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WEBINAR

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Panel discussion: What Would It Take To Get The U.S. To Follow in Italy's Footsteps?

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Former Minister of Education
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BECKY PRINGLE
President
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FEDRICK INGRAM
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Closing remarks: Global Opportunities For Action

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P R O C E E D I N G S

MS. WINTHROP: Good morning, good evening, good afternoon everybody wherever you are tuning in from. My name is Rebecca Winthrop, I am the codirector for the Center for Universal Education at the Brookings Institution along with my fellow codirector, Emiliana Vegas. And I'm really pleased to welcome you all to this event on education and climate change.

We are here on Earth Day. Happy Earth Day to everybody. And we are really seized of the urgency to address the climate change crisis and believe that education plays a really important – a short-term and long-term role. And for that reason, we are partnering with Education International, who has been working on this topic around the world. We are also very excited that this event is done in collaboration with EarthDay.org. And they are having a whole bunch of activities around the world and this will be a piece of it. So we are very grateful to all the teams at Education International and Earth Day along with our teams here at Brookings here for making this possible.

We have a treat for you all today. We have a number of wonderful speakers. And I'm going to introduce them and tell you what our plan of action is. We are first going to hear a presentation from Christina Kwauk, who is a nonresident fellow with us here at Brookings, on a policy brief and research report we wrote around harnessing the creativity of students and teachers to address the climate crisis.

And then we're going to have a lively discussion with three leaders on the topic, Lorenzo Fioramonti, who is the former minister of education of Italy, currently an MP and happens to be called into a special session of Parliament at the moment but is going to participate with us. And he is also a professor of economy at the University of Pretoria with Becky Pringle who was the president of the National Education Association, obviously a really important association for teachers here in the U.S., along with Fed Ingram who was the secretary-treasurer of the American Federation of Teachers, the sister teacher organization here in the U.S. They both have a lot to say on this topic.

And then after lively discussion with them in which we will also take your questions – so please, in Twitter share questions, #GreenCivicEd. And then we will close out with both David Edwards, who is the general secretary of Education International, and Kathleen Rogers, the president of Earth Day.

And we are doing this event on Earth Day this morning because at the same moment the

– President Biden is convening his summit on climate change. And although education is not formally on the agenda, there's a lot of energy and buzz around education as a lever to help address climate change. And I believe there will be about 11 heads of state bringing this topic up during this session.

The special envoy on climate change, John Kerry, just produced an incredible video out really talking about the role of education and addressing the climate crisis in the short and long-term. And this is a very timely moment for us to all be talking to this topic.

And so with that, I want to invite you, Christina, to please turn your video on. And thank you for coming on. And I'm going to hand over to you to walk us through some big ideas, big proposal that we both have on what we could do collectively.

MS. KWAK: Great. Thank you, Rebecca. So today President Biden and 40 world leaders will start their much-anticipated virtual climate summit. No doubt they will be talking about the climate emergency and their countries' ambitions for reducing greenhouse gas emissions through, innovations and energy infrastructure and trade solutions. But notably absent from their agenda are going to be the education solutions needed for what I like to call a new green learning agenda, or a new way of educating and engaging children, youth, and adults in climate solutions and climate thinking. A new green learning climate agenda is foundational to our ability to win the climate change marathon, to sustain momentum toward a net zero world by 2050.

So to fill the absence of education discussions at President Biden's summary, I'm going to lay out a proposal for global leaders and national leaders that Rebecca and I introduce in our new report. That proposal is to unleash the creativity of teachers and students to develop and implement climate action projects in their homes, schools, and communities by 2025. By 2025, this is when countries are next set to take stock of their proper estimate zero and their commitments to the Paris Agreement.

And what do I mean by climate action projects in every school? Imagine the students and teachers at your neighborhood elementary school, middle school, or high school actively designing, leading, and engaging in a schoolwide project aimed at adapting to the impact of climate change. Or helping to reduce the vulnerability of your neighborhood to specific climate risks. Or to decrease the carbon footprint of your school or your community. And high emitting countries like the U.S., these

projects could address sustainability issues from food waste in school cafeterias to mapping out local environmental challenges like storm water management. Or they could be projects that focus on analyzing local practices or policies that contribute to environmental racism that disproportionately impact low-income neighborhoods in your community or in communities of color.

In low emitting countries, these projects could help students address the impacts of climate change already at their doorstep like increase food insecurity in times of drought, raising awareness around sea level rise, and measures to mitigate around coastal erosion, or the development of community response plans to ensure girls can continue attending school during periods of educational disruption caused by climate disasters or prolonged environmental shocks.

So why are we proposing such an audacious idea? For three reasons. The first is the evidence that suggests when education helps students develop a strong personal connection to climate solutions as well as a sense of personal agency and empowerment, it can of consequential effects on students' daily behaviors and decision-making in ways that can have measurable impact on their lifetime carbon footprint. Specifically, researcher suggests that quality climate change education kinship young people's food choices, transportation behaviors, and career decisions in ways that could help reduce nearly 19 Gt of carbon dioxide by 2015. And this estimate is just looking at implementing quality climate change education to less than a quarter of secondary students in middle- and high-income countries. Imagine if every student around the world receives such an education.

