Education in India 2047 | Text Transcript | CIRCLE

This is a text transcript for the recorded webinar "Education in India 2047" presented by the Canada India Research Centre for Learning and Engagement (CIRCLE) at the University of Guelph. The event was recorded on February 9, 2022, and was moderated by Franco Vaccarino, Professor of Psychology and Neuroscience, and former President and Vice-Chancellor, University of Guelph. The guest speakers were Nandini Sundar, Ashwini Deshpande, and Rukmini Banerji.

Transcript:

Franco Vaccarino:

Operating this- moderating this this panel, which of course is part of the India 2047 speaker series, celebrating the 75th anniversary of India's independence and today's particular session is on education in India in 2047. Looking ahead, looking to 2047 and that- that journey.

Now I'm, I'm very conscious of the fact that we're- we're spread around the world actually and- but we can't lose sight of the- despite the power of connectivity we shouldn't lose sight of the power of places, and the places that each of us are in, and on that note I want to do a- a land- I'd like to do a land acknowledgement here that relates to the University of Guelph and the lands that the University of Guelph resides on, and the lands of the University of Guelph reside in the ancestral and treaty lands of the Arawan-Ren people and the Mississaugas of the credit, and we recognize and honor our Anishinaabe, Haudenosaunee and Metis neighbor- neighbors with- with the dish- with-one-spoon covenant that speaks to our collective responsibility. I think we can all relate to this our collective responsibility to steward and to sustain the land and the environment in which we live and in which we work.

So I- I- wanted to share that with the group despite being virtual, again that power place. So let- let me kick things off by first of all thanking Professor Sharada Srinivasan again who is the- the director of- of CIRCLE, which is the Canada- India research center for learning and engagement. I want to thank her for her leadership and- and for inviting me to- to moderate this event, which I have to say I- I'm super energized about and I'll- I'll say a few words about why that is in a moment, but- but thank you for that. Let me also just remind people a little bit of context in terms of the Canada- India research center for learning and engagement. This is an interdisciplinary- interdisciplinary nucleus here in Canada for- for really cutting-edge forward-looking research on India as well as India diaspora to showcase, to advocate, to catalyze, and to foster an equitable, respectful, and sustained exchange of knowledge between Canadian and India- Indian scholars on issues that are both emerging and also very complicated, and comp- complex issues that relate to sustainability and social and economic and economic well-being.

I- I will say that as the former chancellor and president until 2020 in case some of you are wondering how far back does this former president go, I- I finished my term in- in the summer of 2020 and spent the last six months in emergency mode dealing with COVID-19, so it was

quite the off-ramp for my presidency, but throughout my time as- as president, internationalism was a major theme and our- basically our connectivity with the- the- the rest of the world. India in particular featured prominently for me in this regard, and it's for a number of reasons that we all here would understand. It's the world's largest democracy, and I would say also that it is a successful stress test for democracy just given its- its size: 1.3 billion people. Among the largest economies in the world, home to- home to three mega cities you know, which are defined as over 10 million people. 23 official languages. I mean we you know we juggle things here politically with two official languages. 23 official languages and so- so for me when I think about the concept when I think about democracy, the world's largest democracy, I think about common purpose. What brings- what brings people together, and the capacity to come together and in this regard, India symbolizes for me the highest of aspirations in this regard and- and the power, really the power of the of the human spirit to- to- to be able to be true to democracy or- or strive to be true, and strive to be true to democracy. Notwithstanding all of the- the- the obvious challenges with- with- with a country of the size and scope of India.

At a personal level, one of the greatest joys from my time as president was- was the- the- the people that I had the opportunity to cross paths with in my role, and in this regard my travels to India and my many, many conversations with Sharada really have elevated my appreciation understanding of the complexities and the- the- the opportunities.

So this year, of course the- the 75th anniversary of India's independence is really an opportunity for- for us to- to reflect on where we've been and- and where India is heading as we move towards 2047- the 100th anniversary, and you know we think in- in hundreds and- and so when we think about the next 25 years as we complete that 100 cycle where what- what- what do we need to be thinking about on that journey over the next 25 years. How- how education in the workforce in India over the next 25 year- 25 years will have impact on- on our world. Some of the questions that- that I think are going to be important for- for all of us to think about and this is- these are things that our panelists will be- will be sharing and- and- and giving us insights to how can universities excel how can they deliver high human capital to drive the economy.

India has the largest youth population, with the average age of an Indian being 28 years old. Rising, but this- and rising education has not necessarily matched rising- rising employment. How will India for example capitalize on the opportunity of increased education of women- the opportunity the challenge but also the opportunity increase education of women, and- and build women's empowerment, well-being and gender equity? How are they going to address this in the- in the- in the years to come? These and- and many more questions and nuances are- are what our panelists are going to address today.

So what I'd like to do now is just introduce each of the each of the panelists and- and I'll introduce all three of our panelists and then what we'll do is we'll- we will have a 15-minute

presentation from each of the panelists and- and then at the end we will have hopefully about 30 minutes or so- 25 to 30 minutes of opportunity for question period.

So let me begin by first introducing professor Nandini Sundar, she is a- a- a scholar of constitutionalism, academic freedom, democracy, law, inequality, and agrarian ecologies. Her recent book "The Burning Forest: India's War Against Maoists" has been translated into Gujarati, Tamil, and, Teluga- Telugu, sorry. Trained at- she's trained at Columbia University, this was- she received her PhD. She's published extensively, I won't go through all the publication, but she's widely recognized for her scholarship having received a number of- of important prizes, awards, and recognitions and- and- and she demonstrates her constant bridging of academic successes with public- with public discourse and that's evidence also through her- her considerable media- media involvement. So professor Sundar will be our first speaker, but like I said, I'll introduce all three of them at this point, and by the way professor Sundar will be speaking on "Universities in India 2047".

Our- our second- [coughs] excuse me, panelist will be Professor Ashwini Deshpande, a professor of economics at Ashoka University will be speaking us- speaking to us on "India 2047: Gender Equality at Work and at Home". Professor Deshpande is an economist focused on discrimination and affirmative action, founded and leads the center for economic data and analysis at Ashoka University, she's extensively published including "The Grammar of Caste: Economic Discrimination in Contemporary India", which analyzes the degree of change of the caste system using national level data. She was trained at the Delhi School of Economics, received her PhD in '94. Professor Deshpande has been teaching economics since 1990 and has been awarded a number of outstanding awards, including the Exim Bank Award for outstanding dissertation as well as other awards. So again, welcome Professor Deshpande.

