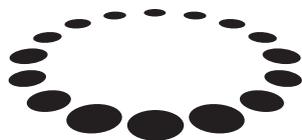


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Cities as connected learning networks
The Pittsburgh Remake Learning model
Sunanna Chand



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Introduction

Good afternoon, everyone. My name is Sunanna Chand and I am from Pittsburgh, Pennsylvania. I'd like to thank the Foundation Bofill. Thank you to the Open University of Catalonia. Thank you to this magnificent museum for the space today and for setting everything up so beautifully. It is an absolute pleasure and I'm thrilled and honored to be here with all of you today. Thank you all as well for being here.

As I said my name is Sunanna Chand. I'm a strategist for Remake Learning. I'm from Pittsburgh, Pennsylvania, which is on the eastern side of the United States. It's a metropolitan area with about 2.5 million people. It's about 14,000 square kilometers. A little bit smaller than Catalonia, but not by too, too much. Today I'm going to talk to you about Remake Learning and how we in the Pittsburgh region have connected our learning spaces and our learning opportunities in ways that create a web of support and an ecosystem that supports innovative teaching and learning in the Pittsburgh region.

But, before I do that today, I actually want to take you back. I want to take you to yesterday and specifically, I want to take you back 100 years ago. Imagine yourself there. It's a time of rapid change. A few short decades bring us the internal combustion engine, the telephone, the light bulb and more. Suddenly we're able to make things on a massive scale. Workers are pulling all-nighters on assembly lines, churning out steel and assembling cars.

Young people are leaving the farms in droves and coming to the cities to enter into a new kind of work, one in which they're going to be required to do set and specific skills over and over and over again, make this thing one way, make this thing another way over and over and over. This emphasis on efficiency in repetition got put into our schools. We

asked learners to do discrete sets of skills. Take biology for an hour and then stop. Take language for an hour and then stop. Take science for an hour and then stop over and over and over again.

And we got into this habit of listen, memorize, test, repeat. At least in the United States and at least for some students this worked beautifully. In America, it created the world's largest middle class.

Let me bring you to today. Today, we're in another period of profound change. It seems like everywhere we look these new technologies, from smartphones to artificial intelligence, are completely reshaping, redesigning and remaking our world.

Computers are now in millions of people's pockets. Robots are helping us perform surgery. In Pittsburgh, self-driving cars are an everyday sight. We now have to think about how this changes what we expect of our learners as well because learners, by and large, are not going to be assembling cars. They're going to be designing the computers that drive them. They're going to be asked to solve these very complex problems like global climate change, and income inequality, and food shortages. Problems for which, unlike on the assembly line, there are no set standards. They're going to need complex problem-solving skills. They're going to need to know how to collaborate. They're going to need to know how to communicate across cultures, across contexts, communities, across countries.

They're going to need to do all of this as well in a time of increasing income inequality, in a time of segregated schools, in a time when despite educators' heroic efforts we're still leaving far too many children behind, particularly students in poverty, students of color, students with disabilities and others.

We as adults have the responsibility to make sure that every single student is able to pursue their passions, pursue their interests, find their purpose and meet the demands of the modern world.

I was a teacher and I can tell you first-hand that education is not just about creating a future workforce. It's about creating creative, curious, compassionate citizens. It's about creating stronger and more equitable communities. It's about creating a more loving and compassionate world. We think that in order to do that in 2017 and far beyond it takes a new, more expanded and more connected approach to learning.

We in Pittsburg have been thinking about this for quite some time. In 2007, we kept hearing the same refrain from educators over and over and over again. Some of you might be thinking this to yourself as well, “I’m just not connecting with students like I used to”. Every generation tends to complain about their younger ones a little bit, but this seemed different. It seemed as if a seismic shift had taken place in the way that kids were forming identities, interacting with the world around them, interacting with their peers.

It was at almost this exact same time when learning scientists, many of them right in our own backyard at places like Carnegie Mellon University and the University of Pittsburg, were starting to find out why. They painted a drastically different picture of the modern learner, a learner that has tools that were once unthinkable to us, even three to five years ago at their fingertips, a learner who has access to infinite amount of information in an instant, a learner who is forming and reforming identities on social media constantly with a potentially global audience. Think about it. In the age of the iPhone, what should education look like? How should it happen? What is the role of an educator and who is an educator?

