I also agree that the benefits of improving education are really important. They can have a huge impact on standards of living and on economic growth, but they're going to come in the long, long term. Unless we work on the adults that Alice talked about and Maureen mentioned, it's at least 18 or 20 years before we begin to see the full results of changing what's happening to kids that are in school now. And of course, our political system -- and this goes to your point, Alice, I think -- is terribly myopic. I mean, I'm beginning to think they just look backwards; they don't even look forward a couple of years. Well, I don't want to be too skeptical here.

Now, on diagnosis or, you know, why do we have these

problems? The book talks a lot about teachers, and there is all of this research now that says -- and you've already heard this -- it says that having an effective teacher in the classroom can make a huge difference. You know, if you have an effective teacher in the classroom for, what, three to five years I think it is, you can actually close the gap between less advantaged and more advantaged kids. I Mean, it's amazing what you can do with good teachers. And they also matter from a political perspective. They are what the book calls a vested interest and sometimes are a barrier to innovating and changing the way that we do things because I don't think it's that teachers don't care about their kids, they do, but their job is also their job. It's the source of income for their family often. I think we do have to be -- to not let them off the hook but be a little bit careful about how much emphasis we give to that. But I'll come back to that.

Now, I do believe that learning is a cooperative activity. The teacher may be a really critical actor in that process, but students and parents matter as well. I think Rick said this. He said, you know, first comes the student, then comes the family, then comes the teacher. And I think what he was saying is, well, we know how to change what goes on in schools -- and this is the theme of the book -- and we don't quite know how to change the students and the families and the neighborhood and so forth. I just want to say that I would like to see more discussion of this whole issue of how much you can accomplish without changing the very large gaps that we have in this country between the least well off and the best off. We are, you know, we know we have growing income inequality but we have growing inequality in a whole variety of dimensions -- family structure, education, neighborhoods, where people live. We are becoming a very divided society, and I think that has ramifications.

The book talks about a study that was done by Richard Rothstein and a colleague that tried to look at these international differences and say how much of the difference is due to these class gaps and how much is due to the education system itself? And the finding was that you could explain half of the reading differences from adjusting for these class gaps, the greater inequality that we have in the U.S., and I think a third of the math gaps. So I think that bears a little more discussion because I think we've got to do something about that as well.

I think that it also suggests that we're going to have to have schools that work differently with student and parents, and by that I mean think about some of the best charter schools, some of the KIPP Schools for example where one of the things they're doing is not only getting innovative, good leaders and better teachers, but they're also asking the families and the students to make more of a commitment to the learning environment. You know, longer school days and years and much higher expectations and more rigor and so forth. And that I think should be telling us something because not all charter schools, by the way, have done well, but the best have done some amazing things.

Finally, I was intrigued by the state differences that were talked about earlier, and Rick talked about Maryland and Massachusetts versus Oklahoma and Iowa. In the book, they talk about the four top states being Maryland, Florida, Delaware, and Massachusetts, and they do a little analysis that shows if we could replicate the performance of those four top-ranked states in the other states, our students would look as good or better than they do in Canada. And they earlier showed in the book that if we looked like Canada educationally, we wouldn't even have any long-term debt crisis. By the way, I'm

a little skeptical about that but we can come back to that.

So what are those four states, or those two top states that Rick talked about, doing right? I think New Jersey was high on the list as well if I remember, and I'm glad we are going to be hearing more from New Jersey. I want to hear what it is that these states that have done well and have shown this big improvement are doing right.

Now, if I had to come up with a list right now of what to do it would be a pretty standard list. I don't know as much as the people who wrote this book, but on my list would be early childhood education. The Head Start program has been disappointing based on the best evaluations of it but there are state-based programs and other high-quality early learning programs that I think make a huge difference for getting kids, especially the less advantaged, the ones that had the poor home environments, ready for school. And the administration is currently recompleting the Head Start dollars and partnering with the states on this front, and I really think that the president's proposals here are very good. Unfortunately, they're probably not going anywhere.

I would support more charter schools and more innovation of all kinds. I would support paying teachers more, considerably more than we do now on average but linking pay to performance. What other profession is there that has standardized rates of pay based on years of experience and a couple of credentials and not much else? I mean, it's just crazy and it goes to your point about the need to elevate this to a real profession and have the respect for it and the kind of career trajectory that you see in other professions.

National standards. Maureen mentioned this. Couldn't be more important. Crazy that we have state-based standards for education in this

country, and as Maureen said, we are now moving towards national standards, the so-called Common Core Standards. And they will be more rigorous and they will be benchmarked. I think there are going to be all kinds of problems with implementing them and there may be a huge political pushback. And we had a talk about -- I'd like to hear more about how that might work.