And finally, Professor Rukmini Banerji. Professor Banerji is a prominent India educationist who strongly advocates for systematizing preschool and- and [indiscernible], and in 2019, Professor Banerji said that the biggest development challenge that India faces is preparing our young people for the future trained at the University of Chicago, PhD in 1991, she has worked closely with federal and state government of India to shape- to shape the child education policy she also- I should mention, lead Pratham's- Pratham's Annual Status of Education Report from 2005 to 2014 and Dr. Banerji is the CEO of Pratham and Pratham USA Professor Banerji is a lauded scholar, a recipient of a number of key awards including an important award by the Government of Bihar in 2008 and the Yidan Prize for Education Development this year. And the title of Professor Banerji's talks will be "Every Child in School and Learning Well from Vision to Reality in 2047". And so those are the introductions, I don't want to go on much longer at all but just a couple of very quick logistical- logistical points before I pass it on to Professor Sundar.

So the speakers will speak for 50 minutes, we'll have opportunity for- for questions at the end. At the end, and I'll remind people again, we can- you can raise your hand, a virtual raising of a hand if you have a question you'd like to ask. As well, if you want to do it through chat I'll try to keep an eye on my- my chat button here and- and- and we can try to also address any- any

questions that way. So without any further ado, let me now pass it on to Professor Sundar to- to kick things off. You're on mute. There we go.

Nandini Sundar:

Sorry about that, yes. Thank you Professor Vaccarino and Professor Srinivasan and everybody else at CIRCLE for organizing this and for inviting me, it's really a pleasure and a privilege to be part of this conversation. So let me just launch straight away into what I have to say, given that we have 15 minutes.

So when we look back at 1947 and look forward to 2047 I think the first question that we need to ask ourselves is, what are universities for? What was the vision that was articulated in 2000- in 1947 and how well have India's universities performed on these fronts? And do we need a new vision going forward? So to answer the question of what universities are for, I list the following, although these are not in any particular order. One, to train human resources to power the nation's growth, second, to enable social mobility through education in order to reduce inequality, third, to keep alive a spirit of inquiry and criticism, and fourth to push the frontiers of research. Broadly speaking, these are goals that successive commissions of- on higher education such as the Radhakrishnan Commission of 1948-49 or the Kothari Commission of 1964-1966, the Yashpal Commission of 2009, and even the latest national education policy have highlighted. For instance, the Radhakrishnan Report states, and I quote, "Higher education is undoubtedly an obligation of the state but state aid is not to be confused with state control over academic policies and practices. Intellectual progress demands the maintenance of the spirit of free inquiry.

The pursuit and practice of truth, regardless of consequences, has been the ambition of universities." unquote. The Radhakrishnan report also emphasized democracy within the university and the importance of engaging with the surrounding environment of, I quote, "being alive to the needs of the society in which they live." unquote. The Kothari commission of the 1960s was equally clear that universities must serve as, I quote, "the conscience of the nation", that "Universities are"- and I'm quoting here, "Universities are preeminently the forum for a critical assessment of society, sympathetic, objective, unafraid, whose partiality and motives cannot be suspected. That faculty should live by the values they teach and should resist becoming organization men eager to suck up to the powers that be." unquote.

For the Kothari Commission, it was imperative for Indian universities to shake off the examination culture in which they had originated to impart a sense of Indian heritage and to be independent and autonomous rather than dependent on international discourses and technology. Which is why they advocated the setting up of elite institutions such as in engineering and centers of advanced studies. Now not all of these goals, skilling, critical inquiry, research, are in harmony or in perfect harmony with each other. For instance, many of us know how teaching takes away from research and vice versa.

There are also many functions which a good university performs on the side such as- which may or may not be part of its explicitly stated goals, but which are very important to the lived experience of a university in an ideal sense, such as bringing people from different straight of society together, encouraging forms of association between young people or very different backgrounds. While these goals of inquiry, of criticism, of research, of training, etc. may- and indeed must be tweaked, I believe they do provide a sufficient template going forward. Universities globally are struggling to redefine themselves with rapid technological change, the growing precarity of staff, stringent audit cultures, and the fate of the Indian university will depend in part on international trends.

Both in India and globally, we are yet to fully grapple with what a post-pandemic higher education landscape would look like. Clearly, online courses will expand. There are changes to our understanding of the knowledge commons with sites like LibGen and others you know being tested for their legality and people protesting against the high monopoly fees that private journal networks charge. So there are all sorts of changes that are happening that are going to affect how universities in India will react going forward. But, what I want to talk about today is a little bit about the specificities of the Indian experience and for that I need to first lay out some figures on the Indian higher education landscape. I'm drawing on the All India Survey of Higher Education for 2019-20, which is the latest document that we have.

The number of colleges and students has grown massively in India from 20 universities and 500 colleges in 1947 to 1043 universities 42,343 colleges and 11,779 standalone institutions, research institutions, other forms in 2019-20. 300 of these universities- 307 of these universities are affiliating universities which is- which means that they have colleges attached to them, and some of these universities like the one in- at which I teach, Delhi University, are incredibly large so Delhi University started in 1922 with three colleges and 750 students and now has 16 faculties or graduate schools, over 80 postgraduate departments, 91 colleges, and over 700 000 students. Perhaps the only comparable institution in terms of size is Beijing University, which however far, outflanks Delhi University in terms of global rankings. Of these universities, a little over a third and 78 percent of the colleges are privately owned, and sixty percent of these colleges are located in rural areas about eighty percent of the students overall are located in undergraduate programs, and only about 0.5 percent are doing PhDs. Of these undergraduate students, over one-third are in a BA program followed by 16% in science and 14% in commerce.

So what are the implications of this predominance of private colleges despite the centrality of a public sector funded central university system? Partly the fact of these- this private management apart from the sort of few liberal arts universities which are just- which have come up recently, such as Ashoka, the fact that so many of them are privately owned has serious implications for academic freedom and academic autonomy. If you look at the density of colleges across India, it follows very closely the political economy of those states with states like Karnataka having a high density of colleges both in rural and urban areas, which sort of

reflects the power of the local bourgeoisie, where colleges are seen as an easy way to both park your money earned from other sectors as well as to make money. And many of these colleges because they're privately owned do not really countenance much criticism either from students or from faculty. There's also a huge shadow economy of coaching colleges whether to get into engineering, or medical courses, or into the civil services, which actually constitute the university experience of many young people today.

