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PARTICIPANTS:

Introductory Remarks:

REBECCA WINTHROP
Senior Fellow and Director, Center for Universal Education
The Brookings Institution

Moderator:

XANTHE ACKERMAN
Associate Director, Center for Universal Education
The Brookings Institution

Panelists:

Pooja Bhatt
Regional Portfolio Manager, Accenture Development Partnerships
Accenture

ASHISH DHAWAN
Chief Executive Officer
Central Square Foundation

SUBIR GOKARN
Research Director
Brookings India

URVASHI SAHNI
Nonresident Fellow, The Brookings Institution
Founder and President, Study Hall Foundation

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P R O C E E D I N G S

MS. WINTHROP: Good morning, everybody. Thank you so much for coming.

We're getting miked up. I have to hold on. I think it's fine. I think we can do two things at once. My comms people are not appreciative of this miking and talking at the same time.

We're really happy to have you all join us. I'm Rebecca Winthrop. I'm the director here of the Center for Universal Education. We work on a range of things here at the Center. We focus quite broadly on education in low and middle income countries around the world, and we have quite a bit of activities that we do at the global level, but we also do a range of specific projects and work at country level. By and large, we're quite committed to what we would think of as sort of the three big hot topics in global education, which is equity. Massive progress has been made in enrolling kids into school, particularly at the primary level over the last -- certainly the last decade, but there still is a big equity challenge. The kids who aren't in school yet are largely from marginalized groups. And we also -- that's the first one.

The second one, of course, you can enroll kids into school but it's always very important that they learn something while there, so the quality challenge, which is an issue that we face here in the United States but certainly is an issue that I haven't been to any country around the world that isn't struggling in a big way with this at the moment.

And then lastly, this question of relevance. What are the sort of skills and capacities that young people are learning in terms of preparing them for their livelihoods and their jobs and their future lives?

So we've been doing increasingly over I would say the recent past, work

on India. First and foremost here at Brookings we have a new Brookings India, which is actually its own organization, its own board of directors, et cetera, affiliated with Brookings, and we're really fortunate to have our research director who has just joined a month and a half ago, I think, leading that effort here with us.

So in addition to that, us, at the Center for Universal Education, are beginning to do quite a bit more work on India. We have one of our team members, Urvashi Sahni, is based in India. We've recently brought her on board. And we've recently been doing some work this past month on a paper for a World Bank-U.N. ministerial meeting relating to India.

Do you guys hear that beeping sound? It's strange. I'm not sure what that is. Maybe someone's telling us something. I think we should forge ahead and perhaps whatever it is will stop.

So in any event, for us, as for all of you, India is of great interest and importance, and there's been huge progress -- and we're going to hear a lot more -- huge progress on education in India, largely thanks to big efforts by the government and lots of active civil society actors. And the progress around the world and enrolling kids into school; we can all sort of globally say a big thank you to India because a huge portion of that progress has come from India. But there are many challenges that lie ahead.

Despite this huge progress, every year for many years now, India remains sort of one of the countries with the largest numbers of out-of-school kids. Despite a large portion being in school, the scale and scope of the size of the problem is just so large that it makes it that way in terms of total numbers.

Huge challenges now in completion. Kids dropping out; in learning in terms of acquiring the relevant skills and competency; and of course, sort of connect on

to the job market and to other education. This, of course, is, if you are someone who cares about human rights as many, many organizations in India do, it's certainly a rights issue. If you're someone who cares about just straight-up economics, it is a really big issue for the globe.

In 2030, 25 percent of the global talent pool is going to come from India, so this is something for all of us no matter where we are to think about. It's the kids born today that are going to be going through the education system in India that are really going to be providing 25 percent of the skills for the future.

And India is very rich in many ways. It's particularly rich in human resources. And you know, I often think if you're a country -- and this is a colleague of mine, Gib Bulloch says this also -- if you're a country who is very rich in natural resources you wouldn't have your oil drills leaking oil here and there or out of the place; you would really try to harvest those natural resources and make sure that they get you where they want to go. The same with human resources. We're having an education system in India that leaks, that isn't creating sort of the outcomes we want. So that is certainly something that we want to talk about today, but most importantly, what are sort of new ideas for addressing it? New -- if not new, good -- even if they've been old ideas and now the time is ripe to act on them -- good ideas for really advancing education in India.

I'm going to turn over to the panelists, and I'm really pleased. You have their full bios in the program, so I won't go into it, but thank you very much starting over here with Ashish Dhawan, who is the founder and CEO of the Central Square Foundation, who has really recently taken his full energy -- and he has quite a bit of it -- to focus on education, coming from the investment management sector. Xanthe Ackerman, who is the assistant director here at the Center for Universal Education. We

also have Subir Gokarn, who as I mentioned before, is the director of research at Brookings India. He comes to us prior to that being the deputy governor of the Reserve Bank of India and many other things. If you ever have been in India you will see his face on TV quite a bit. And Urvashi Sahni, who is the founder and director of the Study Hall Education Foundation, social entrepreneur doing for many decades very interesting work on education in India. And recently, a fellow here with us at the Center for Universal Education. And then Pooja Bhatt, who is based out of Mumbai and she is with Accenture Development Partnerships, in charge of the South Asia region.

So thank you all of you for being here. And with that I'll turn over to you Xanthe.

MS. ACKERMAN: Thank you, Rebecca.

Thank you all so much for being here. We look forward to a very engaging day and look forward to your participation as well.

There's two pieces that I'll quickly just draw out to precede our panel discussion. One is in thinking about India and the tremendous progress that's been made in terms of access. So just between 2005 and 2009 alone, the number of out-of-school children dropped by 40 percent and that has continued such that now there is less than 5 percent out, although this is still 3.1 million children. So naturally it's a large number. And these children represent various different groups, sometimes more so on certain states, but also the disabled children who are throughout the country, which actually represent a third of that out-of-school group and half of those being mentally disabled.

Other marginalized groups, there are many but a few just to draw out. Girls, in particular, children from scheduled castes, scheduled tribes, some Muslim

communities. Government has done a lot of work to make progress along these lines but there is still quite a lot to be done. And sometimes the top level statistics don't actually shed light on the depth of the problem. So a gender parity index of 0.99 actually covers over huge amounts of discrimination and challenges that face girls. And there are other groups that are important, too, including first generation learners, children from migrant communities, and many others.

At the same time while there is this continuing access problem, there is a very deep and fundamental learning challenge which is starting to come into recognition but it is really quite severe, including that the independent ACER survey shows that more than half of children are three years behind reading level at least. So in this scenario where there are challenges at every level of governance and accountability, we have to ask ourselves what can be done? What can be done first? Who are the actors? And how can we work together to bring innovation into this space.

I just want to say about our panel, we're so fortunate to have this diversity and expertise on the panel. I have really enjoyed getting to hear about Ashish's really cutting edge philanthropy, bringing in a venture capital model, building on his expertise in emerging markets and equity, and the appreciation he has for value and potential. Subir, we're so grateful to have him here as he's thinking about how research and really leverage and move forward policy, and it's at a very exciting moment that he's having this time of reflection. But also representing a past of working in government at the highest levels and also academia. He brings a breath of experience. Urvashi Sahni, as a social entrepreneur who has worked at every level, ground up, working with the government, scaling into schools, and even trying to bring gender in at the highest levels. And Pooja Bhatt, who has done really innovative research looking at return on investment

and new ways to think about the importance of education for all stakeholders. I know you'll enjoy the discussion that we have today.