In 2007, when we started hearing this refrain in Pittsburg, we sought to bring people together to think about this problem, mostly educators at first, over breakfast. It was really just informal conversations that were fuelled by pancakes and coffee. Because it was such an intriguing question to so many people, those breakfasts started to grow.

Suddenly, they involved gamers, roboticists, higher education professors, technologists, funders, businesses, more non-profits. Slowly, the momentum started to build. As our network started to grow, we started to realize that this new approach to learning would take an all-hands effort. Not one organization, not one project, not one program could tackle this giant change in learning that needed to happen.

We needed our libraries, we needed our museums, we needed our schools of course, but we also needed all of these other types of organizations to come together. In other words, we needed a network, we needed an infrastructure to be able to communicate the things that were going on right in our own region that were innovating, that were compelling, that were moving things forward. We needed a way to

champion best practices and be able to show others what quality looks like, right around a corner from them in some instances.

We needed a way to catalyze new and innovative programs and projects and made sure that the educators in our network were supported. We needed a way, first and foremost, to convene people and organizations, to bring them together in more structured ways in order to help each other solve these problems. What started as an informal network of breakfast meetings turned into an international movement.

Remake Learning

Now there are over 500 organizations that are part of Remake Learning regionally and again these involve museums, libraries, schools, after-school organizations, funders, businesses, technologists, all kinds of different organizations that are coming together and garnering international attention for the work that they're doing in the Pittsburgh region. They're all working together to create engaging, relevant and equitable learning experiences for the kids in our region.

By engaging what do I mean? I mean that kids are actively building and constructing knowledge. They are not passive recipients. They're actively participating in the learning process. By relevant I mean that learning is relevant not only to a student's passions and their interests, and their community, and their context, but it's also relevant to the demands of a 21st-century workforce. By equitable, we mean that the students that need the most support and resources get the most support and resources. Let me show you what that looks like in practice in Pittsburgh.

VIDEO

Hailey: When it's hands-on learning, it's something that you want to do.

Illah: How do we make Pittsburgh the very best place in the world for children? We are all about empowerment, but empowerment through technology innovation. We work with local source innovations and local students, parents, families, and adults in such a way that our technologies can be authentically useful in them improving their circumstances.

Christian: When I go back to school, I'll be able to apply what I've learned here into my class work. When I do that, I will be more prepared looking for a job after I graduate.

Junlei: The learning and rehearsal of skills whether it's arithmetic or literacy become so central. What sometimes gets neglected is how do we help children grow on the inside.

Cathy: It's really about pivoting the conversation from education to learning, and harnessing all of the assets in the community to contribute to that overall learning journey a young person can expect.

Jenna: We need to learn a lot throughout our whole life. We should never stop learning.

That paints the picture for you a little bit. What you saw there were all different spaces, certainly schools but museums and libraries and higher education institutions as well. What you can see in that video is that our partners are from all over, from the Children's Museum of Pittsburgh to our local public television stations, to schools in urban, rural and suburban environments. Now, it's not at all uncommon for learning scientists to be embedded in museums learning what works and helping develop new programs.

It's not uncommon for inventors and entrepreneurs to work with teachers to create classroom apps that are most relevant to them and their students. It's not at all uncommon for hip-hop artists to be embedded within out of school organizations creating poetry workshops for kids and on the service of engaging, relevant and equitable learning for our modern generation of kids.

Now, we've got this movement in the Pittsburgh region that's garnered attention from people like Forbes and CNN, and the World Economic Forum and the Tribeca Disruptive Innovation Awards and more. Now in the Greater Pittsburgh region, a kid can walk through any number of Remake Learning's front doors, whether those front doors are attached to museums or libraries or schools or virtual spaces or something else entirely. They can experience this kind of engaging and relevant learning anywhere that they learn.

I'm going to paint a picture for you of how this looks in practice. Let's imagine a student and let's call that student Leah. Leah's five years old and she comes from a low-income family in Pittsburgh. Due in large part to the hard and wonderful work of Remake Learning's network partners,

it's possible today that her entire educational trajectory could be shaped by the members of the network both in and out of school. Let's start with Leah when she's in kindergarten. You can see Leah using an app called Message From Me. It's where she takes pictures of what she does in her kindergarten class and record some audio and send that back to her family members at home in a one way text communication so that when she gets home her family members can see what she did at school that day and have a meaningful conversation with her about her learning. That app called Message From Me is now in over 100 schools and early learning centers throughout the Pittsburgh region.