And of course, there's also the growing exodus of middle class students to universities abroad even at the undergraduate level, which perhaps wasn't there a couple of decades ago. So I think we can broadly expect these trends to continue till 1947 with some shifts corresponding to changes in the political economy of employment and perceived prospects. For instance, last year a large number of engineering seats went vacant because students shifted from engineering to medical courses. To come to the social breakup of this higher education enrollment, the total enrollment is estimated as 38.5 million or 27.1 percent of the population in the age group of 18 to 23, with almost equal percentages of men and women. So compare this 27 percent to 54.4 percent in China, or 88 percent of the gross enrollment ratio in the US, so clearly India is- still has a long way to go in you know, reaching the kind of tertiary acts- says that we need. But, if you look at the kind of composition of the student population, women actually constitute about 49 percent of the total enrollment, and even though the gross enrollment ratio is- is lower for scheduled castes and scheduled tribes or indigenous people, the percentages of these students in the student population is more or less the same as their percentages in the population at large.

So you know, given India's history of quotas or affirmative action, with some gaps the university system has more or less been successful in becoming socially representative insofar as those enrolled go. The worst of however, are Muslim students who constitute only 5.5 percent of the population, which is much- much lower than their percentage in the total population. It's only recently that Muslim students have begun to receive any kind of affirmative action despite evidence that poverty figures among Muslims are almost as- are as bad as you know SCs and SDs in many ways.

So, the inclusivity of the higher education system as far as Muslims go is something definitely to be worried about. So to come back to my original matrix, or what universities are for. I think we can say that insofar as the first two goals go of training human resources and enabling social mobility, universities in India have been trying at least to respond to these demands, even if the numbers of those enrolled have to be expanded to meet international standards, and the kind of education that students may be getting in these colleges may leave much to be desired. For instance, we've recently had- I mean it's going on right now where women students in colleges in Karnataka, one of the southern states is- are being prevented from going to college because they wear hijabs and they're being attacked by saffron, shawl-wearing youth who are kind of heckling them and harassing them.

So you really wonder what kind of education these right wing youth are getting when they try and assault their own college- co-college students and when they rake up these kinds of issues. Perhaps they are learning more from what is called whatsapp university now in India where everybody seems to be getting their information from, and expenditure on India on education has hovered at around three percent despite repeated assurances that it will go up to six percent, and much of this is directed at you know elite institutes of technology, or what are now called institutes of eminence which are really designed to crack the global rankings. However,- so I'm not that worried about- I mean yes, investment in education the nature of education, the nature of skilling, all of that is a problem.

But these are problems that can be addressed given you know, some degree of will. However it is the other two aspects of what universities of the sort of core goals of universities which are of serious concern in India today, and these are pushing research and keeping alive inquiry and criticism. So although it's debatable whether stifling academic freedom will necessarily end critical research as well. For instance we know that Nazi Germany was excessively- was doing very well in the sort of scientific- field of scientific development even though later research coming out of those universities was discredited. But really it is increasingly going to be difficult to do any kind of research both in the sciences and humanities under conditions where money is diverted to kind of spurious research projects like the value of cow urine, or you know if social scientists in particular are prevented from studying a variety of different issues.

Since 2014, India has slipped drastically in global indices such as academic freedom and democracy. For instance, in the 2020 scale of the academic freedom index of the Vidam Institute, India had a score of 0.3 on par with Saudi Arabia and Libya. What- what Indian universities will look like in 2047 depends among other things on the political and electoral choices made from now on. Though in many ways it may be actually too late to undo the damage. Some changes can be addressed, such as this arrests and suspensions of students and faculty who are critical of the regime, the bans on certain books being taught at in universities, the overall climate of censorship, the general climate of hostility to critical inquiry, which has resulted in a large number of extracurricular activities being disrupted.

So even before COVID, even before the lockdown, the DU campus was becoming a very dead place with the university refusing to allow discussion on contemporary issues due to fear of disruption by the ABVP, the student wing of the RSS. So all of that, yes if we have a new government perhaps you know all of that will stop, the universities will open up in an intellectual sense. However, the more important concern is that in the public sector, sort of flagship universities of the country, academic appointments that are being made now both at the level of the heads of institutions and hires down the line will be much harder to reverse because we're talking about people who will then reproduce through future appointments for the next 20 30 years.

Take JAIN-U for instance where the incoming vice chancellor seems to have been selected with the sole purpose of completing the demolition job begun by her predecessor. JAIN-U is one of I

mean- at least has been one of India's top ranking universities and over the last five or six years, there's been you know all sorts of attacks on its autonomy and academic freedom. of both students faculty and of research. So looking forward to 2047, I want to put my faith first of all in the young people of this country. In the first Modi terms, students at central universities were in the forefront of protest demanding quality, education, scholarships, equality, and hostile timings etc... Now years later there is somewhat of a more subdued arrested scared lot living in an increasingly polarized world with future- fewer job opportunities and fewer safety nets than ever before.

But, if universities are to grow and change they will have to respond to demands for greater investment in equality education at all levels, for a curriculum which is more attentive to people's existing knowledge. At the same time of climate change, we have to stop the process of de-skilling and restriction of knowledge into narrow industrial avenues that we've been seeing so far. We need to incorporate all the existing indigenous knowledge there is in agriculture, architecture, fishing, a variety of other occupational skills. We need an expansion of learning in vernacular languages, simultaneous with learning English, not one at the expense of the other, and a greater cosmopolitanism on campus and above all, a reduction in discrimination on the grounds of caste, gender, sexuality, or ability; a safer campus for women and minorities.

But for all of this to happen, India has to change and change fast by 2024. Because 20 000.47- I mean 2047 is not so far away. So thank you, and I'll stop with that.

Franco Vaccarino:
Wonderful, well thank you very much professor Sundar. You know, there's a lot of food for thought there and I'm sure that people in the audience have all sorts of questions and- and comments and points of discussion, but like I said what we were going to- if people could just hold on to their thoughts until the end and- and then we'll- we'll have a- a- a broader- a broad discussion.

So let me now take this opportunity to again welcome and introduce Professor Deshpande who will be talking to us today about gender equality at work and at home. So over you over to you Professor Deshpande.

Ashwini Deshpande:
Thank you very much, I echo Nandini's sentiment for, you know, thanking the organizers to invite me to this event I am actually going to not talk so much about education but about work, something that in a way follows education. And I want to reflect a little bit about gender equality at work, both at home as well as in paid work. And the reason for this is that while, you know, the introductory remarks Professor Vaccarino talked about the enormous dividend that India has because of its young population and- and women being more educated.

The fact is that when you look at women in paid employment, then one of the problems that academics and policy makers have been grappling with is the recorded female labor force participation rate of India, which has been stubbornly low, is now declining. Now, what this means in terms of how it's counted etc., these are all technical issues and I'm not going into it right now, but it's the- the reason that it's puzzling is because globally when you look at female labor force participation rate, you observe through history that there are certain preconditions that society had to meet before female labor force participation rate or women's participation in paid work increased. As it turns out, India has already those preconditions in place. So for example, maternal multi mortality rate in India has been steadily declining and is fairly low by the standards of the developing world. Education levels of women have been increasing, in fact if you look at the increase over the last decade, the rise is higher- sharper than that for men, and so male female gaps, at least in the quantity of education, are- have either been eliminated or are getting eliminated at higher levels.