I'd love to first turn to Subir and ask what is your thought on the role of institutions like Brookings India? How do these institutions move forward in policy and thinking?

MR. GOKARN: Well, I think three roles that I can immediately visualize. One is just deliverage of not just national experience in this event. We've been talking a lot about learning from the U.S. experience and obviously there are commonalities given the size and the diversity, the cultural diversity if you will, of the country, of the constituency. But we do have this weakness I'd say, inadequacy in the Indian framework of being able to learn effectively from successful experiences or from failed experiences. So bringing that experience into some -- I won't use the word "digestible," but identifiable, assimilatable kind of formatting is very important for research to be playing that role and not just to keep finding out new relations but also aggregating across different experiences.

The second part is I think that there are a lot of preconceptions. The people in policymaking tend to favor a particular model and this favors another one and there is therefore a lot of churning because somebody new comes in and says, you know, what was done before is wrong and I've got a new set of ideas. And I think what we need is some sort of persistence and commitment to models once they've been identified as being relevant, as being able to deliver. And I think constant sort of provision of evidence that something is working or not working if you want to change. I think that's important again from a research perspective that we're providing this evidence.

And the third is to look at communication and articulation as a continuing process, as a part of the strategy, not just as an end game where you have all this research and then you sort of go to somebody and say, look, this is where it works, as opposed to having a sort of continuous personal engagement looking at questions coming from the constituency, from the audience as to what about this issue? What about that issue? Have you taken all of this into account? It adds to a more holistic, more rounded set of prescriptions.

So it's certainly an ongoing communication effort and not a sort of end of the process effort. So I think these are the three elements that we hope the Brookings endeavor will bring to bear.

Now, as far as education itself is concerned, I would like to place in the context of the larger context of development challenges. What applies to education and many of the things we're going to hear from the panel actually applies to public services in general. And so I think that is a benefit from a common framework, a common understanding of problems of institutions, of incentives, of accountability, of governance, that run across not just education but help other systems, you know, several others. And I think as we identify these commonalities and agree on them, the research agenda gets that much more substantial.

MS. ACKERMAN: So picking up on two of the themes that you just mentioned -- incentives and also learning from other sectors -- we know that in education the Center of National Government has increased dramatically the amount that they're contributing to education. Along with that is there an opportunity for greater leverage from the Center for reform? And are there any experiences across other sectors?

MR. GOKARN: Very significant. I think while it's clear that it's always a

tense relationship in the federal framework, there have been instances at the macro level. Fiscal consolidation is something that the Center has incentivized in states by offering incentives for achieving certain fiscal targets, and I think that has pushed the process along. In the power sector you had an arrangement, a power reform development program where resources were made conditional on certain benchmarks being achieved.

Now, of course, the dilemma here is that often the incentives are based on actions, not on outcomes, because outcomes, even the short-term outcomes take some time to materialize and you can't hold the program in advance till that happens. So input-based incentives or effort-based incentives have their place but I don't think are a complete part of the story.

The culture of accountability, the culture of conditionality is gradually seeping in and I think there is an opportunity there to be creatively constructive about it so that you blend in a bit of incentive for actions to be taken, policies to be framed, and so on, and then combine that with incentives contingent on specific outcomes as they roll out.

MS. ACKERMAN: I know we've had some discussion around Race to the Top. I'm curious what's your thought on competition-based incentive programs at national level?

MR. GOKARN: I think there is an issue of sequencing, and we have to be careful about moving too fast down the road because the first challenge -- this is a challenge perhaps you make, as Rebecca was also suggesting -- that getting a large number of kids -- huge number of kids into a viable schooling model with some reasonable learning outcomes that are manifest as important. Now, whether competition is going to achieve that kind of volume is tricky. Let me quote perhaps the most quoted

Henry Ford statement, “You can have any color as long as it’s black.”

The importance of scale I think is critical here. Maybe there is some value to deciding on a model even at some risk that it’s not the right one to go along. But just from the scale perspective, but as we’ve been hearing again through this event, education doesn’t happen in sort of isolated context. It happens in a cultural context. So there are issues that have to account for the kind of situation the households are in, the pressure they face for livelihoods and other responsibilities.

So you can’t take that mass model and say, look, you know, this is one size fits all. It has to be flexible enough to accommodate a variety of different cultural, geographic, other contexts. And that balances I think something that is a matter of experimentation and trial and error. So we have examples of very successful models across the board but adding it all up to a national policy or even a state-level policy I think is a huge challenge. But that’s what we need to focus on. But competition may play a role there, definitely. But I think it has to be seen in the larger context of what the eventual goal is, and the eventual goal is scale, sustainability, and quality. Those three things I think have to define whatever strategy we put in place.

MS. ACKERMAN: Also, very curious on your thoughts on the 2 percent corporate tax and what impact do you think this will have on corporate behavior and opportunities for partnership?

MR. GOKARN: It creates an opportunity clearly if companies are mandated to put aside that share of their profits to corporate social responsibility activities, but our experience with mandates has been mixed. People, if they’re asked to put aside the money, end up doing things that are not necessarily consistent in the spirit of the mandate. So I think governance off the mandate is going to be very important. I

think having created the resource pool potentially, going beyond and looking at ways in which it can be used to full effect, that has to be an important follow-up to institutional innovation which I don't think as of yet is the case.

MS. ACKERMAN: Okay. Thank you. We'll look forward to hearing more.

Ashish, if you could, what are three things that you think are really important and are actually working? And then if you could also elaborate on the pieces that you think need to be taken up and moved forward in terms of policy.

MR. DHAWAN: Yeah. So I think you alluded to it earlier. I think what's really worked is the Indian government has done a good job with providing access. The (inaudible) which is the scheme to bring about universalization of education has led to 97 plus percent net enrollment at first grade. So we are getting children to come to school, and yes, there are issues with marginalized communities but the numbers are now quite small in the Indian context. So that's one thing we've done well.

The second thing that I think is very interesting -- I mean, I'm a business person. I spent 20 years in business and I've recently gotten into the education field a year ago -- is I'm always looking at big picture trends and inflection points. And I think we're at a very interesting inflection point in that our focus for 60 plus years after independence was always access and equity. And there was third leg to the stool which was excellence that was sort of ignored because the goal was to build more schools to get more children into school. I think we're at that point now where we are starting to focus on quality of education because there's a huge dropout out of the system even though net enrollment is high in first grade. And so the minister now is talking about learning outcomes. Our most recent 12th plan talks about learning outcomes. Our most

recent 12th plan talks about learning outcomes and providing quality education.

We're still not measuring it. We still don't have standardized assessment, but the fact that it's entered the lexicon, the fact that this is -- everybody now recognizes we need to move away from just access to really looking at quality and measuring learning outcomes I think is very important, and that's an important trend.

I would say a third thing is that we are definitely spending more money. We alluded to it earlier. We now spend 3.3 percent of GDP -- the government spends on education. The Center's spend over the last decade has gone up six times. It's gone up six times in the last decade. The states haven't gone up as much. The private sector spends 2.2 percent of GDP, so we're spending 5.5 percent of GDP. If you compare that with most countries, which are spending on order of magnitude 6 percent of GDP, we're somewhere close. I still think the state needs to spend close to 4 percent of GDP on education, but we're hampered by the fact that revenue collection is still low as a percent of GDP. We're spending about 11 percent of the overall budget on education, which is reasonably large. So those are, I think, some positives.