Second is the evidence that suggests education reduces climate risks and vulnerability by addressing underlying inequalities like those that structure the lives and livelihoods of marginalized and vulnerable public populations including girls and women. And relatedly, is education's potential to increase young people's resilience and the capacity to adapt to the impact of climate change by building their knowledge not only of climate change itself, but also its underlying drivers and its solutions.

But in addition to knowledge, education is critical to building young people's green skills like coping with uncertainty, problem-solving, systems thinking, and empathy that are needed to thrive and to be constructive citizens in a changing climate but are also critical for working in climate relevant careers or green jobs that will power a just transition to a greener economy.

Together this evidence suggests that our ambitious goal to see climate action projects in

every school around the world promises to have significant impact on our ability to tackle the climate crisis. For starters, leveraging local community climate of action at scale will add up. Research suggests that the research for climate action is at the scale of 10,000 to 100,000 people, which is roughly the size of a school district depending on the population size, the cities, and the counties. This scale of action is important not only because the collective ability to make meaningful impact that is rooted in action that has local relevance, but also because we reach a certain degree of cost-benefit optimization when it comes to the global impact of our local actions.

Furthermore, climate action projects in every school have the potential to address deep-seated issues of climate injustice. Those communities that have historically contributed the least to present-day carbon emissions are often the most vulnerable to climate risks and climate impacts. This includes girls and women in developing countries, minority and indigenous populations in communities in the U.S., small island developing states and many low- and middle-income countries around the world.

For these communities, climate change is a threat multiplier and because of their marginalization, their interest and needs are often ignored by national climate policy. Student-led climate action projects can engage youth from these communities in important civic action helping them to become powerful change agents for sustainability and climate justice.

And finally, green jobs. As I mentioned earlier, education has an important role to play when it comes to ensuring youth today develop the critical green skills and civic mindsets needed to power the green jobs that will help us reach net zero by 2050. The experiential, solutions-oriented project-based learning that climate action projects enable are an important design element when it comes to developing the skills and mindsets for working in climate.

Our audacious goal is also supported by growing momentum around the world to harness the power of education. For instance, in the U.S. 80% of parents and 86% of teachers support teaching climate change in school. The powerful Fridays for Future movement and similar youth labor campaigns point to the strong demand for their education to address and to prepare them to face the greatest existential threat of our time.

In addition to high demand, there are four conditions that increase this moonshot's likelihood of success. First, successful models of project-based learning that is oriented towards

addressing climate change already exist around the world. These projects from Zimbabwe to the U.K., to Washington State draw on decades of evidence on how children learn best.

Second, there is a diverse coalition of actors ready to scale successful models through policy, advocacy, and practice. Just last year in the U.S. 120 organizations and networks came together to cohere a collective vision for climate empowerment and developed a strategic planning framework to put climate change education at the forefront of U.S. climate action. This is just a drop in the bucket when it comes to the volume of civil society actors standing at the ready to channel their expertise, their experience, and their energy into classrooms in support of teachers and students.

Third, as I mentioned before, school districts provide a perfect network of institutions for scaling climate action. They exist in every country in the world, are often a key part of the connective tissue of communities and create opportunities for linking civic learning to local climate and environmental justice issues.

And finally, young people are powerful climate communicators. Children and especially girls can have a strong influence on their parents' views about climate change. And research shows that when children are given the tools to facilitate conversations with their parents about environmental challenges in their community, they are able to bypass adults highly resistant political ideologies and increase their parents' concerns about climate change as well as their parents' environmental behaviors. This intergenerational learning can be instrumental to sustain the impact of student led climate action projects ripple outward into the broader community.

So to make this moonshot idea of climate action projects in every school a reality, we need to support teachers and students to implement a new green learning agenda. We can start by activating coalitions for action. This includes coordinator financing, the diverse coalition of actors I referenced before, from civil society, to government, and to the private sector all working in collaboration to support teachers.

And to make these coalitions effective, different actors will have different roles. From those who need to fund these efforts to those who should specialize in content development, potentially pairing teachers with local scientists to curate and develop locally relevant teaching and learning materials. And then there are those who should mentor, coach, and train teachers and youth leaders and

then those who are best placed to share stories of success, lessons learned, and good practice. And of course also those who will be helping us attract the impact of climate action projects on the environment.

So our window of time to take action is quickly closing. The leaders' climate summit happening today, and tomorrow is missing a critical item on the agenda, education for climate action. Not harnessing the creativity of teachers and students to tackle the climate crisis and not identifying ways to better equip generations with the green skills and civic mindsets to engage in climate solutions will have consequential impact on our ability to reach net zero by 2050.

So I hope you will accept this proposal as a path forward for educational climate action, our moonshot idea, to see climate action products in every school by 2025. Thanks, so much.

MS. WINTHROP: Thank you so much, Christina. Really appreciate it. That gives us lots of food for thought.