Of course the quality differences still remain and that's- that's something to- to worry about. Fertility rates have been going down. So Indian families are getting smaller, India is now near replacement levels of fertility, which is basically on average two children per family. Elsewhere, historically these conditions have produced- have- have coincided with a rise in female participation in paid work. But not in India. And it's- it's a puzzle- and also- I mean now Indian rate of growth- the economy is not- is not- has not been high for the last six-seven years, but there was a time when for at least for two decades where India had also witnessed a sharp, you know, a- a high rate of growth. But- and so all of these conditions together should have ensured a greater participation of women in paid work but that didn't happen, that hasn't happened. And one explanation for this persistently low level, not so much the decline but the persistently low level, is that Indian women, like their counterparts in South Asia, particularly Pakistan, are predominantly responsible for what feminists call reproductive labor or domestic chores. Reproductive labor doesn't only mean the actual act of giving birth to children but it's- it's to do with, you know, cooking and cleaning and washing dishes and keeping the house, you know, getting vegetables, filling water, etc., and of course, the care responsibilities. Taking care of children as well as taking care of the elderly. And India and Pakistan share this one thing in common which is women spend as much as 10 times more hours on reproductive labor than men do.

So the gender inequality of sharing domestic work is very, very high in South Asia, India and Pakistan in particular. And this- this feature prevents women from accessing opportunities when they exist, but I think the corresponding story in India which particularly relates to the decline is that opportunities that will use that are able to employ women or use female labor have been declining. So what you see as a decline in female labor force participation rates a large part of it is- also reflects a decline in paid opportunity. So number of women or proportion of women who work in paid work hasn't declined, it's the number of hours they are able to work because there isn't much paid work available. That has declined, and that shows up as a

decline in female labor force participation rates. And my submission is that gender inequality in domestic work mirrors gender inequality in paid work.

So as women are caught up inside the home taking care of the domestic responsibilities, they are less able to go out and work and I have some suggestions about how that should break and hopefully by 2047 we- we- we should be able to see a reversal of this vicious cycle. Now one of the key sort of factors that underlies all of this is what is known as son preference. Now, son preference is this desire to have at least one son or a certain number of sons, over daughters. What is happening in India is that son preference as a- as- as a desire or, you know, the feeling- the- the- the need for a son, particularly for old age support, is- remains strong but the family sizes is shrinking, so as a result of which either families are, you know, resort to sex elective abortions, which by the way are illegal in India, but it's done on the sly, or increasingly we've also been seeing this issue of what are called unwanted daughters. Which is, so I put unwanted in question marks which is girls born in the process of- of parents wanting a son. What that means is that families end up with daughters that they didn't really want in the first place and that has, you know, implications for the girls and, you know, the quality of education for example that the girls receive, or the quality of health care that the girls receive.

So gender discrimination within the household is related also to this phenomenon of son preference and, you know, it's the- the unwanted daughters or the excess daughters that get born as a- when the parents are actually seeking a child. Now, how does- so, all of these factors combine in a vicious CIRCLE. How can they be broken, or can they be broken at all, right? And so we do have examples in the world where this strong stranglehold of son preference did get broken, there are examples like China, North Korea, etc. which for various reasons, you know, those- those solutions may not be possible in other contexts but if you look at South Korea, which also ha- had and continues to have strong son preference, what ended up happening in South Korea is a- urbanization created job opportunities for women, and women demonstrated that they were as able to provide older support as their brothers were, or as the men were. And as parents realized that basically the child who's closer by who's going to be able to provide old age support, the material basis for son preference started to weaken. And we see that happening right now in Bangladesh as women are becoming economically, you know, are getting engaged in economic work, the material basis for son preferences is weakening, in fact, in- in a qualitative service in Bangladesh, parents actually say that daughters are better they- they care for us more, you know?

So we would actually- you know, we don't really need- necessarily need a son, right? And so in India too, I think that the way to break this vicious cycle would be to provide- to make women economically independent. To create opportunities for women to be involved in paid work outside the home. And I think that it's provision of- of opportunities for economic independence of women that's I think, in my mind, going to wake- to break this vicious cycle. And I think that's the biggest challenge for India going forward in the next 25 years. Now, there's huge amounts of academic work on all of these issues that I'm talking about. And

people, you know, particularly these days, economists have started focusing a lot on social norms and there are, you know, tons of experimental studies that talk about behavioral nudges to shift the needle on patriarchal social norms.

Now, I think that because these norms are rooted in the socio-economic realities of society it's- it's behavioral nudges can only do that much, you know? So I- I don't think that the solution going forward is to provide behavior. It's not as though people are- people believe in patriarchal norms because they don't know better, you know? It's not ignorance that's causing it, it's a certain combination of material realities that make people rely on their sons for old age support. As a result of which, son preference remains strong etc., etc., you know, so it all follows. So, in order to loosen the stranglehold it's not- it's never going to happen by changing people's minds. That's not how women have been drawn into the fold of economic independence or paid work elsewhere in the country.

So I think we should learn lessons from history, as well as from our neighbors, that have, you know, broken this stranglehold in different ways. And so A, I think we need to focus on creating opportunities for women, which means that employers, whether it is government or the private sector, have to be, you know, specifically aware of creating equal opportunities for women at all levels of the workforce. And part of the reason that women lose out on the opportunities particularly in the private sector in India is because private sector jobs are seldom advertised. They are a lot of the times- most of the times, they're filled up with networking, you know, through networks. And because women are not already in paid work, their networking opportunities are- are zero basically because they are most of the times- they are with their- with their friends or relatives. And so, providing, you know, allowing women to create cooperatives I'm using networking opportunities but don't think of it as corporate networking, what I'm saying is that creating networks of women that will then have a cascading effect in terms of allowing women to participate in- in- in paid work and gain economic independence.

Now, all these issues that were already fairly serious have been exacerbated in the last two years because of COVID-19. Schools in India have had amongst the lo- you know, the longest school closure, Rukmini I'm sure will talk about this in greater detail, and the digital divide. Basically what that's meant is that mothers and girls have been disproportionately affected, girls have not been able to access online education just as, you know, even boys from poorer families have not been able to access- to access. Mothers have had to take huge amounts of responsibility because children are at home, and women in paid work already low, have disproportionately been disadvantaged and fallen out of the workforce through the years of the pandemic. There seemed to be a slight recovery, but as you see, this graph that my centre, CEDA produced, you know, that- that recovery has really not- has been quite illusory.