I think we need to reform our schools of education. I will just leave that on the table for now, and I think more Race to the Top challenges to the states would be excellent. I think the existing Race to the Top for K-12 has done a lot of good and now there's a new Race to the Top fund for higher education, which I won't go into but I think using what federal dollars we have to leverage innovation is much more important than using those dollars for some of the other things they're being used for right now.

So I think I got through my -- oh, well, I was finally going to say apropos of my comments about diagnosis -- I've maybe gone too long here -- is school reform can't solve the problems we have in the education system we have by ourselves, and that would lead me to a whole lecture on what we can do about families, especially the less advantaged families, but I won't give you that speech right now since I think I'm out of time.

MS. RIVLIN: Hold that lecture.

MS. SAWHILL: Yes.

MS. RIVLIN: I am delighted to say that we have been joined by Commissioner Christopher Cerf from New Jersey. I'm glad, I assume that the Amtrak came through.

MR. CERF: I got here.

MS. RIVLIN: We're delighted that you are here. Commissioner

Cerf has a very large responsibility for actual students in real schools. He, as commissioner in New Jersey, oversees 2,500 public schools. That's 1.4 million students and 110,000 teachers. And that's a big responsibility.

Between 2004 and 2009, he was deputy chancellor of the New York City Department of Education, where he oversaw organizational strategy, innovation, labor relations, and other matters pertaining to recruiting, supporting, and developing that huge school system. And before assuming that role he served as Joel Klein, the city chancellor's chief advisor on transformation.

Just to give you a feel for the variety of his own experience, before that he served for eight years as president and chief operating officer of Edison Schools, which manages 150 public schools in 19 states and provides other educational services.

So we are delighted that you've been able to get here. You have missed part of a spirited conversation but this is just the right moment to hear from you. So let me turn it over to Commissioner Cerf.

MR. CERF: Yes, of course. Thank you so much. It is a great pleasure to be here. If I feel a little discombobulated it's because you can't will an Amtrak train to go faster. No matter what you do, it just doesn't work that way. So thank you for your patience.

And it's a great pleasure to be with you, particularly on the occasion of celebrating the publication of this very important book. You know, it methodically paints a portrait of an education system that falls short of not only our national expectations but the level of urgency that I think the challenge deserves. It's, for me, a real short of shot in the solar plexus of the sort of general self-satisfaction that permeates the political culture as well as the

literature and the complacency that sort of dominates the discourse on this.

Also, I have to say I love the way it debunks some of the many excuses that seem to be offered as ways to sort of mitigate the depth of the challenge, the most disturbing of which is that well, we would be doing better but we serve so many hard-to-educate kids, which is, of course, a euphemism in our discussion. It really demonstrates that even if you sort by that criterion, that the gaps exist, and indeed, in some respects are exacerbated, particularly when you focus on the advanced proficient. You know, we think, well, at least we're developing this sort of -- in the master class the sort of -- you know, the masters of the universe will lead the world tomorrow because we have this cadre of excellence that is excelling through the system, and that turns out to be in a comparative sense not true either.

So the book will speak for itself, and my very distinguished colleagues up here I'm sure have very wise and interesting things to say about the work itself. But the question that fascinates me and what I hope we can collectively spend a little time on today is why is it so hard to have these fundamental truths rise above the din? Because in rooms like this, you know, we all tend to agree with each other. I mean, there may be sort of minor differences of emphasis around the solutions, but in the world out there and the world in which I operate, you know, this stuff doesn't really penetrate at anywhere near the level that I think commensurate with the magnitude of the issue. And that problem, which is ultimately a political and some would argue even a communications problem, I find it intriguing. Otherwise, we're going to keep coming down to Brookings every couple of years talking about this and the world itself will not have changed anywhere near the level we hoped.

So I want to start the conversation by identifying a couple of sort of rhetorical argument that if they're not winning the day are certainly blunting reform efforts and distracting elected officials and policymakers alike. You know, one of my favorite words is "shibboleth." Anyone know that word? It ought to be a name. I figured I should name one of my children. I was thinking about this on the train, Shibboleth Leviathan Cerf. Wouldn't that be great?

(Laughter)

MR. CERF: It actually is a word with biblical roots I discovered by using my iPhone creatively today. But it's defined as a common saying or belief with little current meaning or truth. A common say or belief with little current meaning or truth.