And I want to now invite up our panelist to react to this big idea. Becky, and Fed, and Lorenzo, can you please come on video? And first off, I just want to do a quick round robin on what you think. What you think about this big idea? What are your reactions to this proposal?

Lorenzo, you look like you are in a moment when you can speak, even though I know you've been called into an emergency session of Parliament and are speaking to us from Parliament. So two thumbs up to you for dedication. Why don't we start with you?

MR. FIORAMONTI: Well, thank you so much for having me. And you may hear some noise in the background. As the conversation is going on in the main chamber. When I see this presentation, I get extremely excited. I get excited because you got the whole point. When we in Italy, roughly two years ago, decided to introduce a new approach to civic education that puts sustainability and climate change at the core of what civic education is all about, we had this in mind. We thought that it would have repercussions across society. We thought that harnessing the power of students was going to be fundamental in achieving the – our climate objectives.

We got inspirations from the global youth movements, the brightest of the future. The fact that they had a very simple message, right. I don't know if – you know, this was striking to me, that they said listen to science. So we had 16-year-olds around the world telling adults listen to science. We go to school to learn and then you adults are doing the opposite of what we learned in schools. So when

we started, we were the first country in the world, as you know, to do so. And we had very much the same approach of a project-based, making mandatory, galvanizing teachers, giving schools a new mission, something that was really revamping social attention to schooling and education.

We didn't know that it was going to have such an important impact on global debates and global discussions. And perhaps this is why – this is because the time is right for some serious mobilization on the side – not only on civil society, but also in government leaders. They have to take action on this. And a small step in that direction can have a systemic impact, which as you have shown in your paper, is equivalent, if not even superior and stronger than rolling out all of the technologies that we can come up with. So investing in people, and their activities, and in their education can be probably the most powerful weapon to change the world.

MS. WINTHROP: Great. Thank you, Lorenzo.

Becky, I want to turn to you. You are a science teacher, lifelong. It's in your DNA. What are your reactions to this?

MS. PRINGLE: So, thank you so much. It's good to be here. Yeah, happy Earth Day. That just makes me smile saying that. And knowing that we are in a position here in the United States with the election of President Biden to actually make a difference now. We have a president who believes in science. So there is that. But it absolutely is committed to ensuring that this next generation has an earth that they can live on and they can breathe on and they can drink the water on, they can live there. They can live their fullest lives.

Without question the climate action projects, the idea that we (inaudible) I will call it that, certainly that big hairy, audacious goal of climate action projects in every school is not only worthy; actually its ambitious but is absolutely necessary right now. Research that the proposal cited talked about – quoted the statistic that 86% of teachers believe climate change should be taught in schools, but only 55% of teachers said they know how to cover climate change in their own classrooms or how to talk to the students about it. So while absolutely reaching this goal in every school by 2020 is necessary to move this forward.

We can't forget those intermediate steps. So what we heard from that report is that we have to really lean into the professional development of educators. And by the way, when I talk about

that, I'm talking about the entire continuum. I'm talking about preservice, preparing our teachers, not just our teachers, our other educators that are surrounding our kids and ensuring high-quality learning from them all the way through accomplished teaching. In that space I think about leadership development. And so educators must be included throughout all of these steps. So now we will talk more about that later.

But when I think about leadership development most especially, at the NEA one of the things we are really leaning into is developing our leaders of color. And so when this report specifically talked about climate justice, which we have to talk about, we have to center our work on racial justice. And so as a union, we know that a part of that work means that we have to prepare our leaders of color to lead in this space. And so those are the kinds of things that we are focusing on and we know that as we do this work, we have to integrate that climate education throughout our system, and it has to be embedded in every single subject. And we have to make sure that our teachers, all of our educators are prepared to not only teach, but to be leaders in this space.

MS. WINTHROP: Great. Great. Thank you, Becky.

Fed, over to you. Anything to add? I know you will have much to say, but especially on sort of maybe some of the hurdles that would need to be overcome to really make this idea a reality. Becky talked about really leaning into professional development for teachers. Any other hurdles that you think should be overcome? And/or reactions?

MR. INGRAM: Yeah. I think there are some hurdles, but I think we have to talk about some of the opportunities. And first let me just digress and say it's always an honor to be here with Becky Pringle from the NEA. Thank you so much. And Lorenzo, thank you for being here. But to Rebecca and Christina, I think you guys get it. You've hit on the head. And from the American Federation of Teachers' point of view, listen, there's an old adage that says I don't know what the future holds, but I do know who holds the future, and it's our kids. That is where it's at. And these kids today, our students, they care more about – arguably, care more about societal issues than any other generation before them. They care about things that are happening.

I'm here in Minneapolis, Minnesota. And this movement that you see, this racial movement, this reckoning has been led by young people. Young people said enough is enough. Young

people, who once they are educated in a particular field, in a particular genre, they understand and conceptualize it and have mastered PR. They can actually go out and teach somebody else. So that's what we need to do, right?

If we just pivot over to the pandemic, what has proven to be one of those things that has helped us get through this? Being outside, fresh air, ventilation. That all has to center itself into climate change. And so we know that this is the existential threat. This is something that we have to operate in a global scheme.