And so, what do we do? You know, it seems like a very intractable problem, but I think that there are practical solutions, some of which might be small in themselves, but together they can create a climate of change so that we- from a vicious cycle, we start getting onto a virtuous cycle, okay?

So, first is identification of the problem. Not denial, but, you know, identification of the problem. What is it that constrains women from- prevents jobs from going to women? Is it gender discrimination? It could be overt, or it could be covert, you know. Hiring managers just don't pay attention to gender. That could also be an issue. It could be direct in- discrimination, we don't want women, or indirect discrimination, which means that conditions remain the same for everybody without taking into account the special constraints that women face, right?

So, all of this is within the purview of policy, and I don't mean only government, I mean corporate sectors, you know, the private sector as well. It requires stronger- stronger laws, it requires sensitization, there are transportation bottlenecks, there are sanitation bottlenecks, sometimes it could be as simple as a workplace not having a toilet for- for women, which makes it, you know, very unusable for women. And so a small change like that can create- can change the climate of a workplace.

So a, first admitting that there is a problem, B, identifying the constraints and working towards solutions to- to break those. The reason that I am saying this with such certainty that if you- if you identify the constraints and provide women with opportunities, they will take those up, is when you look at for example the Rural Livelihoods Program in India, which consists of the- consists of self-help groups. Millions of women have been mobilized in SHGs. These are very poor marginalized women where the cost of attending a meeting a week is actually pretty high, but women do it voluntarily and derive immense benefits, not material benefits, but benefits of being in a collective that's not based on family. There's a huge literature on the impact of self-help groups. So women are willing to step out of the home and join an activity if it- if they feel that it's going to- it's good- it's going to benefit them, right? In urban areas, now these- these self-help groups of course rural, and they are not yet at scale which will make- convert women to entrepreneurs these are very sort of, you know, basic level activities but they can become the vehicles of providing employment opportunities in the rural areas that go beyond [indiscernible] auxiliary nurses and midwives. In urban areas, child care is a con- is a constraint in a way that it- it's not so binding in rural areas.

So without affordable and good quality child care, women cannot go to work because, you know, their single generation families are more common in urban India than they are in rural, supposing there was a canteen at the workplace which provides decent affordable food or a different service that lowers the burden on women to do- you know, to cook everybody's meals before leaving for work. So it's again, a simple thing but it can have huge cascading effects as indeed we saw in China, you know, after the Chinese revolution, different services can provide employment opportunities to women who want to work from home, as well as alleviate the cons- you know, a big constraint to women going out to work. So again, each of these might seem- seem like a part of the of the solution, but all the parts can come together to create a solution. Entrepreneurship, you know, a lot of effort, you know, a lot of attention is paid to women's entrepreneurship but unfortunately, all the schemes that we have a focus on stereotypically feminine sectors.

So if it's women, teach them to become beauty salon, you know, you know, operators or give them stitching training. Not all women might want to become, you know, to- to work in a beauty salon. Besides in a- in a village, how many beauty salons can there be, right? And so, women have aspirations that are just as big and just as wide as the men are and recognizing them and training them and skilling them in that- in- in- and, you know, allowing their natural talent to flourish would be- would be something that would be very, very important, but for all of this to happen, we need to make sure that there is representation of women in all decision-making bodies that affect their lives. And I don't mean again only government and whether it's the private sector, whether it's a corporate sector, or the government, everywhere decisions get made that affect the lives of women. And unless women are represented in those- at those levels, the- the- the problems are not going to be solved. And of course I'm using women as a homogeneous category, I'm also aware that there are categories within women, and we have to look at specific problems of intersectionality to- to create all these challenges.

Finally, I will talk- I will end with-, with- by saying that at the end of the day when we- when we, you know, when we talk about the gender dividend the demographic dividend, women's agency is paramount, you know? Women just like men have to be allowed to wear what they would like to wear, eat what they would like to eat, marry whoever they would like to marry, they must have, you know, agency, reproductive choices within the home and outside. That's the kind of India that we want to see in 2047. Thank you very much.

Franco Vaccarino:
Great, well thank you very much Professor Deshpande. Really another thought-provoking presentation. I'm sure there are many questions so, let's-, let's keep moving so we make sure that we get to that point where we can have an open discussion and- and let's move on now to Dr. Banerji, and I referred to her as Professor, and she sent me- she sent in the chat a note to- to- to correct that to- Doctor, but I will say that although I said Professor Banerji and officially or technically not correct, in spirit I'm going to say Professor Banerji. Dr. Banerji, welcome and please over to you.

Rukmini Banerji:
Thank you so much Franco. This is fascinating, we are starting from university, going to the world of work and I'm going to say- talk a little bit about school education. And I'm mindful that we need to save some time for all these patient listeners to actually ask questions or comment. what I'm going to do is take a quick look back last 20 years and then think about what has been achieved in the last 20 years which could help us think about what changes need to happen in the 20 years or more that- to get us to 2047. And I'm going to use very, very simple sort of trends over time and numbers, I'm not showing you any slides, but I think the numbers are very clear.

So if we think about primary education or elementary education in the last 20 years, big changes, big push, so much so that I think we can now say that almost every habitation in India

has a primary school that has been provided for by the state and we see that our enrollment numbers are almost- for the last 10, 12 years have been more than 95 percent across the country. So universal elementary coverage and, you know, of course there is still the last five percent, the last mile, which always tends to be the most difficult, but it seems like we have managed to get at least a bulk of our children into school. Very often we look at these as aggregate numbers and this is a number that perhaps Ashwini will find interesting, that if we looked at grade 8 10, 12 years ago and look at the enrollment there, we had somewhere around 11, 12 million who were in school. And if we look at our census numbers from the last census, very broadly speaking we have about 25 million in every single year age group.

So, 10, 12 years ago we had about half the age group that was reaching 8th grade, which is the end of our- at the time it was not compulsory but now it is compulsory schooling, but if you look at the same number eighth grade enrollment in- in say 2017 or '18, that number is close to 22 million, which means that over these last 10 years in particular, not only are kids being enrolled in school, they are remaining enrolled for a long period of time. Ashwini, I invoked you because my own home state of Bihar, if you look at these numbers of 8th grade boys and girls, it starts very low for both, and much lower for girls but in the same 10 years period of time the girls have out- kind of outnumbered the boys in terms of reaching 8th grade.