It started when two organizations that never would have met had it not been for a Remake Learning network event, Carnegie Mellon University and an advocacy association called the Pittsburgh Association for the Education of Young Children. These two organizations that are normally in separate silos came together to solve a problem and now it's created massive change on a great scale in the Pittsburgh region. Now imagine that Leah sends pictures back home and those pictures are of her building things she seems to have a knack for it.

Her family goes to her teacher and says, "We see she likes to build things. How can we expand on the skill?" Her teacher goes to one of the over 100 professional development opportunities that are offered in the Pittsburgh region over the course of the year and learns her skills in engineering so she can apply them to the classroom. In that professional development, she might also meet someone from a neighborhood makerspace. There are over 100 makerspaces in educational settings in the Pittsburgh region, again in large part due to the network.

She might say to the family, "You should send Leah to go to one of these after-school programs so she can build up on her skills, build her passions and continue this trajectory of engineering and building". As Leah grows so do the number of opportunities that could support her learning. Perhaps she attends one of Pittsburgh public schools STEAM academies, Science, Technology, Engineering, Arts, and Math.

Perhaps she finds the labs at the Carnegie Library of Pittsburgh. This started from a small catalytic grant from the Remake Learning network to see what would happen if we could put recording equipment and 3D

printers and all other making activities within a library. It's since grown to labs at five different library locations. The libraries have plans to expand it to over 20 libraries in the coming years, so again small ideas, partners coming together, and then potential for massive change.

Leah might end up here and record music and continue her love of making and creating as she gets older both in and out of school. Remake Learning is not just for educators and kids, it's also for parents, families, community members as well. That's how we started in 2016 something we call Remake Learning Days, the world's largest open house for the future of learning.

In 2016, we asked our network members to host events to showcase what the future of learning looks like in their learning space. Over 250 events were hosted over the course of one week in 2016, in May. Over 30,000 people attended those events, parents, family members, kids, teachers to experience what the future of learning looks like. All of these little dots are museums and libraries and schools that were hosting events in 2016.

At the launch event in 2016 over 100 organizations made commitments to learning innovation in our region that total 25 million dollars in investment. This year, in 2017, there were over 350 events over the course of 12 days and another 30,000 parents and families came out to experience the future of learning. It's important that these events happen not just in the city center but in suburban communities and in far rural communities as well because we need to account for all different kinds of variances in location and in students because we know that what might work in one context might not work in another.

That's also what's so great about a network approach, is that hopefully when you're able to see the entire region and all the organizations that are participating, you can see where there's a concentration of activity and where more activity needs to happen. You can see where there are inequities in the system and work your very hardest to fill those gaps. For instance, for Remake Learning Days we focused our attention on six communities that although they are full of amazing educators and there are really amazing learning opportunities there, these communities have struggled with economic disinvestment, with poverty, and with systemic oppression.

We focused attention on those areas. We concentrated funding. We worked with community partners. We made sure that there were lots of events happening in those areas to showcase the great work of those communities and we focused positive marketing attention and specific marketing campaigns for each. This is important for lots of reasons, but not least of which is that a network like Remake Learning is at its best when it's most diverse and inclusive.

You never know who's going to spark the next great idea so we need to make sure that there are as many people around the table as possible. Innovation only happens when people who never would have met come together and think of something new. It's very important to us that we cultivate a diverse and inclusive network. In that way, I'm hoping to explain to you a little bit as I end my presentation about how we created our network, how we sustain our network.

In the service of that, I hope to grow ours with all of you, but I also hope that we can start to think about how you can start a network and how that might grow for you as well.

Here's my first, tip build on your strengths. What makes your region unique? What makes your city unique? What about its identity, its history, its culture, its institutions gives it unique ability and strength to serve its children in innovative ways? I'll give you an example in Pittsburgh, we have a long history of making things and reinventing ourselves.

We're an old steel town that is now a hub for technology, for advanced manufacturing for the arts. That well positions our region to be able to advance STEAM learning, Science, Technology, Engineering, Arts, and Math and gives us plenty of partners to work with who can come together to accelerate this work. That leads me to my next point, encourage cross-sector collaboration. As I said before, the best new innovations happen when people who never would have met come together.

That's why the network is full of, not only educators, but technologists, makers, artists, local politicians, philanthropists, business leaders as well all coming together to think about the future of learning, which is why you'll see drones flying outside classroom doors. It's why you see local politicians extolling the virtues of Remake Learning and its impact on the local economy. It's why you see musicians and artists and learning

scientists working together all the time, that's something that we encourage over and over and over again.