But I'm from Miami, Florida originally. And so I've seen it up close and personal. I've seen beach erosion. I know what the coral reefs are doing. I know that we are cutting the Everglades more than ever before. I know that sea level rise is real because I know where the beach was when I was 5 years old, and I know where it is now as a 40 something-year-old person. And so those are the kinds of things I think we can start to teach.

And if you want something done, I always say give it to a teacher. If you want something to actually be expounded upon in our society, you give it to our classrooms. And not only give it to a teacher, give us the time. Give us the tools. Give us the resources and get out of our way and let the magic happen between the teacher and a student because it always does.

We can change this world. We can save our earth. Earth Day is something that we can magnify this issue. This is a democracy issue. This is an issue that is going to help Black, and Brown, and Indigenous kids more than ever before, low socio kids. And so yes, there are some hurdles. Yes, we had to do with politics. Yes, we to do with those politicians who are nonbelievers. We have to deal with those people who are on the edge. And so that is part of the civic engagement that we also have to talk about and be a part of. But we also have to think like you have thought, think boldly and think widely and comprehensive. So I will leave it –

MS. WINTHROP: Thanks Fed. We will bring you back in, because I think actually, I want to turn – I want a deeper question now I'm about to you Becky and Fed, given your expertise on education in the U.S., to really ask you about some of the strategies. And you both brought up environmental justice and the intersections between racial justice, systemic racism, climate impacts, and civic action.

And so I'm wondering about strategies that you think might be very practical and helpful for advancing this agenda in schools. Given that we – you know, teachers around the world, principals around the world, but right here in the U.S. too, have a lot on their mind. They are coming out of COVID recovery. There's been massive loss of instructional time. Kids are doing remote learning. So this is on the top of their mind.

And I have a colleague in the U.K., Jim Knight, who is working on a U.K. educational climate action campaign. And he says, look, young people have a mental health crisis. They are – you know, they been isolated. COVID has been very difficult. It's too much to – they have lost instructional time. They are behind on academics and it's too much to add an existential climate crisis. So let's give them the tools to act and be empowered to take action there at least.

And both AFT and the NEA are very supportive and have been advancing and working on the community schools' model, this idea that schools should be very connected to communities, families, parents, and that the community should be sort of the canvas on which learning can take place in and out of the classroom, experiential learning. And as – and community schools have proven to be a great model to address some of the learning loss especially for the most marginalized kids.

So I wanted to think about that model as maybe an operating model that could be a good environment for some of these climate change education innovations and projects to flourish. Do you think that they – that would work? And what are your thoughts and what are some practical advice you would give to schools and teachers?

Becky, why don't we start with you?

MS. PRINGLE: So the short answer Rebecca, is yes. But then again, I believe community schools model actually works to address many of the challenges we are facing in our public education system today. And at the heart of it, honestly Rebecca, is the believe that when we say that every single student, every single one, deserves to learn and grow in a racially and socially just and equitable system, for that actually happen we have to, as a society, understand and own our share of responsibility in that.

And so when you think about the community schools' model, it is all about that. And the premise of that is that it's not only the school's responsibility that those four walls of the school, but it is

the entire community's responsibility. And the school can serve as a hub of that community.

So when I had the opportunity to visit community schools, what I've actually seen Rebecca, it's really kind of interesting. We have the six pillars for the community school model. We talk about strong and proven, culturally relevant curriculum. We talk about high quality teaching and learning. We talk about inclusive leadership, which is key. We talk about behavior practices including restorative justice, family and community partnerships. And then that coordinated and integrated wraparound services to support not just our students, but the entire family, the entire community.

And what we've seen – and the community schools model begins with doing an assessment with what's needed in – for the students and the community. And what I've seen as I've visited community schools, when the students are involved and that's the way the model is designed to work where the students are involved in doing that assessment along with everyone else, invariably environmental justice actually gets on the plate of the things they are going to address. So I have had the opportunity of seeing them take this issue on front and center in just about every community school that I visited.

But the idea of centering the work and everyone coming together and owning that problem, honestly Rebecca, that is the only way. That is the only way we're going to overcome these hurdles. We all have to see ourselves – and our responsibility in climate education, in the solutions that we must – that we must absolutely address right now and into the future, and that we see our collective responsibility in doing it.

MS. WINTHROP: Great, thank you.

What about you Fed? What are your thoughts?

MR. INGRAM: Yeah. So in the African American community we have something called the eight-man corner. And Becky will know that this is an eight-man corner. Community schools work. Community schools work and we have said that for many years now.

Let me just give you some things will go on top of that and insert into the community school idea. One is the curriculum. We have to deal with the curriculum that is set and ready to go that is inclusive of the voice of educators, that is inclusive of the voice of the young people, because we cannot do curriculum without their voice. They must help us lead this charge. And if we give them something

from an ivory tower and say this is good for you, that's the quickest way to get our young people uninterested. And so we must fill their minds with their own ideas and try to edify that and create a curriculum that leaves no community out, that leaves no issue out. And so it must be comprehensive in nature. So that's one.