Now all of these as you look ahead will have will have implications for you know, what we are doing but every time I talk about enrollment, I am reminded of a young boy. I think he was in a school somewhere in central UP, a rural school, and I was in the classroom, and I was asking kids to read what was on the board, and in many of our schools we always have the attendance and the enrollment numbers for the day on the- on the blackboard but the num- the name- the word for enrollment in Hindi is quite complicated, and the word for attendance is opacity. So I wasn't actually interested in enrollment or attendance, I wanted to see if the kids could read the words, and so one young kid in the fourth grade stood up and read the word namang and I was very impressed, and I asked him what does it mean and he gave me the best definition of enrollment I've ever heard. He said: "It means that my name has come to school." and so I said: "and you?" and he said: "I come also sometimes.".

So I think that we have this massive pride in having provided for schools everywhere and high enrollment numbers, but we have to remember it's your name who's come to school and until you follow your name every day, all the time, it doesn't translate into you know, and it's not you don't even translate into the first step of what you want to do. So if you take a attendance map of India you will find that there are states in which enrollment and attendance are pretty close to each other, and on a random day if you visit, you will find similar high numbers and then there are states like my own home state, or several other northern states where attendance is you know, much lower than enrollment and attendance is sometimes even lower than 60 percent. And so challenges of having everyone enrolled but only coming sometimes are large because it's very difficult to know who to teach and what.

But, if we move to one of the main preoccupations that I have had and my organization has had for the last 20 years, it is that you know even in the economics literature until quite recently years of education was used as a proxy for everything that happens that improves your human capital, and so you use years of education to say that more years of education are better than less years of education, and they correlate to wages and opportunities and so on and so forth. But I would say that again in these last 20 years, there have been now different kinds of empirical research which shows that these years of schooling and the value add for every year you spend in school is not moving at the same rate, and so you may have very high years of schooling but the years of learning can be quite low and then remain flat and the ASER report, the Annual Status of Education Report that we have been bringing out in India since 2005.

So today we are in 2022 and we've been measuring basic reading and basic math now for all those years. This morning in fact, we released a ASER report for the state of West Bengal and I would say that you know there have been of course minor, incremental, changes but by and large if you took the 2005 ASER report, and you took the latest full report which is 2018, just change the headings of the tables, it hasn't changed very much and we still are at a level where half the children in grade five, so five years of schooling and only 50 percent are still only at second grade level. They may some of them, may be higher but a full 50 percent is not even at after five years is not even that a two-year mark. So this is the level of where we are at with a very, very basic aspect of human capital learning levels. Basic learning levels have been low, they have been very relatively flat as kids get older, and within any grade there is a very wide variation of learning levels.

Now the new education policy was... India has a new education policy, very dramatically released right in the middle of the pandemic in about July 20- end of July 2020 and in a way, the new education policy I- I think it's a 56-page policy, but to me the most significant text box is on page eight, and the text box says that if in the next five years we don't achieve universal foundational literacy and numeracy, by the time the kids get to the beginning of third grade that the rest of the policy is irrelevant. To me this is a very, very bold statement, and I think that you know whoever was behind the writing of this policy at least up to the primary stage has really captured what is the real bottleneck in terms of helping to move the curve much further along, and if my bottleneck gets mine or sort of India's bottleneck gets dealt with that I think Ashwini and Nandini will be making a different presentation you know, 20 years from now.

So what do we have to do? So today in India if I look at third grade, so two years into school, if I look at third grade, and I'm using our assert data, which is very simple data but large data from many years in the country, we are at a pre-COVID, third grade for all of rural India, children going to all kinds of schools, we were at 30%. So only three out of 10 children in third grade were at grade level. And we all know that in India and I- I don't know about university I was in university too long ago but I would say all through school we follow a very age grade linear progression.

So if you are in third grade, then the teacher is teaching from the third grade textbook, if you're in sixth grade, she's teaching from the sixth grade textbook, and so there is this linear progression. And so already, by the first three years of school you've lost 70 percent of the kids. What the new education policy is saying is that we need to get this 30 percent up to 100 percent. And that it's saying that in a year or in the years where first and second grade- today kids who are enrolled in first and second grade, schools are still closed in many places just about opening up. They've never had preschool, they've never had any school, they've come literally from their parents laps into the classroom.

So you clearly can't do the first or second grade curriculum with them. So, our business as usual leaves 70 percent kids behind. If we want to leap into becoming all the different things that India should become, then one of the first things we have to do is to fix this early problem in the way that we can. And again, remember with 25 million children in each age group, if you take the age group- if you take kids who are at age three today and think of the next five years, then- and you think of each subsequent cohort, we are talking about 150 million children and the next five years and if we don't achieve this one very basic task is to get them to learn how to read to do basic math and not just that when you learn to read you've got to learn to think about what you've read as well, you've got to express your views. But if you put that whole basket of foundations in place, it's only then that you will have a growth, or a development, or- I mean, at some level I also believe that if all of this foundation is done well it should lead to a much more critical thinking and assessing population. But if you don't do all this in the next five years with the next 150 million who are in school, this 2047 is just another date that will show up and we'll still be talking like what we are talking today.

So Sharada I'm going to stop, you know, because I- I want to make sure that we all have things to talk about. But thank you so much for inviting me and remember if you don't get this job done, the rest of everything you do in education is irrelevant.

Franco Vaccarino:
Wonderful, well- well thank you again Dr. Banerji for it- for that presentation. And now we're going to open it up for questions and- and commentary. I certainly have my share of thoughts but let me- let me begin by picking something up that was asked about in the chat and it pertains to the impact of the pandemic, and I thought it was a- an interesting question that was framed in a particular way that looked at the future po- the post-pandemic world and I guess in some ways asking the question that given the increasing social centeredness and progressive thinking that has been a response to the pan- the pandemic that brought us together and, you know, made us so conscious of the interdependency do you think that the post-COVID era might- is there an opportunity here to- to increase the focus on education with a socially centered emphasis? It can be, I guess, accelerated or catalyzed by, you know, our- our COVID experience moving into post-COVID era. And- and it was- it was directed at Professor Nandini but it was also directed at the entire panel. So maybe we can start with- Professor Sundar, I should say. And- and- and then open it up a little bit.

Nandini Sundar:

Thank you, that's a very good question and I really don't have the answer because universities here are just about beginning to open up, so Delhi University is still online. So I really I'm not sure what a post pandemic university will look like and what space there will be for social justice issues to come forward. I mean, one thing that may happen is that, you know, students after having been barred from seeing each other physically for the last two years will actually begin to have these conversations. One is that they may just be absent from the university because we don't know if this period has actually changed people's attitudes towards physical attendance in universities. So I really I'm not sure about that.