In terms of what's not working, we took the PISA test and we came second to last on the PISA test. And Kurdistan came 74th and we were just a whisper ahead of Kurdistan. So I think that really just shows that the system is completely broken. And if you peel the onion back a couple of layers what you find is that PISA has six levels. And if you're at level one or level two, that means you're not even mastering the basic skills. And if you look at the developed world, a country like the U.S. where there's this whole issue around the achievement gap, about 20 percent of kids in the U.S. come in at the first two levels, and those are typically children of color who are being failed by the system. And that's with the whole charter movement, a whole bunch of

issues around addressing that equity issue.

In India, 80 percent of children tested in at those two levels, which means that 80 percent of the 240 million children in our K-12 system are being failed by the system. So it's a gargantuan problem. It's an extremely complex problem. I think that's the single biggest issue by far is just the quality is terrible.

MS. ACKERMAN: Given the magnitude of that problem, what is your perspective on the role of private philanthropy as a catalyst? And I'd love if you could touch a bit on what venture philanthropy means to you and how that approach is unique and suited to this.

MR. DHAWAN: Sure. I think philanthropy's role is to focus on two areas. I think the first is doing R&D work. It's true in the corporate sector that even as organizations get larger it's harder for them to be innovative. Government is such a large behemoth it's hard to be -- for government to be really innovative. Government's job is to take things to scale. So I think the role of philanthropy is to do pilots, and to do it in a scientific way where you can show that there's hard evidence that a particular thing is working. So I think doing that R&D work is really important. And the second piece is to do the advocacy work, to really get people together, different constituents to speak with a somewhat unified voice, and to try to get government -- I mean, it's a huge oil tanker that's moving in one direction -- to even change direction a little bit.

I believe that particularly in the area of education, our policies are quite regressive. We're still living in the license raj in education. The private sector plays a very important role in education. Almost two-thirds of our students in higher Ed go to private institutes, and a third of children in K-12 go to the private sector. And yet if you look at how many approvals are required and how many, you know, the red tape, it's

unbelievable. So I think we need serious reform. The fact that we don't even have standardized assessments -- I think there's huge leverage in terms of advocacy because, you know, there's a lot of improvement on the policy front that's required.

MS. ACKERMAN: I'd love if you'd say a little bit more about the role of private education and if you could, talk to us a bit about how the dynamics are different than in the U.S. context.

MR. DHAWAN: Yeah. So I think firs to fall the numbers, of course, I mean, unfortunately, because the government system is so broken, you know, children have just escaped the government system in hoards and the private system has become so large. So if you look at some of our large cities in India, in some of them -- in Delhi, about 50 percent of children go to private school. In Bombay, 75 plus percent of children go to private school. Overall, in urban India, 50 plus percent of children go to private school.

Now, I think market forces work very well for upper income children or even the sort of upper end of the middle caste, but market forces unfortunately don't work very well for lower income children where the government system is clearly one option and that's not working. The quality is bad. And unfortunately, the private schools that serve low income children also are equally bad. So unfortunately, they don't have much choice. And the reason the private sector is so bad at the low end is because it's operating at about a third of the cost of the government sector and the teachers they've able to hire are typically, you know, girls from the community who are very sincere but really don't have the capability to be able to deliver high quality education. So for the bottom 50 percent of the socio-economic segment, there is a real issue in that they don't have much choice even though the private sector works well for the upper income

segments.

MS. ACKERMAN: And as you think about different areas of policy related to learning, who are the key players that you seek to engage with? What partnerships are going to allow you to advance your policy objectives?

MR. DHAWAN: Yeah. I think we touched on this a little bit as we spoke with several other people. I think one role we think we can play is that I'm relatively new to the education space but there is a lot of interesting work happening and the number of foundations that it's bringing, number of NGOs doing interesting work, number of interesting people within government who really want to reform and do, you know, improve the quality. It's bringing more people around the table to coalesce, to speak with a unified voice. I don't think we've had enough of that. And really push for reform. I think the single biggest place where we need to start is to start measuring learning outcomes. To define standards and to actually start measuring learning outcomes, because if it starts from there, if we start measuring it, we'll automatically start moving towards pushing for higher quality within the system.

MS. ACKERMAN: Thank you.

I'd like to turn to Urvashi. If you could, tell us, please, about your experience as a social entrepreneur in Uttar Pradesh and at the national level. What was it that instigated you? What made you feel the need to start being an independent provider of education?

MS. SAHNI: It was many of the things that people are talking about. Dissatisfaction, really, with what was being delivered.

Even in the private system, which is what we started with, even for the middle caste students, the quality of education way back in 1986, even amongst the best

schools was basically it was on rote learning. The focus was on rote learning and on transferring of information. So beginning with that and moving on to reaching the marginalized, what drove us to that was, and especially with girls, was, again, poor delivery and also not enough access at the time when we started.

So to Ashish's point, and everybody else's point, that access has improved, but it comes to not giving the kind of dropout. So in terms of girls and the marginalized, there are more of them coming to school but they don't stay, they don't learn, they don't complete, and the gender equality indicators in the country by and large continue to remain really bad. In terms of another international assessment of the gender inequality index, India ranks 126th out of 149 countries, which is really poor.

So that was one of the reasons that drove us to work with girls and to work with rural populations where again the government school system is probably amongst either very poor private schools or then the government school system which is by and large broken.

In terms of experimenting with it, when we started to work with it we realized that the important thing to do was to look at life outcomes, to look at it more holistically, and to define learning in terms of life outcomes. So that if it is girls we're looking at, the reason that they don't stay is because of gender driven reasons. They're not valued enough, they're required at home to work, they married off very early, very high rates of child marriage, and of course, domestic labor.

So what do you do with that? So we positioned our school in a way that it became an advocate of girls' rights. The teachers learned to expand their roles, and we included gender education and empowerment education as part of the curriculum, understanding that unless you build a resistance and you teach girls how to face the

challenges, even if they do manage to complete the life outcomes will not change too much. And most of the time they will not complete; they will be married off early.

So in our own experiment we worked at training teachers to become advocates of girls' rights. Working with the community to make them allies in terms of girls' rights, educating them, and positioning the school so that we fought to keep our girls back, and treated all the factors that were pulling out girls or pushing them out.

And that's the part of it, the piece of it that we are trying to scale with the government. I worked at various scale-up operations with the government, and particularly in teacher training. It mainly adjusted the primary school teachers' learning about interactive teaching and interactive learning and trying to improve learning outcomes. But what we found was that when we trained again it was very input-based, and the whole idea of trying to test them or trying to see where the training was going was not something that was part of the program.

The other thing that we found in trying to scale as we worked at various levels is that the government -- of course, the government system is broken and the main part of the brokenness of the system is the management system is so broken. So that in one case where we were trying to test our technology innovation in a bunch of tent schools, we actually went to the administration and said that in these tent schools -- and we named them -- can you please not pull teachers out for all kinds of duties? Can you put this management system in so that we can test our innovation? They said yes, and of course, it didn't happen.

So the point is that we are working now with (inaudible) which are residential schools. It's a great gain by the Indian government where they have 3,500 of these and Uttar Pradesh has 750. And these are meant for girls from the poorest

background, from the lowest castes, and girls who have been out of school or who are in danger of dropping out. And they are residential schools of 100 girls each in classes 6, 7, and 8, but we are working with them in the eastern three districts in eastern U.P. which is the lowest -- one of the most backwards parts of even the U.P., which is one of the most backwards states in the country.