Two is the collaboration. It's where a science teacher like Becky and a music teacher like me can go into a classroom and we can work in an interdisciplinary team and it's okay. We are not pushed and pressed by a test. We're not pushed and pressed by somebody from a district office who says you must do this. That we can actually work together.

And this is just as important as science, technology, engineering, mathematics, the arts, and climate, because it is something that we are all working towards together. And is that collaborative effort on top of the curriculum where the music teacher understands and feels an importance to do a concert with Michael Jackson's "The Earth" song or the will.i.am song that says my president is green. You know, those kinds of things we can absolutely do together.

And that the last thing I think I will just add to what Becky said. It's about construction. And I really mean construction, the physical plant of our buildings. I mean the brick-and-mortar is what we've heard in the pandemic space. How are we going to redo, reconstruct our buildings so that it is an edifice of climate that sun panels or solar panels are on top of buildings? How are we going to ensure the clean water is getting into this? How can we integrate lab and science projects within the entire cultural space for our students?

And then lastly, how do we build and make it okay for our business partners in a community or our parents, most importantly our parents, to come into a school and understand that this is a green school, this is the environment that we're trying to set for our kids. And this is running through our agenda. This is what's going to save not only the kid that's in the classroom but is going to save your grandkids. It's going to save your nieces, and your nephews that are to come. That's what we need. We need that passionate thought from our community members and our teachers.

And I think if we deal with the curriculum, we deal with collaboration and we deal with construction, I think those things will not only help to add to our community school project which the NEA and the AFT have been leaders on for almost decades now and telling – and we been singing it from the

highest tree. Listen, these things work. We used to call it wraparound services. But if we can make the school the hub, it's an opportunity for us to really take this climate change, to take this issue of saving our earth the heart and do it all together.

MS. WINTHROP: Great.

Lorenzo, I want to turn to you because both Becky and Fed talked about how if student voices are at the table, the climate gets into the education process. And you mentioned that part of what you've done in Italy was inspired by young people and listening to the Fridays of the Future movement and many other movements.

So for people who don't know, in Italy, Italy is one of just two countries. I think maybe a third is on the way. But at the global forefront of comprehensive, fully integrated climate education. And you've framed it as education for sustainable citizenship. So you really linked the democracy was citizenship, the civic action with the climate, understanding, and mindsets. Could you just, you know, for this audience, tell people what you did, what your approach was? Give us some of the nuts and bolts, some of the practical nuts and bolts on how you approach this.

MR. FIORAMONTI: Thanks, Rebecca. Well, I think as it's been – we already touched upon in this conversation, empowerment is at the center. This is what the younger generations want. They don't want – you know, they are not interested in just learning. They want to know what to do about it, which is one of the lines of what Jim Knight said about not having an existential crisis on top of all the other crisis that the youth is already facing.

So in 2018, I was fresh in Parliament. I was a government minister. And there was this discussion around whether it was time to reinstate civic education in our country. And so my argument was, well, if we have to go down the road of civic education, civic education in the 21st century cannot be like civic education in the 1950s when it was first introduced after the Second World War. It needs to be about the new rights and the new responsibilities. It needs to be about the great challenges we are all facing. And I suggest that that sustainability be at the core of it, sustainability from an economic point of view, from an environmental point of view, from social point of view, taking into account the U.N. 2030 agenda and (inaudible), which I thought was a very good framework to get the debate going.

And this is how we put together a crosscutting alliance with the right and the left, the

Conservatives and the Progressives. Everyone was in favor of this because it was community centered. So the whole idea of regaining a connection with your community, learning what to do to increase the well-being of your community. You know, turning education into a tool for participation.

It was all about supporting local economic development. It was about developing projects that could increase the – also the sustainability and the resilience of small cities and the different territories and the different local systems, something we had sort of forgotten in this blind pursuit for globalization and so on and so forth.

So it was, in a sense, it was speaking a language that Conservatives as well as Progressives could perfectly understand. And that's why I was, as the deputy minister representative of the Green Party and the person in Parliament that took actually the leadership, took the lead in this process was from the right wing, was from a right-wing party. So when we did this, we then turned it. So we got a law first. So Parliament voted and it was unanimous, everyone in favor. Not one single member of Parliament voted against. And then secondly, that gave me as administered by them, a strong mandate to get this into action.

And the whole idea was civic education must be about sustainable citizenship. What does it mean to be a responsible citizen? A responsible citizen needs to know how to take care of water, how to take care of waste, how to reduce all of the negative impacts on society, how the environmental and social dynamics intersect. Very important to start connecting the dots between these worlds. They are not separate.

So our climate challenge is also our inequality challenge. Our systems of production and consumption are the cause of both our social ills and our environmental crisis. So learning all of these things became a catalyst for participation.

And the good thing is that I saw old schools getting excited. And from grade one all the way to the end of high school. And also universities got excited. That's when they started teaching new modules at the universities because they also realized that it wasn't going to work if kids come out of school and the go to university and they operate in silos.