Franco Vaccarino:

Great, well let me- by the way, let me just mention I- I- I should have- I've done this the actual- the- I'd like to identify the- where the- the person- the question is coming from, and this- that question came from Shmuel Yerushalmi and- and- and maybe I- I don't know if Doctors Banerji and Deshpande have any other comments before I move on to the next- next questions.

Rukmini Banerji:

Yeah, I would say that, you know, we are at, I feel at least, with- with the primary schools, we are at a crossroads. If we do business as usual when schools open, you just go back to just doing your usual grade level teaching, then it's a clear signal that we want to go down this very inequitable path that we've been on, and that schools are really going to continue to be used as a filtration system to just take a few people much further along and leave everybody behind and that's the basic design. However, if we really want to come back and think about what will it take to take my thirty percent to a hundred percent, spend money, change things around, do things differently, then it would be that we are putting at least in the early stages equity and, you know, opportunity to go ahead right at the center. So, you know, we don't need to wait another 25 years, even in two years time, it will be clear which way we are headed. And if- and that- that will be basically I think, you know, I mean, I'm exaggerating but that will basically set India's trajectory for the next 50 years.

Franco Vaccarino:

Great. Yeah, thank you.

Ashwini Deshpande:

The only- the only thing I'll say is that the last two years, I've actually seen a widening of all kinds of inequalities. You know, rural urban, male female, caste groups, religious groups, etc. The wealth inequality in India, the increase of the top two- two- particularly two individuals and their, you know, business houses versus the bottom fifty percent. The widening gap, you know, it's- it's a sort of k-shaped curve. And so I think that the biggest challenge that India is going to face going forward is inequality.

Franco Vaccarino:

Great. Thank you- thank you for that. I'll move on to the next question here From Hina Tangri, who's asking, "How do you think the NGO working in the educational sector are making a difference, and- and what more can NGOs do to improve the percentage of students completing this schooling and- and- and further going on to pursue higher education?" And that's to- to- to- to any of the panelists who want- who want to address that.

Rukmini Banerji:

Since I am an NGO in the schooling sector, I mean, it'll be very unlikely that I'll say we are making no difference whatsoever, right? I think it depends on what you're doing and where it fits into the larger landscape. There are some who are just providing more of, you know, there's always a need for provision and for sort of connecting things, and there are others who are actually identifying gaps and coming up with solutions or different ways of thinking. So, you know, I think it's very difficult to generalize, but I would like to say that, you know, this completing of schooling and heading to higher education, I think is strange.

Franco Vaccarino:

Oh, I think Dr. Banerji just froze. I- I- I think others are okay any of these- okay. Dr. Banerji, it froze there for a minute, but I think we got the the- the gist of, you know, the core parts of your- your message. Any other comments on- on the NGO piece?

Nandini Sundar:

I actually would like to comment on that.

Franco Vaccarino:

Please.

Nandini Sundar:

So, I think there is one mother NGO and set of NGOs about- which, you know, we really need to be worried about, which is the RSS, which is really controlling the higher education sector right now in a massive way. So for instance, just to give you an example, there's something called the Research for Resurgence Foundation which is an RSS front which has managed to get central universities and state governments belonging to the BJP to basically promote it through official channels. So, they conduct competitions in getting to know your local rivers, and people have to pay a fee to be, you know, to participate in these competitions etc. So they get money, they mobilize money, they mobilize student participation and data and this is actively pushed. There's no kind of, you know, open competition for which NGOs, or which think tanks can be involved in education. So there's all sorts of ways in which the RSS is controlling the university, and I think this is actually example of how dangerous NGO participation is when it's in collusion with the government. And this is not to say anything about all the excellent NGOs that are working in the field of education, especially primary education, especially Rukmini. So I'm not

[laughs] I mean, I'm just talking about higher education where NGOs don't usually work, but this is one example where they are very pernicious.

Franco Vaccarino:

Thanks for that- that insight and I think an important nuanced- nuanced point on the NGOs. Maybe I- I see that there's a- a brave soul who- who has raised his hand, John Harris has a hand raised in the- in the chat, and maybe I'll ask, John Harriss I guess is the name I- I'm just seeing the- the- the- just the name there. Go ahead john.

John Harriss:

That's me. Can you hear me?

Franco Vaccarino:

We can, yes.

John Harriss:

Okay. First of all, thank you all three, very much, for three really excellent presentations and all very, very, very clear. My question actually though is for Rukmini really. I mean I- I thought you gave an extraordinarily clear presentation, a statement of what the fundamental sort of problem in basic education is. I- I wonder though could you just talk a little bit more about how that problem is to be- is to be fixed, because so many other problems come- come into play. Think of the, you know, the problems of- well, the ways in which teachers are- are recruited, the sort of people who- who get into teaching in schools, and then of course the problems of the absenteeism of- of teachers and- and- and so on. The whole sort of basic problem that you drew attention to of the sort of rigidity of the age grade- grade system. So, yeah. Just would really love to hear from you a little bit more about how you think what the most important things to be done are to fix the problem.

Rukmini Banerji:

So let me say at the outset that I did not plant this question, but I was hoping somebody would ask it, because, you know, one of the main things that we've been doing for the last 20 years is firstly, you know, heightening the awareness that there is this big learning gap and that it needs to be fixed. But it's not sufficient to just say that there is a gap you have to also demonstrate how to fix it. And again, if I was able to show you the picture of, say, third, fourth, and fifth grade and think about each grade as a row, and then think of columns about- in a way that are children at different levels, so in each of these three grades there are kids who- at- even though they've been in school for a few years can't read letters, some can read words, some can read sentences, but still can't read a long story.

Now, the way our school system is structured is that the- it's- it's really by age and grade and it's by a row. And you have one teacher who's trying to tackle all these children with different learning levels in her same grade. And so, John, the- the approach that we have evolved over a period of time, and evolved completely I would say based on these contexts that we see in

India, is to say what about for a couple of hours a day, you group children across these grades not by rows but by columns. So that if I have three teachers or two teachers in third, fourth, and fifth grade, they don't teach the whole- they don't teach the whole combination of children in that grade, but let's say if there is Ashwini, Rukmini, and Nandini, Nandini gets the group of kids across these grades who are at, say, a letter level, or who are not even recognizing letters, Rukmini gets all the kids who are at word level but not able to read higher than that, and Ashwini has a fun job of reading- of working with the readers who can go ahead. Now this method is called teaching at the right level, which we have developed over a period of time, has been evaluated many times. If you do this, these kids who are stuck in anything like 30, 40, 50 days of a couple of hours a day, really begin to make progress. So it's really- there's no extra resources- I mean, there is a shift in mindset about how you organize instruction, but it doesn't require a lot of extra resources. And my final point is at this time of COVID, if you look at what has been a- in a typical year, the growth of this basic skill over time, it's usually in the range of 10, 12, 15 percentage points. But the teaching at the right level, in less than three months, can give you up to 25 or 30 percentage points within a government school system which has all the problems of- you know, that John spoke about. So we do have solutions, and if we were to use them today, it is possible that you may come back, you know, far better place than before COVID hit us.