And let me tell you, when I think about why this issue does not rise above the din, is there are a handful of shibboleths, and we will only touch on literally a subset of them that are I think blunting serious conversation, one of which is, in fact, touched on at the end of the book, which is the notion that this is all about more money; that if we could simply throw more money at the problem, do what we're doing but do a little more, do a little better, that this situation would be dramatically improved. It's a very hard case to make if you're actually interested in the facts. It is, you know, one could certainly find examples, and my state arguably is one, but there are so many counterexamples that the sort of statistical correlation seems despairingly low. I mean, no one argues that money is irrelevant, but certainly when you look at a Camden, New Jersey, for example, and something that's very much in the front of mind for me where we spend $24,000 per pupil, where the national average is give or take $11,000, $12,000 today. It's very difficult to believe that the answer to that set of educational, you

know, complete despair is to augment the funding. How well we spend it, how we spend it is certainly a question of equivalent relevance, whether it's on early childhood or different compensation and pension systems or the like. So it's very, very -- and by the way, if you look at New Jersey, in our lowest performing schools, denominated priority schools in the new sort of federal nomenclature, the bottom five percent of the schools, they have dramatically more per pupil funds. They have much richer teacher-student relationship. Their teachers are more senior and therefore, draw a higher salary. So I'm just telling you the statistical case to be made for more money. And yet that is the first thing when you scratch any American -- what do you need? More money. More money for schools. That that would be the answer to all things.

The second is -- the second, using the word I'm borrowing today, the second shibboleth is that all of our collective efforts today are organized around the best interest of children. It's one of those sort of truisms that sort of trip off the tongue of anybody who comes in touch with this. And we just have to acknowledge that emphatically that is simply not true. This is a $600 billion a year enterprise. It's second only to healthcare. It's as large as just everything else out there. It's larger than everything else out there. And it shouldn't shock anyone. You don't need to be a sort of progressive Marxist, you know, from the left guy, which, you know, I spent much of my career being, by the way, even though I'm a cabinet member in a republican administration. To think that that kind of resource pot is going to attract a lot of interest. And think who it attracts.

And by the way, these are not evil. They attract the interests of vendors. They attract the interest of employees and better job security and more compensation. They attract the interest of elected officials who want to maximize

their personal careers or their political control. But a lot of interest that this thing attracts, they are not -- you know, the VIN diagram of that does not suggest that all those interests coincide with the best interests of children. And one of the things that sort of maddens those of us who are kind of in there getting filleted every day by this is the public equation of teachers and unions and the interest of children as being absolutely equivalent terms. It's a very carefully crafted presentation by those who are superb at messaging and interest groups. But they're not. And I'll give you an example. It's the law in New Jersey that when a district has to downsize -- and that happens, particularly in the urban core where there's been a lot of exodus from the city -- that it is the law that you must retain the job of a demonstrably inferior teacher by any objective measure and preserve -- and dismiss a superb teacher if the former is one day more senior. That is the law of the land and immutably imbedded in our political culture. That just makes the point. You can't defend that law on the basis of the best interest of children.

The third sort of shibboleth out there is that we're ruining public education with assessments because schools are teaching to the tests and it's countereducational and destroying the entire spirit of the exercise. And I will say part of the nonsense that's abroad out there about the common core is energized by this mostly from the left perspective, joined by an equally radically voice on the right. It's an interesting diversion of politics.

But, you know, I taught AP U.S. History about a million years ago. I taught it for four years, and a little bit of history is valuable. So the standards movement, it started out as a response to the notion that there was basically educational anarchy out there and it was really hurting poor kids, meaning that if you didn't have a set of expectations about what a child should know or be able

to do by certain milestone ages or by the time you graduate, then pretty much anything goes, as it did by the way when I was teaching if I didn't have the sort of structure of the AP curriculum. And so it was really intended to say, look -- by the way, every country in the world has done this, is say the definition of success is a centrally owned entity. That is what constitutes success in education -- graduation, the ability to write a coherent paragraph, the ability -- whatever. However one defines it. Well, you cannot have standards without accountabilities. They're a different articulation of the same phenomenon. You cannot say, well, we expect everybody to get to this but we're never going to measure that. That doesn't work. That is just silliness to do that.

And what's happened now is two sort of quite understandable, sort of rhetorical phenomenon. First is there's absolutely no doubt -- and let me shout it from every mountaintop -- that there are negative collateral consequences to assessments. Right? In the hands -- it can lead to miseducation. It can lead to focusing on drill and kill. It can lead to focusing on the test taking techniques as opposed to content. It can lead to cheating. It can lead to all sorts of terrible things. But it's the lowest form of debate to argue from anecdotes and to draw generalizations from it. Those need to be addressed and dealt with and improved and corrected. But that doesn't mean you don't have tests and assessments, which is the most radical articulation of the view that's out there.

And the second is a phrase I would urge us all to purge from the vocabulary, which is the phrase "teaching to the tests." So let's just think about that. All right. So I look out there. I see a few people with hair the shade of mine and few people who probably would be if they weren't using chemical products.

I'm married to someone who uses chemical products and I'm allowed to say that.