And we are trying to take just our empowerment component which we have -- by using very simple video technology and training the teachers to that. And there again we find that where the innovation is working at the teacher level because the teacher is pretty much captive. They're residential. Again, because of management systems, because of infrastructure problems, out of the 39 schools, four are gone. Just don't have them.

So in terms of testing your innovations, you do need certain management systems to be in place. And if I was to think of one thing, just one thing to focus on in terms of education reform in India, of course you need innovation, of course you need pedagogical reform, of course you need all of that. But first you need a system that functions, even at a basic level. Teachers who come to school, work in school, and teach, spend their time in school because that's what keeps children coming. And at that basic level we have the ravi system that is huge. It's functioning at whatever level but it's functioning. There's a postal system that is huge. Think of the scale of India. It reaches everywhere. It's functioning.

So I don't believe it can't happen. I really think that there is a way in which you conceive of a population minimally and then you treat them minimally. And who are the system, which is the part of the population that is not being reached which the government school system actually addresses? It is the lowest caste. It is the rural.

It is the poor. These are not schools where any government functionary's children ever go to. And those are the ones that receive the most minimal attention. That's a system that's broken.

So I think it's important for all of us who are working at educational reform to really work with the government very strongly.

MS. ACKERMAN: So here's what I'm wondering because I know you're the head of your schools, and I know your teachers are accountable and show up. So what is it that you're doing in terms of accountability and management in your system where you reach many, many children. What of that can actually be scaled up in terms of accountability in management? Or what practices would you share?

MS. SAHNI: I think first of all the head should care that the system functions. Right? And in a school system where you're pulling out teachers to do everything else but teach, the message you're sending to them is that the children aren't important. Meaning there's animal census and there's election duty and there's exam duty. All that is important but not the children. That's really important to do.

Secondly, I think what -- of course, attention to learning outcomes, and that in our case there's a very strong monitoring. In fact, a monthly monitoring of not just learning outcomes but attendance, especially in schools with the girls where attendance can be an issue. Then looking at their lives as a whole, that is important. Training your teachers to look at that as a whole and putting systems in place where you have a continuous community engagement and building accountability systems and being serious about them, holding teachers to that so that eventually in our rural school, which is 25 kilometers away, right, I have an excellent principal and building leaders. Principals as leaders. We don't really need to be there every day because we built the system and

they know that the paperwork will show, and eventually the students, whether they stay, whether they transition to high school, whether they graduate, is going to show. So I think building that into a system of caring and of nurturing your teachers, supporting them, have a sane system that will allow them to teach, and supporting them through that, and then holding them accountable and knowing that their jobs depend on that and building a system of excellence and of care, and of helping them to value their student population.

I think one thing that hadn't been mentioned so far is cost and that's a huge issue, too. In the government school system, historically, because only the upper caste had access to education, largely even now the upper caste form the teacher population and the lower caste form the student population, especially in rural schools. And there's a huge hiatus there. I have been in schools where the teachers will use a stick to beat their children, and even the stick the children will go and get. They won't even touch the children because they're of lower caste. So how do you expect that a teacher will teach students who they value so minimally?

So building -- when you talk of teacher training, even learning -- teaching them how to value their students and their students' lives and their backgrounds and where they're coming from is really an important part in helping them teach.

MS. ACKERMAN: Thank you, Urvashi.

So Pooja, you've done such important and compelling research on return of investment for private actors to education. I think once we hear we'll all be ready to invest personally and with every point of leverage. But could you talk to us a little bit about return on investment?

MS. BHATT: Sure. So under the auspices of the Global Business

Coalition for Education and in collaboration with the Brookings Institute, we've taken on a piece of work to sort of articulate what is the business case. So why is that private sector should care about investing in education and not from a CSR perspective, not for the social benefits of education but from a strategic imperative perspective. So it is critical for the private sector to invest in education because it is critical for their strategic growth. And that is our proposition.

And why is that relevant even more so in India? As Rebecca mentioned, by 2030, 25 percent of the working age population will be from India. And even if you're an organization that doesn't function in India or has no plans to function in India, migration trends suggest that people from India and other countries like Pakistan and Bangladesh will migrate to Australia and the U.S. and U.K. That's purely because, again, from a population demographics perspective the talent pool in countries like the U.S. and U.K. is actually decreasing.

So our hypothesis is twofold really. It's that for private sector to invest in equitable access of quality education is important to achieve strategic growth. One, from a perspective of securing talent to maximize revenue; and the second, from the perspective of managing talent management costs.

So in a survey done by PricewaterhouseCoopers last year in 2012, they surveyed 1,258 CEOs around the world. Forty percent of the CEOs stated that they were not able to take advantage of market opportunities or they've delayed strategic initiatives in key economies because they are not able to identify talent with the appropriate skills to lead those initiatives. So that is a clear indication that talent today is a critical constraint for growth in emerging economies and we propose that it will only be worse in the future.

The issue that the private sector faces is around finding the right talent

with the right skills, and it's not necessarily technical skills but it's skills that are learned in primary and secondary education. So we say foundational and transferrable skills. So foundational skills being around literacy and numeracy, and transferrable skills are communication, team working, project management, things that you are expected to -- skills that you are expected to build by completing secondary education, not necessarily tertiary education. And that's where the gap is. So that is really the issue that private sector is facing today, and if nothing is done will be worse in the future.

The second part of it is around talent management costs. So talent management costs are everything related to costs for recruitment, wages, attrition costs. You know, people leaving jobs because they are highly skilled, as well as training costs. And if you look at data from India, wages have been increasing at a rate of 15 percent year-on-year over the last few years. Attrition, especially in key jobs, at the junior management level -- it's people who have a couple of years experience and then they go to a similar firm that does the same work, but that attrition cost is significant for an organization. Most companies spend a significant amount of money training people when they enter -- at the entry level, so when they enter the workforce. So as soon as they've graduated, then companies put their employees through a 20- to 30-day training period minimum, and that training isn't around technical skills; it's soft skills. So it is about team working, collaboration, project management, those soft skills that were not gained in education or failed to get.

And just to throw some scary statistics out, everyone knows about the IT sector in India. BPO work is big. These are other people's statistics, but about 500,000 engineers graduate from Indian institutes every year. 2.6 percent are employable. And employable means you are ready to start work or start productive work as soon as you

enter the workforce, and that's the gap that people are mitigating. And 56 percent are considered to not have the soft skills required to be successful at work.

So taking these two sort of big factors, what we have articulated, if you take a perspective of what is the value chain of talent and the future economic value of talent, if you can quantity it in some way, we've just done some sort of rough, very initial analysis, but showing that the investment in education, even over a period of 12 years or 15 years if you want to take the full breadth of tertiary education -- 16 years, sorry -- the amount that you invest in that amount -- in that time period will reap significant benefits in the future once the person has entered the workforce and through the lifetime of their employable contribution to the company, as well as obviously to the economy.

And so if you take some very rough numbers -- and we only compared Indian companies -- nine Indian countries across different sectors -- manufacturing, mining, et cetera -- if you articulate what is that value, we have found that there's a 42 percent return on investment for overall at an average across industry basis. And if you take one example of a typical Indian company and use sort of their data to do this analysis, in very simple terms $1 invested today will result in $53 in 20 years when that person enters the workforce. So just from a pure sort of business perspective, not considering any of the social benefits of education, it's critical for private sector to invest in education just for their own growth and sustainability.