Franco Vaccarino:

Great, thank you- thank you for that. and I- I see that there's a second hand from our fearless leader there. Sharada, do you want to- yeah, go ahead please.

Sharada Srinivasan:

Yeah, thanks Franco. I mean, fantastic interventions by the three speakers and I like- like I said in the chat, you know, sometimes you sit here and you wonder but haven't we said all this so many times before? The question I have is- it's mainly for Nandini but I also would like to hear from you about this. So the current rage in India and certainly in China seem to be of getting foreign universities to come to India and you know set up shops. So the recent budget actually talked about the specialization zone, particularly in Gujarat to be set up for foreign universities. So where do foreign universities and- and hires of foreign graduated faculty within Indian universities where do they fit into the sort of vision that the three of you have articulated? What does it mean, Rukmini, for our school education? So what are we now aspiring for in terms of what are the sort of universities our children will be going to? And Ashwini, what does this mean for- especially for female labor force participation that's been such a vexing problem, right? I mean, are we now going to then see better participation rates that we have foreign universities and presumably people going to study in these foreign university campuses set on India or to universities where foreign faculty are teaching? So I just want to get a sense of where do foreign universities- the idea of inviting foreign universities to India and of people educated abroad coming into and being hired into universities, where- where do all that fit into the sort of vision that we are talking about for education in 2047. Thank you.

Nandini Sundar:

So can I go first?

Franco Vaccarino:

Please, please.

Nandini Sundar:

So, it fits into the government' plan to make it into the global indices over to the global rankings for Indian universities. So one of the major criteria for ranking is international-internationalization. So both of students and of faculty. And Indian universities have historically done very badly on this international index, so that's really why they want to get, you know, international faculty and foreign universities to tie up. And it's- it's very much in line also with funding, you know, a few institutes of eminence which are again going to be targeting the global rankings.

So it's part of the kind of prestige projects or advertising of the Indian government without actually looking at the university system in a holistic way and what is required. And there's also the question of which almost everybody has now forgotten, you know, in the '60s there was a big debate about swaraj, or self-governance, in, you know, universities, how one might actually begin to develop autonomous sources of thought which were not following trends. I'm talking about the social sciences which were not following international trends just because they were fashionable and to come up with. So that whole kind of strand of thinking has now also been completely buried even though the government is talking about, you know, indigenization and so on of culture and learning, so, thanks.

Franco Vaccarino:

Great, thank you. Any other comments on that one? I have- I'm conscious of time, but if there's any other-

Ashwini Deshpande:

Just a quick response in terms of female labor force participation: I don't think it's going to make any difference because the reason that female labor force participation is low is not because women are not well trained or, I mean, I don't accept that. I think it's a much more complicated problem. Most of all to do with the nature of jobs that are getting created or not getting created more likely. So one is there's a problem of joblessness for everyone, unemployment is at an all-time high, and within that, women are particularly disadvantaged. And the opportunities for women to be involved in paid work are shrinking, combined with their domestic, you know, reproductive labor responsibilities. So, I- I doubt if the entry of foreign universities is going to change any of these factors. So I think that's- that's a whole set of other factors that we need to focus on.

Franco Vaccarino:

I- well, first of all, let me take this opportunity to thank again all the panelists. I did have a- a question around STEM, the science technologies, you know, mathematics and the more technical di- disciplines that India is- you know, is profiled so well around the world for, You know, how- it seems to me that that some of the biggest questions and challenges that- that face us in the future are actually social science and humanities questions. They're fundamental questions around equity, around how we organize social justice, these kinds of things. How do you- how do the panelists think we- what are some of the ideas around- how do we increase the premium that's placed on the social sciences- social sciences, education, which I think are going to be key as a foundation for future decision making and policy formation. You know, the more- the more socially science and humanities oriented education that we have, you know, the more we're going to be informed by those- those areas in terms of how we approach complex decision-making for our societies. And by the way, I'm speaking as someone who's on the STEM side in my professional career but who hugely appreciates the importance of the social sciences.

Ashwini Deshpande:

I mean, I would- I would- at this point I would hesitate to advocate any- any push towards this or that direction because I'm also very worried about what that- what shape that push might take, you know? And so I think, you know, for- for all rounded development all- all subjects are needed. For example, the university where I'm at, Ashoka, which started off as a liberal arts and continues to be. Now it's pushing in the direction of science because that was- those faculties didn't exist in the university so I believe that that trend will make it more all rounded. I think it's not so much social science versus stem as much as it is developing critical thought and ability to think critically and progressively, regardless of which discipline. I think the challenge for India is really that rather than I would say social science versus the this direction or that direction. I think what- what we are- we are all struggling to hold on to is India's very rich heritage in, you know, pioneering, critical thinking, and, you know, very complex ability to produce knowledge around very complex subjects, very deep rooted knowledge, you know? So India has had some outstanding scholars, both in the social sciences and humanities and- and sciences. And I think it's that heritage and that legacy that needs to be strengthened and taken forward rather than regressing into some, you know, view of the world that is not scientific, and I don't mean scientific in a technical sense but I mean not informed by- by scientific rigor. So I would think of that as a bigger challenge than just a disciplinary shift in this way or that.

Franco Vaccarino:

Great, well thank you very much, and I think your point on the critical thinking is exactly right. I was just thinking in terms of the goal posts that that define, you know, our base education to- to- to make sure that people have that foundation for critical thinking. But look, I- I'm conscious of time and I- I was adamant about trying to stick to the, you know, to- to our backstop which is- which we've just passed it by a minute or so. So I want to again, first of all, thank all the

participants for showing up. I'm not sure what time it is in your part of the world, but it's just before lunchtime here in- in Canada, in Toronto.

But thank you all, a particular shout out and thank you to the panelists for just a- a great set of presentations and also insights that touched on really important nuances in what are very obvious, very complex issues and- and- and- and also to Sharada for- for her leadership [indiscernible] all this stuff as part- part of the broader India 2047 speaker series. So on that note, I want to again say thank you and to all of you and look forward to hopefully crossing paths again. And I think that the speakers we- we may stay on, Sharada do you have any- any- maybe you can send a chat about that. But again, thank you to everyone. Bye.

[End of Transcript]