We took something called chapter tests, right? We went out there and every Friday -- logarithms this week. We're doing logarithms, right? Causes of Civil War. And do you know what the teacher did? She taught the material that was going to be on the best. Okay, that was the whole idea. Right? Or take the AP curriculum. Take the AP curriculum, right? I knew that my students would be evaluated on -- they'd have to read one of *Sister Carrie* or Upton Sinclair's *The Jungle*, *Huckleberry Finn*, whatever. I think Huckleberry Finn has been purged from the curriculum according to certain people who oppose the common core, which actually is a joke. And they were asked to write a persuasive essay that enabled them to integrate some of those books into a larger demonstration of knowledge of the historical context. So that's what I taught. Right? So that's teaching to the test. Right?

So that is a conversation stopper, not conversation starter. And so we need to make tests better. We need to have them be more sensible. We need to have them evaluate critical learning skills. We need to have them aligned to the measurable evidence of college and career readiness. But the notion that we should just abandon tests, I think that's probably the most damaging thing we could do to particularly poor kids in this country. And yet that shibboleth that these tests need to be eliminated is widely accepted in the political culture.

I'm going to limit this because I'm sure I'm way over time, but I'll just mention one more.

Another shibboleth out there that plagues me and, you know, I have a robust clip file, let me tell you, is that this is all a sort of corporate

conspiracy. These guys up here. This is all a corporate conspiracy that is organized by corporate interests to "privatize" public education. Now, I'm never quite sure what that means but it is deeply held, that view. It often takes a kind of wingnuts or tinfoil hat turn, like, you know, Mark Zuckerberg is trying to make money off of kids in Newark. Now, let's just dissect the illogic of $100 million gift to poor kids in Newark that is intended to make Facebook money. It just doesn't make any sense, or that Eli Broad, who is by the way the largest contributor to democratic candidates in the country and the benefactor of such radical organizations as the United States Department of Education and the New York City Teachers Union, has as his goal the destruction of public education to replace it with the private sector.

Now, this is just flat-out nonsense. There is no one who can actually make an affirmative case in defense of that, but it taps into a deeply -- there is a wonderful book called *Anti-intellectualism of American Life* by a wonderful historian named Richard Hofstadter. Well, there's also a deeply entrepreneurial in the center of world capitalism, a deeply anti-private sector bias out there. And it is a very influential fact in political debate.

I mean, for example, New Jersey. We have 2,500 schools. We have 100 charter schools. We've closed a dozen of them. We've accepted applications for a distinct minority of those, and yet the idea that we are going to turn every single public school into a charter school is repeatedly advanced in the political discourse. And by the way, you can't drain with public school -- the notion you're draining from public education, public schools, because charter schools are public schools. But that's another inconvenient fact in this.

Philanthropy to schools is an honored and ancient tradition. It

goes back to the Ford Foundation. Carnegie, Wallace, New American schools. Do we remember that era? It's just the notion that there is a sort of opportunity -- anyone remember the Trilateral Commission? I think it involved Exxon, Mobil, and the CIA and the Mossad? I can't even remember. But the notion that there is this sort of group of sort of billionaires sitting around trying to take over public schools and turn them into private entities is a shibboleth. Return to that phrase.

So I will simply list two more and I won't go into it because I think I've exhausted my time.

The first also touched up in the book is until you fix poverty, you can't fix education. That is a very vocally -- very vocal sentiment out there. And the last I'll mention is the quote "accountability doesn't work." That is, holding educators accountable, holding schools accountable, holding districts accountable don't work. And I'll just end by saying this. In Camden, which the state just took over, 49 percent of the children to start the ninth grade graduate from high school -- 49 percent. And of those, about a third of them actually pass our exit examination, which is more or less an eighth or ninth grade examination and it does not suggest readiness. Twenty percent of the children are proficient in reading. Thirty percent are proficient in math. And when people say we shouldn't have accountability measures, what they're really saying is that we should not have a centrally set definition of success. And I will tell you that if you don't have that, then our ability to intervene, our ability to improve, our ability to manage is really undermined in a very fatal way.

So I could go on and on. I'm going to end where I started -- that these myths have proven largely resistant to the kind of thoughtful and fact-based analysis that is represented in the book with these wonderful authors here

today. They are the problem; not the facts. We can all agree on the facts. It is the perpetuation of those myths and their impact on the political system that is where -- that is the nut we need to break in order to make a difference in this sphere.

Thanks so much.

MS. RIVLIN: Thank you very much. And thanks to Amtrak for getting you here. We now see why it was so important to have the commissioner on the panel.

I asked earlier that people with questions write them on cards and hold them up and somebody will pick them up -- I'm not sure who is in charge of this but there come the two people who are -- and bring them down front. And while you're doing that, let me start with a couple of questions.

One, for anybody who would like to answer it, if you were asked -- suppose you were parachuted in to a particular community or a particular school, and every school can do better, how would you frame the message "we need to do better"? Would you put it in the terms that this book has about how other places do better and we could be like them? Or would you phrase it in some other way? Does anybody want to try that one?