MS. ACKERMAN: So given that compelling case, if you could talk to us a little bit about the role of the private sector. And also if you could touch on the hundred billion figure that you've also mentioned.

MS. BHATT: Yes. So the part that I didn't talk about, I'll talk about that now.

So if you consider that there are 27 million children who are born each year in India, and two-thirds of them will not complete secondary education. So it's related to the figures that Ashish talked about. One is survival up to age five, then entering primary school, and then from primary school going to secondary school. If you consider that full number, it's two-thirds of the population that will not complete secondary education today. The value gap -- so the opportunity cost of all of these individuals not being educated is to the degree of 100 billion per year annually. And it's purely from what is the GDP contribution of each employed person to the GDP. And if you just take that number, that's really the value gap that exists. So there is a broader sort of call to action which sometimes is harder and gets lost around education where it's easier to articulate it in other sectors like health where you can count the number of people who have received vaccination and can say, okay, I've helped achieve this standard. It's far greater in education. So that's the bigger opportunity cost that is being lost.

On the role of private sector, it's multifold. I mean, I think Ashish and everyone has talked about private sector can play a role in service delivery. It certainly can, and in fact, there is a movement towards privatization of education in India. And we can have a whole separate conversation around the pros and cons of that, which is not necessarily what we want to go into.

Our work focused more on the private sector contribution in funding. And while the government contribution, percent of GDP towards education has increased, our proposition is that that amount is not going to be sufficient for the reason, again, because of population growth because the investment per child, even at the rates of increasing GDP and if it sustains at 6 percent even or increases, it's not going to be sufficient to educate the numbers of children who need to be educated in India. And of

course, also, international aid is decreasing.

So in general there is a funding gap. And our sort of call to action again is for collective action with private sector, as well as foundations and philanthropic money, government money coming together to create innovative funding models to support outcome-based learning, you know, learning initiatives. So it's not about -- private sector definitely helps but it has a role in sort of mitigating the funding gap.

MS. ACKERMAN: Thank you.

Okay. We'd love to open it up to the audience. Please share your questions. We'll take about three and then put them out to the panel. And just thank you in advance for keeping your questions brief.

We have a moving mike. We could start -- well, let's start in the back and then we'll come here and here.

The mike is coming. Would you mind just standing and speaking loudly? And if you could say your name and where you're from.

SPEAKER: My name is (inaudible). I come from India, from one of the largest assessment companies in India. So I find the scholarization very interesting.

A couple of quick questions. One to Pooja. Just a minor statistical correction. So the employability is not 2.6 percent; it's 26 percent. So that's a huge (inaudible).

I just wanted to understand from an Accenture standpoint because you guys are fairly large in India, can you talk about some of the initiatives of what Accenture has done or is doing in India to plug this employability gap and also to look at investing into education for the future? Because I believe that corporate involvement to address some of the pressing issues that we have is a very key point of fact. That's one question.

And just a quick question to Dr. Sahni. You also talked about availability of caste issues and how people don't touch. I anecdotally agree but do you have data on that? Do you have data on how many upper caste teachers in your school interact with lower caste kids, so on and so forth? If you can share some data, that'll be very helpful for the audience. Thank you.

MS. ACKERMAN: We had a question over here.

MS. BARBER: Hello. My name is Jacqueline Barber from Harvard University.

I wanted to ask a question about the focus of many of these initiatives on teachers. I think someone made the important point that it's really the whole holistic context. I think maybe you did, that interferes with many kids' ability to stay in school and to flourish, particularly for girls. And in that context it's clear that it's not just a question of teachers; it's a question of the community norms. It's a question of the perceived value of education. If many kids are dropping out before they get a skill which really then rewards the family for the sacrifices they make by sending the children to school, then the incentive to change the cultural customs in terms of early marriage and doing housework and so on really aren't there. So it seems to me that while teacher incentives are critical and mentorship is critical, it's also important to invest in access to the sorts of educational opportunities that lead to jobs which lead to income. And I really didn't hear people talking about that. We've done some research on low caste girls in college, and we find that even those who manage to make it don't manage to access science, engineering, computer courses. So the sorts of educational opportunities they do manage to access when they're successful don't really lead to paying jobs. And so that really then feeds back into the incentives for the community. So I'd like to hear from the panel about ideas

for addressing that. Thank you.

MS. ACKERMAN: Thank you so much.

In the front row. Right here.

MR. ZIMMERMAN: My name is Paul Zimmerman. Our family lived in India many years ago and we visit very often and visit Village India. I have two questions.

Mr. Gokarn, you spoke about competition. I'm not quite sure what you meant by that. If you mean competition between schools, in most of Village India there is no such competition.

And the second question I have is I appreciate the need for research and teacher training, but action. What do you do now? We have a lot of discussion and argumentation in our own country about the improvement or need for improvement of teaching. That discussion I'm sure is even more of an emergency in India. How do you improve teaching now?

MS. ACKERMAN: Thank you. So we had a question to you, Pooja, about Accenture's role. A question about the caste system and any data that we may have or may need. Thinking about, as well, the holistic nature of teachers, but also where that links up to relevance. And I'm sure everyone has thoughts on that. I know that's something Ashish is also thinking about. And then these questions around competition and also action.

So I think the action one goes to everyone. But otherwise, let's start on this end and come down.

MS. BHATT: So thank you for the correction.

Accenture has 90,000 employees in India today and has plans to grow

that base to a large number in the next three years. We are CSR focused, so our foundation's focus is around skills to succeed. So pure and simple, we support a variety of projects around the world to help individuals build skills for employability. And many of the times we do support a lot of work around vocational education, so definitely IT skills, but also retail, hospitality, otherwise, and in India we partner with a variety of organizations such as Don Bosco Tech, Quest Alliance, and a whole bunch of others which I can't name right now, to support their work in being able to train people in vocational training. Our employees also go and conduct the training and things like that. So that's all part of our CSR focus.

In terms of the challenge that I mentioned, when we hire people, we also have to train the new hires that we bring onboard, especially around the outsourcing folks. They do go through a significant amount of training and we probably call it three to six months because it's a combination of in-class as well as on-the-job training before they are productive on the floor so to speak. So there's significant training investments that we're making in any case, and we're connected to a variety of universities, et cetera, to continually engage with the curriculum that's being taught and shaping that. And specifically, we're involved with NSDC, so in India it's called the National Skills Development Council that has created sort of 25 sector bodies that are defining the curriculum for particular vocations. And for the IT sector we are actually bringing our curriculum, as well as setting those standards. So that's specific in terms of the IT initiative that we're involved in.

There's something else that we're doing that I'm actually not at liberty I think to speak much about, but taking this whole aspect of at least in terms of IT skills, we've taken it much broader and partnered with Carnegie Mellon and a number of other

institutions to create a certification course around IT skills so that anybody sort of existing that certification course will have the right skills for readiness for employment and can obviously be hired by Accenture but by other organizations as well.

So in terms of IT vocational training, there are a number of initiatives that we are involved in.

MS. SAHNI: I'm not sure I understood the question but let me just answer it in the way in which I understood it.

In terms of our schools, we do have statistics. We have three schools. One addresses girls from urban slums, one addresses middle caste children, and the other one is in a rural setting. But it's a very low cost school in which the fees are about under $5 a month.