So we had universities understanding that the first year must be as crosscutting as possible so that if you're going to become an economist, you will understand that whatever economic

theory you will develop it needs to take into account the biosphere and all we know about biology, what we know about the ecology. If you become an engineer, you'll need to know that whatever you're going to build will have to be suitable for human beings to live pleasantly, not just beautiful to look at, and will need to be harmonious with the ecosystems. So it started a small revolution, which I feel can have dramatic – dramatically positive impacts on the rest of the world.

In this year – I don't know if you're going to say that Rebecca. But this year we have the G20 meeting of ministers of education happening in Italy. We're going to have at COP in Glasgow, two fundamental meetings, to fundamental events that can change the global debate around this. And I think whatever we're discussing here today for Earth Day, must be the launch pad for something very big happening in the rest of the year.

MS. WINTHROP: Great. Wonderful. I have some questions from the audience that I want to pose to you. And Lorenzo, I wanted to pose this one to you. It's Paul from the Mid-Hudson Teacher Center. Because you really touched on it with your education for sustainable citizenship. But could you give us a more practical guidance on how you address this? He is really asking about how the juxtaposition of students leaving school to do climate activism and why can we not bring that energy, the interest, that passion and training for how to be civic minded, smartly typically minded, effective civic advocates into school.

Does your – does Italy that's how does that – do you do that in the education system in Italy? And if so, how with your education for sustainable citizenship?

MR. FIORAMONTI: We do so. We do so also on the premise that when I became minister, one of the first things that I did that I became minister in September. And two weeks later there was the global student mobilization for climate. And I think I was the only minister in history that said publicly that I was happy people were not – the students were not going to school to mobilize for climate. And I thought that was the most important lesson of their life.

And that's also what triggered the whole final process around education for sustainable citizenship, the understanding that if kids felt they needed to leave school to be relevant, there was something wrong with schools. School should be a place where you learn everything that is relevant to your life and we can actually apply your knowledge. And so that's why we got a lot of emphasis on

getting schools to act. And now basically – of course this being COVID, many schools were closed. It's been a very difficult year.

But the number of projects that were developed, we have – I want to make it clear to everyone. We have an additional hour every week. So this is a special subject that is mandatory and is – it has a grade. So students are graded at the end of the year on this. It's not an elective. It is not something you can do if you want if you find time. It is mandatory to do it.

And I think this is important because if we go back to the idea that climate change and sustainability are a bit everywhere and they can be touched upon by different subjects, we are not going to give it the prominence it deserves. There needs to be a teacher tasked with doing so. And our approach is that that teacher becomes actually the school curriculum coordinator so that whatever that teacher will teach during that hour will also contaminate positively what is being taught in the other subjects. This is really, really important.

MS. WINTHROP: Interesting.

MR. FIORAMONTI: It's not just that element, but everything connected.

MS. WINTHROP: Interesting. I would be interested to hear what Becky and Fed think of that idea. And would you be supportive of something like that in the U.S.?

So Becky, I want to turn to you. I love your reaction to what Lorenzo said about sort of extra – you know, adding a special subject. Even though I understand it's mainstreamed, but he's talking stopped about lifting it up so it sort of graded and given prominence.

And then I wanted to add – so reactions Becky, number one. And then I want to add a question from an audience member who was – because you talked a lot about student voice in the community school model. This is a student Mokshith who basically said, look, I – me and my friends are extremely frustrated. We want to develop more sustainable living practices and the adults in my community and in my life, and it seems in my country, are stopping us. So what can I do?

MS. PRINGLE: So, a couple of things. You know, Lorenzo, when you were – when you started answering that first question and you were centering your answer in student empowerment and agency, Nikki Giovanni came to my mind. And she said, you, my children of battle, are your heroes. You must invent your own games and teach us old ones how to play. Now Rebecca, I'm not saying I'm old.

But we have to create the space for students to exercise their agency.

And I often hear students – to the question that was asked. You know, I often hear people refer to students as not being prepared to leave. They don't know enough and all of that. And I want to direct my answer back to Lorenzo's answer to your question. Not only do we have to bring it into the schools, not only do we have to create individual, I believe, individual subjects so we can focus. But it also has – and Fed had said this earlier. It also has to be integrated throughout every single subject. Every single discipline should understand how they integrate this issue into what they teach into their curriculum.

And so when I think about the answer to the question, honestly Rebecca, my answer was yes. It's yes and. Because right now our students feeling the need to be out on the streets and advocating, yeah, guess what. When we take a lesson from history – my dad was a history teacher and he often told us if we don't learn from our history, we are doomed to repeat those mistakes.

And so when we think about great movements of the past, it's, yes and. We've got to be out there. We got to be leading these movements just like the racial reckoning that Fed was talking about people in the streets and raising awareness and demanding change. And we've got to also work with them the system and make that change. So we have to – we absolutely must do both.

And I will end with this. Our students are leading right now. They are leading right now. Greta Thunberg of course has a light shining on her right now and when she said that right here, right now is where we draw that line, that the world is waking up and change is coming whether we like it or not, that's our students. They understand what's at stake. Right now, today and certainly into their future, they understand that they must step up right now and demand what they need.