MR. PETERSON: Well, of course, we did put it in the bad way, you know, we should be like them. But that really isn't our point. In fact, we make the point that we want the whole world to get better. We think that education is going -- if all other countries in the world improve their educational systems and their children are more capable, this will be good for the United States. There is nothing that could be better for our country than for the world to be a better-educated community. But by looking at other countries, you can see

what is possible out there and it gives you a way of assessing how well you're doing. Because, you know, you can have utopian goals that can never be accomplished, but if there is something out there in the world that's being accomplished and you're not doing that, well, then that's a message to you. So yes, the real underlying message is that the United States has the capacity. We used to be the leader in the world in terms of education. We were the first to build an elementary school system in the 19th century, and the fact that we had a well-developed educational system before any other country in the world has to be part of the explanation for the marvelous growth of the U.S. economy in the latter part of the 19th and most of the 20th century. So yes, we've got to pull up our socks is basically what we're saying.

MS. RIVLIN: Belle.

MS. SAWHILL: While you're looking through the questions, I would not disagree with any of that but I think it has to come back to the personal level, to the family level, and to talking about your kids, your own kids. And getting through to parents and others who care, in the adult generation who care about kids in their community, that you may think your school is fine. It's all the other schools that are not doing well. Your own is fine and you may not think it's your kid. Your kid is probably doing fine. It's all the other kids who aren't doing fine. It has to come down to your kid isn't going to be able to compete with that kid from Hong Kong or wherever or even from Massachusetts if you live in Mississippi.

MS. RIVLIN: Let me try one other and possibly this one for the commissioner.

You spoke of charters and regular public school systems pointed

out that charters are public schools and that the idea of draining the resources into the charters is one of your shibboleths. How do you think about the relationship between charters and regular public schools? And I speak from the vantage point of one who lives and works in the District of Columbia where we have a remarkable 43 percent of our students in charters. That's way out on the high end. But how do you think about it?

MR. CERF: I guess the sort of first principle of this is that our mission is to assure that every child has a public school option that maximizes his or her probability of graduating from high school ready for the next step in life, which I think of as college or some kind of professional career regardless of his or her birth circumstance.

Now, I picked my words carefully there because we do not, in my judgment, represent public school systems. Right? That is an entirely different set of considerations. If you conceptualize our mission as representing the children in a given jurisdiction -- Newark or Patterson or Washington, D.C. -- then you go this sort of food fight between the charter school advocates and the public school advocates is something adults can squabble about but it's really not central to the question which is is there an equality public school option for kids?

And so it is I guess not surprising in the world of realism that the infrastructure of public school districts have viewed them as competitors -- competitors for resources, competitors for power, competitors for influence, and have in most jurisdictions other than New York City until arguably the next mayor takes a seat, that they have viewed it as something to guard against, wall off, to protect. But I honestly think that is the wrong way to think about it.

And by the same token, while I think the argument that charter

schools do not serve their fair share of hard-to-educate children is disproved by the fundamental facts. I do think that we could have the greatest level of equity in enrollment, in suspensions and the like, and we should really focus on making sure, for example, I love the idea and we're trying to do this in Newark -- of having a common enrollment system. You don't have a lottery system for charter schools. You have a lottery system for -- a Troy system for every child. And if he or she chooses a charter school, there is a centrally managed audited lottery system. So you literally take the argument off the table that there's selection (inaudible).

MS. RIVLIN: Thank you.

Maureen, this one I think goes to you. The questioner says that a typical workweek for a Hong Kong school teacher is 15 hours in front of students as opposed to 30 here. And that the rest of the Hong Kong teacher's workweek is spent in collaborative learning, planning, professional development, and the teaching of educators. What is the Department of Education planning or thinking on how to develop more professional development in educators here?

MS. MCLAUGHLIN: Thank you. It is true that countries or education systems like Hong Kong provide greater time for teachers to work together collaboratively. And, in fact, looking at education systems who do that, that's part of why in our RESPECT initiative we have collaborative teaching because it is -- you do see that the time to be able to collaborate together is really important for what happens in the classroom. So the answer would be we think that there needs to be more collaboration. There needs to be more attention to professional development. And that the initial training before teachers ever get into the classroom needs to be stronger, as well as the

mentoring in the first couple of years. Other education systems do that better, too, in terms of matching up a highly-experienced teacher with a new teacher as part of their professional development as they're coming into the classroom. So I think that's a place where we think a lot more emphasis needs to be put on -- you mentioned the schools of education. That's before you ever get to the schools but the whole pipeline needs to be carefully looked at and improved.