In the school that we have for the girls from urban slums, we have an 88 percent lower castes and there's a small minority in terms of Christians that we have. They are about 5 percent or 8 percent of our upper caste. Then not by design but almost all the teachers, 100 percent of our teachers belong to the upper castes. In the middle caste school, it's very hard to find even 3 or 4 percent lower caste children, and those are generally children we have inducted. They're scholarship children. In the rural school, we have, because it's a fee-paying school, we have 65 percent lower caste and the remaining -- and all the teachers remain to upper caste. In terms of the anecdotal evidence, I've trained with the teacher's union. I worked very extensively with them and that's 350,000 strong in U.P., and almost every batch of training that we had, because last name stems is very significant. They tell you the caste of the person. There were almost 95 percent upper caste. When we tried to address the issue of caste, because we built the training model with the teachers, the teacher union leaders were very emphatic

that that was not a place they wanted to go. In fact, they put their foot down and they were furious and angry. They said, no, we don't need to talk about caste. We just don't need to talk about caste. There have been teacher trainings that I've done where the caste issue is just where they would sit and eat with us and where we talked about interaction with students that came up. So it's not -- I don't know about national statistics. I think there should be and maybe they are somewhere that I don't know about. But I know that at a local level this is very evident. Perhaps the demographic has changed now. I don't know.

MS. ACKERMAN: I think there is certainly evidence about the dropout in upper primary and how that differentially affects scheduled caste and scheduled tribe children, and especially girls. So where at grades 1 through 5 girls are actually ahead in attendance, when you get into sixth, seventh, eighth, and cumulative, dropout scores, there is at least a 6 point leap in terms of girls dropping out. So certainly we know that there are factors there but I think we could have more evidence.

Subir, I wanted to ask you a bit on the relevance question that came from the audience. I know you've thought about tradition and modernity and how those can be combined in a way to promote relevance in education. Do you have a thought on that?

MR. DHAWAN: Well, let me address the competition issue first. I think my point was not that competition is a universal instrument. I agree that where the demographic and the economic setting actually would justify perhaps just one school, there is no room for competition there because you cannot, you know, you just don't have the density to give options. And there I think the governance framework is critical. If you have one school that people are dependent on and perhaps you have a catchment of, you know, maybe 5 or 6 or maybe 10 kilometers, that's the only choice people have. But

how do you make sure that it is delivering on at least a minimum standard of training and outcomes?

Competition I think does begin to have a role as you get into more dense environments and the form I think it would take one of some sort of certification or quality testing so that people know that some schools are below a certain grade and other schools above a certain grade. You can have differential pricing perhaps. You can certainly have differential assistance from the public resources that are going to education. So if you start to get competition becoming a potential tool for quality enhancement as you increase density. I think that's the context in which I was saying that you might think of using competition as one of your instruments for achieving outcomes.

Tradition and modernity, I think one view that I've been commenting on educational systems more as a sort of passion than as a professional activity, I was just observing schools in operation, my daughter's own experience and people that I know and so on, but some basic lacuna is emerging in terms of value or values it takes. It's very, very difficult to imagine the sort of effect a primary school system which deemphasizes it does not emphasize some sense of rootedness. Where do you come from? Who do you belong to? What's the value of the system you're a part of?

And yet I don't see much content or emphasis on this part. So it's not so much a tradition versus modernity thing as much as a sort of literacy, numeracy, and ethics thing. And literacy and numeracy are focused on because in a sense they're the ones that produce the measurable outcomes. But ethics or not. Even when I look back on my own school experience, primary school, we used to have a discipline, a subject called Moral Science. I don't know where the name came from but essentially ethical

training. And it was the first -- as I look back, my first exposure to case study. It was actually taught through cases. It was taught through little stories that everywhere somebody faced a moral dilemma. And obviously, there was usually a right answer to most of them. Maybe that is a bit too categorical, but I don't see that in my daughter's education. There was nothing formal in what she -- sorry, she got out of school last year -- which actually replicated that, which resembled that.

So where do these kids learn their values from? I mean, they learn them from parents. They learn them from friends. They learn them from society. They learn them from the media. And it's some mishmash. There is no anchor or compass I think which they're getting from this. I think that's very important. I think the model compass, the ethical compass, are particular imports that the school system has to provide. And I don't think it's doing it at this point.

I wrote this in the context of an introduction that I tried for a compilation of kids' studies put out by General Business Magazine. The common feature for these case studies was that they all dealt with ethical dilemmas in the workplace, whether it be dealing with customers or employees or the boss dealing with a subordinate or vice versa. And the common question to all of them was where do these people -- where do their ethical standards come from? How do they pin down ethical standards? And I think it was a very, very important question that was asked -- whose responsibility is it to teach ethics? If you don't learn it in school, is business school going to teach it to you? If you don't learn it in business school, is the workplace going to teach it? And everybody is saying, well, it's the other person's responsibility.

MS. ACKERMAN: Interesting. Thank you.

So Ashish, I know you are a man of action, so perhaps you'll take on

some of the action question. But also thinking about in terms of learning and teaching, what are the primary policy objectives? What would you like to see happen if you can have your wish of the top two or three?

MR. DHAWAN: Sure. So I'll just touch on two things that came out.

One is to make education more relevant. I clearly think we need to embed, and we're in the process of doing it. Vocational education into our secondary schooling. I was recently in Shanghai 10 days ago. Shanghai is 99 percent enrollment in primary and upper primary. Ninety-seven percent enrollment in secondary. Eighty-five percent college enrollment. I mean, this is the richest city in China and yet 50 percent of the kids in secondary school are actually going to vocational schools. Forty-plus percent of the kids in Germany, Finland, go to vocational schools. These are rich countries. Singapore, a third of the kids go to polys, which are basically vocational.

So I think one of the big reasons for dropout is education got relevant for most children in India, and I think vocational is absolutely critical 9-12 grade. To make it relevant and to make sure it's connected with business. It's not just something that's abstract.

I think with regards to the issue of teachers and what policies we need, I think the whole -- I'm a businessperson, so if I look at how you're going to improve education, a lot of it has to do with human capital. It's a human capital business. And so you've got to look at the whole value chain, which is starting with how do you make teaching more aspirational so that better people want to get into the profession? And there are some lessons learned in terms of how others have done it. I mean, the U.K., back in 11, 12, 13 years ago had a massive campaign to actually -- like a public service campaign. I mean, if you can spend public dollars to recruit people for the Armed Forces,

why can't you spend it to make teaching more aspirational?

I know in the States, organizations like TNTP, the new teacher project, have done a great job in making teaching more aspirational. So it starts from the top of the funnel, which is how do you make it more aspirational, to teacher education itself. We have 13,000 plus teacher education institutes in India. There is not one -- I mean, if I asked anybody, and many of you are here from India -- can you name one? For engineering it's the IITs. You know, the model of excellence. For business schools it's IIM. Is there one model of excellence in teacher education? None.

MS. ACKERMAN: CIE.

MR. DHAWAN: Well, yeah, CIE.

MS. ACKERMAN: (Inaudible) colleges.

MR. DHAWAN: It pales in comparison. I mean, CIE is not world class. I mean, so I think we've got -- you know, look at China again. China has 61 normal universities, teacher education universities. In China, it's a four year degree. In India, B.Ed. is a one year degree. In China, it's aspirational because you're going to university. You're not going to some fly-by-night private institute to get your rubber stamp degree. And that's why teacher education is much better in a country like China relative to India. So I think we really need to fix teacher education.