So they are already involved in the act of democracy. They are already running for office. They already are voting in record numbers because they understand that elections matter, that determines the policy we have, and then they're holding their elected officials accountable. It is just incredible to watch. And as educators, as a union, we must support them.

MS. WINTHROP: Great. Thank you, Becky.

Fed, I want to turn to you. I'm combining two questions. One is really around pedagogy because we've talked about curriculum and content and separate subjects as well as mainstream, yes

and, as Becky said. And one of the things that's really important is to make sure that there is experiential learning. You know, active experiential pedagogy that teachers use. And this can be used not just for climate projects, but across – this is a muscle that will strengthen teacher's ability to bring to life any subject, frankly.

So there is a question around pedagogy and there is also a question around how do we bring students to focus on local environmental issues where they can have the most impact. And I'm combining those two because I think that experiential learning pedagogy is sort of the way. And so my question to you is your reactions and what would you need – what you think would need to happen to bring that life?

MR. INGRAM: Sure. So I think – and let me thank everybody for the questions. I think public policy and grassroots must meet in the middle. And I think – let me give you two or three examples. One is integration. 1954 I believe was the biggest move in the 20th century that we have seen. The Brown v. Board of Education was 1954. It took until 1972 to actually integrate through and throughout our public-school systems. That was over time where we had to not only get the public policy established, but grassroots. Had to push the envelope to make it happen. With our public policy, our curriculum, our teaching, our belief system has to change so that – now hopefully won't take that long for climate because we don't have that kind of time. But I'm giving you an example of how these two things have to meet in order to push the agenda forward especially as it relates to our schools.

Another I think very relevant space is John F. Kennedy. John F. Kennedy – and you all reference this as a moonshot. John F. Kennedy says we're going to put a man on the moon. So what do they do? They started in our school systems. They started to train engineers and mathematicians and technicians because they knew they didn't have the technology nor the space, nor had they given us the time or the resources. So they put the resources, they put the time, they got a belief system in folks. And so many years afterwards, not that many years after, we saw men go to the moon. But that was after the agenda was set and after people pushed the agenda and after teachers did the magic that we talked about earlier.

So now we have this whole project-based learning, this experiential learning where we can do certain things. And listen, I am a band director. So I believe the first trumpet player is as

important as the – is just as important as the base drummer.

And so if you're a student at a student government association, you can demand that your school stopped dumping excess food and start composting projects. Those are things that you can learn and actually entrench in your school. PTAs can assist recycling programs are relevant at every single school. Those are things that you can do. If you are a school board member, if you are person who cares about your schools, make sure that they demand funding and curriculum resources for climate change and insist that there is a program or project that every single school until we get it entranced from the federal government on down. Those are some sustainable things that we can do.

And know that we must be led by project-based learning, that pre-kindergartners and first graders can actually go outside and build gardens. They can understand what it means to put your finger in the dirt and understand what comes months later after you put the seeds in and then you have these flowers and have to cultivate this. And then that translates to a young adult who will then understand the importance of gardening, the importance of trees, the importance of this nasty CO2 stuff that keeps polluting our thing.

So I will make a little bit of a joke that we've learned recently that CO2 is some of those emissions that kind of put you to sleep. And I was a very regular student. And so I'm blaming it all on my administrators and teachers who didn't teach me about climate change, that I feel asleep in my English classes and my math classes. You know, if we had better infrastructure, then I probably would have been a better student. But anyway, just a little levity for all of us.

I think there is something –

MS. WINTHROP: Thank you for that.

MR. INGRAM: For everybody to do. This is not assignable project for some people say, okay, make the public policy and the go away. Our students understand more than we do, that this is going to be a push. So I will end my statement by saying this. It reminds me Becky, of A. Philip Randolph. A. Philip Randolph, one of the greatest labor leaders that we've ever seen in America is said at the banquet table of nature you – there are no reserve seats. You get what you can take, and you keep what you can hold, and you can't take anything without organization. And that's what we do every day.

MS. WINTHROP: Right. Thank you so much Fed. Thank you, Becky. Thank you, Lorenzo.

We have 10 minutes left and I'm going to turn over to Kathleen and David to take us out, talk to us about some of the big ideas this year that are – we should keep our eyes on and what we should all be doing. So Fed, and Becky, and Lorenzo, we are very grateful for your participation. You can go off video and I invite onto video David and Kathleen.

MS. ROGERS: Anybody want to go first?

MR. EDWARDS: Well, I think – it's a tough act to follow, isn't it, Kathleen.

MS. ROGERS: I agree.

MR. EDWARDS: That was brilliant. It's nice to hear that the drummer is just as important as the trumpet player, because I'm a drummer. So that was good to hear. Why don't you go first and then I will come in?

MS. ROGERS: Yeah, just quickly. This was an amazing event and so timely. And in the 20 years of my work on climate literacy, green schools, civic skill building, and Becky was so absolutely correct. I've never seen so much action. And I credit everybody on this call for what you been doing.