MR. PETERSON: Can I just add? I certainly agree with everything that was just said. You know, my economic textbook in college was called *The Science of Scarcity*, and that phrase sort of stayed in my head.

So to have, as the questioner asked, only 15 hours versus 30 hours -- I can't confirm the facts -- that means you have to allocate your resources differently. I can promise you based not hat number alone the class size in Hong Kong is stratospherically higher than it is in the United States. So that is a choice, right, that people have to make. I would like to have -- for example, I would like to have resident -- first-year teachers, you know, work, you know, at the elbow of a great teacher, watch her lesson plans, do it for six months, gradually take on greater responsibility, and then get launched into her own classroom in year two. Hugely promising initiative, incredibly expensive. Or I'd like to have lots more common planning time, lots more collaboration time. I agree with you. I think that is essential. But what are you going to give up? Right? We have bet the house on reducing teacher-student ratio. That's where -- and there's a figure you guys will know but it is since, what, 1970, it's three times less. I don't know what it is. Anyway, it's a spectacular --

MR. HANUSHEK: Twenty-six to 15.

MR. PETERSON: Twenty-six to 15. Right.

So you have to make resource allocation decisions because no one is going to go out there and print dramatically more money for public education.

MS. RIVLIN: This is a question which is also inherently about choices.

The questioner quotes James Heckman, Nobel Laureate in Economics as saying, “High school is too late. That you have to invest in early childhood education.”

React to that. Is it a choice? And if so, how should we make it?

Whoever wants to.

MR. HANUSHEK: I’d say it is a choice, and that we haven’t paid enough attention to that. There’s a lot of evidence that, in fact, we can help out some of our more disadvantaged students by starting formal education earlier. What our book emphasizes is what people know at age 15 or later on, but that’s a function of what they knew earlier. What you know earlier makes it possible to go farther, and that’s the whole argument. Not that people should stop at age 15, but in fact, people who know more going into college come out better, and that’s the whole story.

MS. SAWHILL: You mentioned our social genome project, Alice, and it confirms what Heckman has argued and also analyzed, which is what Rick just said as well, which is if you start early, you have fewer problems you have to correct later on and it’s a lot cheaper to do it early than it is to do it later. So our analysis and the numbers are imperfect like all numbers but they show much more cost-effective to do it early.

MS. MCLAUGHLIN: I’d just like to add one of our big initiatives

right now is what we're calling Bright Start, Bright Future, and it's exactly that, which is more of an investment in better quality and more of it, particularly for disadvantaged or more at-risk children of early learning health education, all the kinds of support. That that is probably the best investment you can make. There are studies both internationally and nationally that show the long-term impact. Numbers may not be perfect but they all go in the same direction and it really is a key place for us to be investing more. That would help have better PISA results 15 years later.

MS. SAWHILL: The other thing that Heckman points out is that noncognitive skills, social skills, are just as important as academic skills. And one of the things that children either learn or don't learn early is, you know, things like how to sit still and pay attention and be focused, engage in self-control, and blah, blah. And he's writing a book now that will compare GED holders to high school diploma holders and show that GED doesn't cut it relative to having the high school diploma, but it isn't about the fact that the high school diploma holders are academically better off than the GED holders; they are about equivalent. It is that there is something about the persistence, the noncognitive skills of the people who actually graduate from high school that matters for their future success.

MR. PETERSON: You know, I don't want to disagree with anything that's been said, but I do want to point out that if you look at our NAEP test score performance over the last 20 years, you see steady progress among students in fourth grade, the earliest we have this kind of information, or the 9-year-olds. And then we see less progress at 13, and the least progress at 17. So you can be seeing the educational system looking as if it's moving forward at

the elementary school level but at the high school level there's very little evidence that you are seeing any payoff from that. So there seems to be something about the way we've designed our high school or designed or curriculum or we don't have any standards or students don't know what they're supposed to study or teachers don't know what they're supposed to teach. And so I don't think you're going to really be able to fix our educational system unless you can fix the high school. That's, I think, really, really the broken part of our educational system. Maybe the preschool is another broken part of the system but the high school is also a major problem. And I'm interested whether the commissioner agrees with me or not.

MR. CERF: Well, I do. I mean, you know, the sort of raw facts are that we've made a lot of progress in the fourth grades. It starts to dissipate by the eighth grade but it's still, you know, not totally embarrassing. And then by high school it's like, oh, my god. So something is happening as children stay the course through public education that sort of sends that message.

So I think the research is overwhelming the quality. Early childhood education makes a big difference for kids born in poverty -- if it's good, by the way, because there's a lot that isn't good and the Head Start studies were referred to.

MS. SAWHILL: And it doesn't mean that you can ignore the other parts of the system, either. It's not an argument for only investing in early childhood education.