Then we need better recruitment. I mean, unfortunately, you can still buy your job in many states in India. In Uttar Pradesh, I believe the going rate is $10,000. In Karnataka, I believe the going rate is $20- to $25,000. You can literally buy your job in many of these places. We need to fix the whole recruitment -- how we actually recruit people into the system, how they're transferred to schools, and then eventually, better people will want to join the profession if there is a career ladder. And again, the Chinese

I think have done a pretty good job. They've got a pretty sophisticated -- in Shanghai there are 10 levels. There's a proper career ladder. You're properly evaluated against a rubric and you move up that career ladder and pay is a function of where you are. Singapore has a four-step career ladder where you don't need to become a school leader. As a teacher itself you can move up that career ladder and it's more prestigious as you move along.

I think we really need to think through, I mean, the way companies do. I mean, Infosys, which is a leading Indian company, thinks through its talent management in a very sophisticated, nuance fashion. So does Accenture. We need to think of it in the same sophisticated way for the whole education system as well.

MS. ACKERMAN: Okay. Let's take a few more questions. We have one, two. Start there.

MR. AHMAD: Hi, I'm Nazir Ahmad from Giving Works.

Two questions. One is would each of you or as many of you who would care to talk about what's the most promising experiment (inaudible) you're seeing in service delivery for education that you think could be scalable?

And secondly, you know, there is something called Khan Academy started by a Bangladeshi-American. To what extent are features like that available and accessible and have the potential in India, particularly among the marginalized population? Because I think we also need to talk a little bit more about India not only as a producer of technology but also user of technology and education. Thanks.

MR. DHAWAN: Small correction. Indian-Bangladeshi-American.

SPEAKER: My question has to do with at the policy level. So I'm wondering if there's any discussion at the policy level to rethink the strategy to get

children into secondary schools. And why I ask this question is because through the work on my dissertation -- and I did my study on the (inaudible) we spoke about -- I discovered that parents are saying we're not sending kids to school and we're talking about enrollment. We're not sending kids to school. We're not enrolling kids in school at the secondary level because it's of poor quality. And traditionally, quality is seen as a step up after enrollment. And here the teachers, parents are very clearly saying they're not sending kids to school at the secondary level because it's of poor quality.

It works at the primary level because parents do not have an income to lose when kids go to school. At the secondary level they have an income to lose and they see the tradeoff is not worth it because even after they finish secondary schooling in government schools they are still at the bottom of the ladder when it comes to competitiveness in getting jobs or moving to higher education. So is there any discussion at all in terms of seeing quality as necessary for getting kids into school rather than just the monetary incentives that they've been giving out to schools and parents?

MS. ACKERMAN: Thank you.

There's one right there. The gentleman here. Did you have a question?

SPEAKER: Thanks very much. It's not actually a question but I just wanted to kind of, you know, refer back to the conversation earlier, the question you asked about data on what is happening in terms of the cost sort of configuration.

I think you will remember that during the course of the India briefing document it was very interesting and also kind of very revealing to me working at that time (inaudible) we saw that the (inaudible) statistics for 2012, very categorically kind of applauds the government deferreds in terms of bringing a kind of parity into teacher recruitment because now that the number of teachers are kind of -- it corresponds to the

size and the scale of the students from the communities. So that is the one reality.

But I also want to share with you two very compelling my own personal experiences. If you remember, there is a UNESCO Global Monitoring Report 2010 on marginalization. At that time I was specifically working then with Kevin Watkins in trying to get some kind of images from India because I had kind of a firsthand experience of what goes on in the Indian classroom. And something that I can relate with very sort of parallel that you will see how in Bulgaria I was -- a long time back I was doing a mission for the (inaudible) government on the Matala program, which was on bringing social cohesion to the schools between the Roma children and the Bulgarians. And how does the kind of public perception that these children from the Roma community, when they are in schools, that they are thieves. There is no culture of learning.

I went to (inaudible) and I documented -- I made two -- conceptualized two films on the (inaudible) community in India in (inaudible). And I went to these schools -- and this is documented in the Global Monitoring Report -- that how children -- so the children were not outside the school. And the children said, the teachers, they think that we are thieves. They make us sit on the floor. The high caste children sit on there. So there is no data as such, data data, but there is a lot that goes on.

Another example that I want to share with you in the last year that I have been working on statewide reform with the school in teacher education in (inaudible) with the governments, one very interesting experience was in the Bara District, Shahabad block. So there are about 3,000 teachers that are required in that block, and there is a perennial shortage of teachers. Only 1,400 teachers are there. And from that also almost a quarter of them have been taken out while working in the collectorate and the district level offices without any written orders.

Why is this perennial shortage? Because this community is all of the Saria tribals. And there is no culture there of completing school. So what is happening is that the number of children who are graduating from the secondary school who can then go into doing a diploma in education program, so there is never a situation that a sufficient number of children are graduating so they can become teachers.

Another I think important point that I wanted to bring here -- just the last point. Two very significant issues. I think one that Ashish has already pointed out -- that very poor -- now you said 13,000 teacher colleges.

MR. DHAWAN: Private plus government.

SPEAKER: Right. But if you look at the regulatory system there is nothing that exists. So that is one very important area in terms of improving the governance.

The other thing is that the entire -- as I shared also in the modeling, that how we need to bring back the entire sort of disconnect which has been there between the teacher education setup of the state with what exactly happens into the classroom. The teacher education sector is running completely independent of understanding that how teaching learning takes place inside the classroom. And that has to be somehow or the other connected. Thank you.

MS. ACKERMAN: Thank you, Sid Hansu.

So we have a question about what's working, promising experiments that could potentially be scaled. Khan Academy and any of these blending learning experiences that are working or have potential in India. Secondary quality. Data and what more we need in that area.

And I want to add one, Urvashi, a little bit about gender. If you can help

us understand a little bit more why gender parity is so high yet there are still so many challenges that girls are facing. If you can elaborate a little bit more on the other factors that are affecting girls.

If you can take a few moments to answer whatever piece of that you would like and then we'll wrap up.

So let's start down here with Pooja.

MS. BHATT: So I think that there are actually a few sort of strong examples of things that are working. The problem is its scale. And maybe it's a personal philosophy but I don't necessarily believe that there is one model that is correct. There are models that work that achieve the outcome so that's what should be judged. And Urvashi can talk about her work, which is clearly successful. I know of other NGOs that are doing good work that are model schools. The government is also running strong programs where it's working.

So again, it comes to scale. Several of the conversations have been around how do you get it to scale? And the problem with India is scale. It's about taking it to everybody and everywhere it matters, and that is the challenge.

Scale, in my belief, and I believe with Urvashi, is that it needs to be solved at the system level. And the system is the existing government system and it is about the people responsible for delivering education within the system so it is obviously government policymakers but also the administrators through the levels where they are. And just like everywhere else, you will find disparity in that as well. So there are some good administrators to the BOC level, to the district level. There are all sorts of people responsible for managing the education system and that's where some of the failures are. So I think that's a key problem.

The other aspect -- I'll also agree around sort of what is good learning? You know, we talk about children being the first generation entering education in India. The teachers have gone through this same education system. You know, they've also not necessarily have had the skills and capabilities to be successful, so maybe they want to and they want to try hard, but how hard can they also fight that system. So it's a very sort of complex issue. But I think the challenge in India is about scale. It's not necessarily about saying, oh, Khan Academy. I mean, while it's a great model, the problem I see happening sometimes is that something that works elsewhere, if you just transplant it in India it doesn't work. And it's because of the Indian context that needs to be accounted for.