Just a note on the civic skill building. We are very focused on the issue as an integral part of climate literacy because we know vulnerable communities need the skills to fight bad actions by governments and corporations, which as you may know, they've long experience. And also the civic skills will help them navigate the ravages of climate change, which we will visit those ravages on poor communities and more vulnerable communities. And because we want the jobs of the future to belong to those communities and the jobs of today because I've been left out of the last 10 economic revolutions and I agree the green revolution will dwarf all of them.

A couple of quick updates. Globally, as you know EarthDay.org with most of the partners on here are leading a global climate petition for assessed fully integrated climate literacy through the Paris Agreement along with civic skill building and job training. And as of today, we have half a billion members of groups including youth groups signed on, which is pretty extraordinary.

If you haven't seen the Secretary Kerry interview, here's a quick update. He endorsed climate literacy and Fridays for the Future and dozens of youth groups. Yesterday with us to the global

summit including Greta and they all assess climate literacy and civic skills, which was great. And lastly, internationally the ILO endorsed it as well, which is a major base because our interest in jobs. With about 40 countries that were in various stages of negotiation with, so we hope when we arrive at the COP when that happens, we will see a global endorsement for all the signatories to Paris or even the next one might take us that long.

Domestically we are pushing an office of climate literacy, civic skill building, and the Department of Education with massive investment and funding for climate literacy and support for our state to pay for teacher training, curricular development. And I think Karis interviewed Joe that point home that we have to fight this information to get people new opportunities, particularly vulnerable communities the opportunities for jobs and entrepreneurship. And of course, we've all mentioned it, green schools infrastructure plan, which we support and which we think will allow us to include some of this funding in that process.

So that's an update from us. David, you can take it away. You did an incredible job yesterday with that global summit on teachers.

MR. EDWARDS: Thank you very much, Kathleen. And I really want to thank you too, because it's sort of like there's been a number of us who have been mobilizing around the world and our own sectors. And this particular moment we've come together. So the climate activists and educators and the students movement and you helped bring that together too. So we have the Teach for the Planet summit yesterday. But there was also that We Cannot Breathe, the hip-hop caucus. And we were talking about those social justice issues and linking that with climate justice and climate education and the right to know about science and have that space, but also the student summit. And it was really great to hear the demands from that's coming out of that student summit that climate literacy is there.

So it was certainly within our climate literacy manifest so that we sent to Biden and they've responded, and we know that a number of education ministers have already signed up too. And heads of state are going to be bringing up and that we will not stop from here to the COP. We had yesterday actually the Scottish minister of education, John Sweeney, who actually said with the head of our teachers union in Scotland, the IAS, Larry Flanagan, that they would be very happy at the COP to welcome countries who demonstrate a high ambition and commitment to climate literacy to come together

and to actually share and strategize. And so from that sort of government level.

But I agree with the speakers. I agree with Fed, and Becky, and Christina, and Rebecca and everybody today, Lorenzo, that this has also – we have to flip the system. We also – you know, there is a lot of energy from the bottom up. You don't get good behavior from corporate actors just because they all of a sudden become charitable because there is pressure and movement and building on them to act. It's one thing to pass a law and as another thing to enact a law to create the time, tools, trust, and space for teachers to be able to bring that to life, their creativity and classrooms with working with parents and students.

I'm really excited about the opportunities in front of us Kathleen. And I want to thank also Brookings for creating the space for us to be talking about this on Earth Day. And like you said, the interview with Dennis and Gary was just fantastic. So we should probably get that out as soon as possible too.

MS. ROGERS: Yeah, and I can't say enough how much the people on this Zoom call, every one of you, have had a major impact on this. And it seems like we're just getting – not as critical mass, but a real incredible energy behind this and people are recognizing how much the world depends on climate literate jobs trained people.

Yesterday the other thing Kerry said was he encouraged citizens to demand and demand and demand of the government that they hold their feet to the fire, and including the U.S. And despite this extraordinary commitment by the U.S. a few minutes ago of a 50% reduction by 2030, way beyond most people that's what most people thought was achievable, but again he said is not going to work. It won't happen without engaged and informed and educated citizens. And I don't think it's going to take as a generation to teach our children.

It's already evident as a once said, from the youth movement. But I think it of years with funding we could begin to graduate students from high schools and universities. And certainly university professors and presidents and deans are behind this because they want this fully educated kids to come in and be trained and use their great academic – and research and development dollars to become entrepreneurs and engaged in the green economy because ultimately that will drive so much of this. But I do think climate literacy, that poor stepchild of the environmental movement, is now seen as day. So I'm

really, really pleased and super honored to be with all of you today, especially because it's Earth Day.

MR. EDWARDS: Yeah. So thank you very much everyone for organizing this. Thank you, Rebecca. Thank you, friends of Brookings. Thanks AFT, NEA, Christina, Fed, Kathleen. This is how we change things, and this is how we bring the creativity, public education, and the commitments of our democracy to live through green civics, civic action. And we just lead with our student side-by-side, classrooms, on the streets. Happy Earth Day, everyone. It's a pleasure to be with you all. We will see you next time.

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