MR. CERF: We give full-day early childhood education for 3-year-olds and 4-year-olds to all the children in our so-called ABA districts, which are our 31 worst -- I shouldn't say worst -- lowest economic districts in the state. And

we just had a study that showed that they are making substantially higher progress and other match comparison kids and that study -- those gains have been sustained really all the way through elementary school. So every year we'll learn more but there's strong evidence to support that.

MS. RIVLIN: I read this one with all due respect to the questioner because I think it may be a candidate for addition to the list of shibboleths.

The question reads, "With the enormous emphasis on sports, not just football and not just money, especially in secondary school, how do students have time to learn?"

My reaction is though there may be overemphasis in highly competitive sports at some high schools, we aren't giving our kids enough exercise at any level. They ought to be out there running around and kicking a ball is one way to get kids to run around, or throwing a ball. So I would not put a lot of faith in this one. But I bend to any of the real experts here.

MR. CERF: Well, I have more comments as a parent than I think as someone in the education world. There's no question that physical education has got to be an integral part of education. I mean, it has to do with little things like longevity and it's very, very important.

I happen to think -- you know, I say a lot of unpopular things. I've never said anything that I think would be as unpopular as this. I think we are obsessed with these town sports, these competitive baseball and soccer and so on that they can be very limiting to kids. You know, you have to be -- there's no more three-sport athletes anymore. Remember those days? Something you did in fall, something you did in the winter, something you did -- no, you've got to be like year-in, whether it's soccer or lacrosse or whatever. And you would think,

you know, there are a lot of kids, and we knew some of these kids in college, who peaked, right, at the zenith of their academic career and it was all downhill from there. And I do think that there might be a misallocation of focus for some kids. But it's not to disagree with the urgency of physical education.

MS. RIVLIN: Okay. Well, maybe it's not entirely a shibboleth then. We'll keep it off the list.

This one for Maureen.

Should we marry or put together the NAEP and the PISA to have a single international test? And perhaps more important, do the highest achieving countries have soft or hard accountability standards?

MS. SAWHILL: Good question.

MS. MCLAUGHLIN: It's a very good question.

For us to match up NAEP and PISA, I guess I'd let my colleagues from the National Center for Education Statistics, if you want to comment from a statistical point of view. But I think the part of the question that I would see in there is do we want to know how we are doing at a state level compared to countries? Would getting that information down to a state level mean it's more powerful because it's more directed towards your state, your kid, your area? I think the answer is yes. It's fairly expensive, which is why it hasn't happened yet, but I think the idea of getting data down that allows you to really compare how you're doing in a state, the people who are performing well or not performing as well, the proficiency levels in the different areas of the domain would be enormously helpful. So it doesn't exactly answer NAEP-PISA, but I think the idea of being able to do that is good.

The Center for Education Statistics has undertaken a study to try

and actually take TIMS and NAEP and do a crosswalk. So could you take the NAEP data and be able to do a crosswalk of what you think it is with TIMS to be able to do statistical comparisons in that way? They have a study that will be coming out soon that looks at that methodology and looks at what you can do. And the reason that the nine states participated in the last round of TIMS is because the NCS wanted to have data -- actual data for some states that they could then match and see how it compared to their estimates to see how good that kind of crosswalk would be. And the states, therefore, that were in the TIMS, were low performing as well as higher performing. But the bottom-line I think is that we would like to be able to get that data -- those data down to a state level.

Soft and hard accountability. Different countries have different kinds of accountability. And when you look at high-performing countries around the world or high-performing education systems, you get very different kinds of accountability. Finland is often put out as a country that doesn't do any of this kind of accountability that we do in the United States, but in fact, they have high stakes tests for basically where you're going to go in high school. They have high stakes tests for entrance into university. So it's a different kind of assessment, a different kind of accountability, but they're very much looking at what you've learned and what it means for your future path. The same thing in Korea. They really have very, very high stakes tests.

Then you come to Singapore where they really are watching every single classroom in every single school, and they're looking at what's happening and then they're adjusting and they're making changes and they're on sort of a constant and very, very careful planning basis. So the accountability systems differ. They differ by the culture, by the structure of the country, but having an

accountability system that says you have a high set of standards and then you need to see where you are relative to those standards is carried out in every country. It may be carried out in different ways and it may be purposed in some cases not to be accountability, but it is.

MR. WOESSMANN: May I add?

MS. RIVLIN: Yes.

MR. WOESSMAN: Both from a personal perspective and because I did quite a lot of research on some of these international comparisons of accountability. So linking states and international actually literally, and Germany, I think, was the one big thing that got the thing rolling. So we were really shocked by the fact that Germany was doing very mediocre in the first PISA. But the real addition to that was like for the first time literally we didn't have any NAEP. We had state representative testing and we had a leaked table of the states there. So that really put it up all there and then people started to think in the poorly performing states, we've got to do something different. And the whole attention came in general from the internationally poorly performing things but this linked up thing really got Germany going quite something.