In terms of using IT to deliver education, India has a ways to go. There is sort of something lost in translation around then turning it into just getting hardware or it being about learning IT skills for jobs. It's much more than that. It's about actually learning through IT. It's IT-enabled learning versus replacing the teacher or replacing anything else.

So I think there are strong examples that exist but its scale and across-the-board equity is the issue.

MS. SAHNI: To address the question of the Khan Academy kind of models, in fact, we have a digital model where it's similar to Khan Academy but a little different, that you get the best grassroots teachers. And they teach in a classroom, a life classroom, and you video that using simple handicams. It's very low cost, cost effective. And it uses simple technology, which is just TV and video, DVDs, which can be taken to areas where people can't use the computer. They don't know how to. It's using low tech but being produced in a very high-tech environment. And it's taken there and we're trying

to scale that. Again, the systems issue that we're grappling with.

In terms of your question, Xanthe, about gender and even though there is gender parity what it is that pulls it out, I think it's many issue and there are many research studies that bear out. One is, of course, low value on education for girls from the community side. What is it going to change? Are they employable? Are they going to bring back enough to the family? And if they're married off early then what does it give to the natal family? That's an important issue. So their all gender, because they are girls, then getting them married very early because that seems to be a good way of employing them, so to speak, of finding a way of settling them. That's a second one. And then even from the school -- from the delivery side, a lot of the gender norms are being reproduced in schools where the aspirational levels of girls is very low in any case, and I've seen that happen in many schools where girls are just pushed up to class 5 and when asked why they say, well, she just has to get married so she needs the class 5 certificate and that's enough. And these are school teachers and school principals saying that.

So most of the issues that keep girls out of school, it's because education is valued less for them, especially in rural communities where the final goal for the girl is to get her married.

And to just quickly answer one of the points you made about getting them right for jobs and for vocation, and to talk to the relevance that you mentioned, Ashish, I think the important thing in terms of relevance, too, is not just vocational relevance that's important, but making it relevant to their local lives. In terms of girls, making it gender relevant because that's really important if they're to survive because gender norms are fatal in many cases. And in terms of rural children, too, making it

relevant to the lives that they live and to the local context that they're living in. And in terms of finding placement for them, in our program we work very hard, especially post-primary, to start equipping them for skills, along with their school and education, that will help them find placement. And that's a role for corporates. And we apply -- we really try to enlist support of all the corporates. And Lochner doesn't have too many of them -- and that's why we are engaged with all of them because there are so few -- is that we're all right. They do help. They do support us in training our girls. And I must say they have been very proactive with that.

MS. ACKERMAN: Thank you.

MR. GOKARN: Let me link the two questions because although I don't see it as an innovation, it's a discovery. It's a revelation, how much people are willing to pay for education and how little control they have over what they are getting.

So if you're looking at a design challenge or a design problem, it's essentially bridging this gap that if people are willing to pay a certain amount, what is the best quality that they can get and how do you clear the framework that actually delivers on that quality, whether it is through private schools with good regulation, also public schools with good governance and management. And this could vary across the country. It doesn't have to be "one size fits all."

The question about dropouts being based on perceived value I think is very critical because there again the value may be measured in terms of the ability to get a job at the end of that process, and if you can't get a job that pays you more than in a sense the opportunity cost of having a child in the workforce, that's again a reflection of people's ability to make that judgment. But they're not judging it I think on what was coming of the educational process. They're judging it on the prospect of getting a job.

So you will have great education but no job and people will still not put a value on it. That again relates to larger issues of livelihood and employment which I don't think we're addressing here.

But to the extent that households are acting as savvy consumers in this, I think that's a big opportunity because it's only when you have that check and balance that you're taking the responsibility off the state as the exclusive provider of quality and assurance and everything, and not obviously doing very well as is the case with many of the public services.

MS. ACKERMAN: Thank you.

MR. DHAWAN: Yeah, just two things I'll touch on. On the secondary school I think it's three issues. One is we need more access or more schools to be built, which is RMSA's big focus. So the country's goal is to get to 90 percent enrollment in the lowest secondary and65 percent enrollment in high secondary. And there's going to be a massive rollout of schools coming in the next five years. So that's one.

Two is if children are falling behind, if they're two to three years behind in primary school itself, if you can't read and write and do arithmetic you're going to struggle with science and history and what you're going to have to do in secondary school. So I think part of the secondary issue is parents are not stupid. If they see their kid is struggling and really can't cope and can't get much out of secondary school because they didn't learn enough in primary school, I think that's a real issue.

And the third is the vocational piece that I touched on.

I think as far as the Khan Academy thing, the Indian-Bangladeshi-American guy, you know, I think the experiments around technology have shown that it hasn't really worked so well the last 20 years. I'm very bullish on technology going

forward. I think personalized learning is the wave of the future. I think video is probably the least effective of the forms. So if you look at Khan Academy even today, the most effective thing of Khan Academy is actually the assessment. So I think what's going to be most valuable will be serving the children the right content, the right assessment at the right time. So differentiated instruction which is impossible. Every teacher talks about it's impossible in the classroom. Using data effectively, which feeds back into that, and very importantly, having lots of assessments all the time so that you can gauge competency. So I can be doing fourth grade math. Not even fourth grade math. I could be doing fourth grade fractions and at the same time doing second grade BODMAS or whatever it is. So it's all mastery based as opposed to being grade-level based.

I think this whole area of personalized learning is -- I think there should be a lot more experiments done around this in India because that's something that can scale dramatically because the devices and the connectivity are coming in five years. And the devices, you look at tablet prices today and where they're headed, look at PC prices, look at cell phones, Smartphone prices and the penetration that they're going to get in five years. And with Fuji rollout, broadband will finally be available.

So I think this is the stuff that could be really interesting by the end of this decade.

MS. ACKERMAN: So I'd like to close with just a couple of thoughts, not to summarize but just to highlight how much opportunity there is to move forward this agenda for reaching marginalized and learning. And we've heard a number of ideas but the importance especially of measurement and setting standards so that students and teachers have a way of knowing if they're moving in the right direction. And there's actually a global groundwell around this idea. At CUE we're working on the learning

metrics task force which we convened with UNESCO's UIS. And that task force represents a very broad constituency and has consulted over 1,000 people, and that group is very committed to the idea that learning should be a part of a global goal that sets a global policy and that it should be measured. And so that's just one example of the support for this idea.

Also, we talked about the demand, that there's so many people actually paying for education. If that demand can be better informed and harnessed, those consumers can become better educated in their own role in their children's education.

In terms of relevance, there is such a burgeoning private sector, and that sector is so engaged. And with the research and knowledge that we have about return on investment there's a great area for development as well. And on issues like gender that we've talked about -- in fact, the government has shown quite a lot of interest and Urvashi has found uptake in her ideas on gender curriculum. So as much as there is a great deal of work to do, there are many actors involved and openings that we hope to continue to explore together with you all and many others.

So I'd just like to say thank you to Central Square Foundation, who we are co-hosting this event with, to our panelists, and to Brookings India, and to all of you for participating, and hopefully for continuing in future pieces of this discussion. Thank you.

(Applause)

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