Then the one thing in terms of accountability that indeed, and I basically repeat what you've been saying, that country -- the one very consistent thing that you see is countries that have external exit exams at the end of high school persistently do much better than those that don't do that. Very systematically. So these are tests that are based on the curriculum. It's not the SAT-type test. That's the whole thing. If you -- if the test that decides which university you can go is a test that's totally detached from what you've been doing in school, you basically don't focus on what you're doing in school but

focus on learning what the SAT test does.

So it should be based on the curriculum. It should be broad to cover different subjects or preferably cover all the kids in the system, not a minimum competency test; something that's really like shows the whole level of where you're performing. That makes students accountable for what they do in school. And in a lot of senses that works much better than trying to focus too strongly or it's easier actually to focus on schools because with schools you never know which part of it is basically the families have entered and so on. But for individual students, you are what you are and like the only thing you can do to try to get better is like improve what you are doing.

So part off the increase that we've seen in Germany is not huge but it's quite a step that we've seen over the past 10 years. It's literally driven by the fact that more and more states have implemented external exit exams as well and like recent research has shown, it's exactly those states that have improved.

MS. RIVLIN: We're running out of time and I would like to give each of our presenters and panelists an opportunity to take two or three sentences, no more, of what you hope this group will carry away from this meeting. And then we're going to show you a very short movie. No popcorn, unfortunately, but a five-minute movie that goes with this book.

And we'll start with Ludger.

MR. WOESSMAN: I just had my two sentences.

I guess really there's one important thing to think about, like the Common Core Standards, I mean, you made exactly the right point I think, are a very relevant thing to have but unless you -- somebody looks into whether you achieve them or not, you won't change anything. I mean, teachers won't even

know that they're out there. I mean, talk to teachers on the ground whether they know their curriculum. The only way you get the attention focused on these things is by at the end of the day looking at what students really have achieved.

MR. PETERSON: I think I'll just agree with Ludger.

MS. RIVLIN: Okay. Rick.

MR. HANUSHEK: I'd make the general point that what motivated me to be involved in this project is that since a nation at risk, maybe even since Sputnik before that, the nation as a whole has said we've got to fix our schools or we've got to improve our schools. We've got to have higher achievement. But there's been a complacency, sort of a background noise, and without any sense of the urgency. And to me the most important issue facing the future of the U.S. is whether we can improve the achievement of our students and the skills of our future generation. Without that I really worry about the future of the United States.

MS. RIVLIN: Commissioner.

MR. CERF: This is a political problem much more than it is an educational problem. It is a problem. That's the sort of founding idea. You know, this has been sold as a national security issue. It's been sold as a moral imperative because of the inequity of different classes of people getting different levels of opportunity. It's been sold as we're not stacking up on elite tables compared to internationally. And none of those have carried the day in my judgment. And so the level -- so we remain in search of the right way to break down the political barriers because everything else I'm telling you is rounding error. You know, we can have micro disagreements about which intervention is better than another but these fundamental decisions about how you allocate

resources, you know, what your rules of engagement are for personnel and management, whether you have common standards, these are deeply political questions and that's where the work needs to be.

MS. RIVLIN: Maureen.

MS. MCLAUGHLIN: Improving the level of educational achievement in this country is phenomenally important. Doing it across the board, raising people at the bottom up, is also phenomenally important. International comparisons are a piece of the story, are a part to look at, but it's not the whole picture. You need to look at this carefully t the state level, at the national level, at the international level. Take the lessons you can learn and really try to implement them because fundamentally the lessons as you look across countries aren't that difficult. It's really a question of taking them and putting them into practice. Some of it is political. Some of it can be ideological, but really the bottom-line sort of lessons that you learn are pretty straightforward. If you look internationally and you look nationally at the statistics that we saw here today, both for the states and for other countries, it can be done. And I think that's a message I would send forward. It can be done. You can do it with groups that are more disadvantaged. It's really a question of doing it.

MS. RIVLIN: Belle.

MS. SAWHILL: I really agree with virtually everything that the commissioner said and about the importance of our political and attitudinal problems in this arena. The only area where I might demur a little bit or at least want to add something is that I mentioned, and I want to mention again, the very large social divisions in the United States. These divisions are caused by growing education gaps. We have tremendously growing gaps between the

haves and the have-nots educationally. I mean, by test scores. And it's all measurable and so forth. So education gaps are causing the social divisions, but the social divisions in turn are making it much harder to close the education gaps. So it's almost becoming a vicious circle which is very concerning to me.

MS. RIVLIN: Thank you all. And now, five more minutes for a short film which I am told features a talented child actor.

(Video shown)

MS. RIVLIN: Very good. Thank you for coming.

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