You also need to equip your educators to innovate. You need to give them all the support and resources that you can to make sure that they are ready to think about learning in sometimes drastically different ways. For us that means building a network of professional development that's hosted by all kinds of different people in all kinds of geographic areas that give teachers the ability to teach each other, to work in peer-to-peer ways and to practice modern pedagogies like project-based learning, deeper learning, STEAM learning, maker learning and more.

You also need to meet people where they are. Meet people where they are on the road to innovation. You can't teach a child or help them to navigate designing and printing something on a 3D printer if you yourself are struggling with that and don't have the skills. How do we meet educators where they are in their expertise and their pathway to innovation? How do we also meet them where they are geographically? How do we make sure that teachers don't have to drive an hour and a half to get to an innovative professional development opportunity?

We know that teachers don't have a lot of time. How do we make this process as easy as possible for educators that work so hard day in and day out and are spending as much time as they can in service of their kids and their families?

Be open and inclusive. Again, I talked about how important it is for networks to be diverse and inclusive. The best ideas are when diverse sets of people come together. That's how we make it really easy to join the network. You just go onto the network at remakelearning.org, fill out a brief form that takes maybe 10 minutes and commit to network values, things like creativity, collaboration, compassion, and positivity. You can be a member of the network and start to connect with other people as well.

Be audacious, be bold. We don't have time to wait. This system of listen, memorize, test, repeat is failing too many students. How do we make sure that we're getting out there and doing bold things and not being afraid of change or being afraid of risk? How are we making sure that the crazy ideas get a chance to sprout and grow into something amazing over the course of your entire community?

Finally, and most importantly, keep learners at the center of your work. Listen to them, love them, trust them. We are all in service of our young people ultimately and so we need to make sure that they are supported in their creativity and in their development as caring compassionate citizens again who are ready for the demands of the modern world.

We have a television show in the United States called *Mister Rogers' Neighborhood*. It was a television show that ran for many decades and it was filmed in Pittsburgh. Fred Rogers, the main person, was from Pittsburgh. He used the innovative technology of his day, television, to transform the way that we did social-emotional learning in the United States. One of the things that he said was, "One of the greatest dignities of humankind is that each successive generation invests in the welfare of each new generation".

I want to thank you, I want to thank you for being here but I also want to thank you for investing in the welfare of this new generation that is so different from generations prior. I want to thank you for thinking about how you can work together and really collaborate to take on this massive challenge of changing learning so that we meet the needs of today's kids and meet them where they are. Again, thank you to the Foundation, thank you to the Open University. Thank you on behalf of Remake Learning. It's been an honor to be here with you and I'm looking forward to your questions, thanks.

Interview

Thanks, so much Sunanna for your presentation. How did you manage to pass on this project from an informal network to a well-defined local ecosystem?

Sure. Whenever I give presentations like this, it seems like this, as you said very beautifully, it seems like this built house and it's all finished and it looks beautiful and people say, "I can never build that that's too much." [laughs] What I always say was remember that we started in a room just like this, with even fewer people actually. All educators who were thinking about the future of learning and who were trying to figure out how to come together and make this work.

I would say the first thing to do is really to continue to do this, to come together, to talk, to bring as many partners to the room as possible and make sure that at every convening you're also looking at who's not at the table, who's not in the room, who should be here that's not here and how do we make sure that they're here the next time. That is a wonderful place to start and you're already there.

In Pittsburgh, and around 2010-2011, so the network was already three or four years old of doing these informal conversations, we decided we needed a lot more infrastructure. That's when the Sprout Fund which was a local non-profit in Pittsburgh stepped in. A few foundation partners stepped in to support the work and this organization was instrumental in beginning Remake Learning. They founded all of the communication strategy, they founded the brand which was hugely important. Having a brand, an umbrella for people to identify with, that is neutral, that is positive is a huge step that we took forward in 2010 and 11. I always say it's really important to get that as a next step once you're having these

informal conversations. They made sure that there was catalytic funding of between five and \$10,000 so that folks, educators, technologists, people in the network could start testing out their ideas in very small ways so that they could grow.

They also started doing a lot of the larger convenings, under the umbrella of this new brand and website and social media and everything that goes with that. Putting that infrastructure in place was hugely important. As Remake Learning continued to grow and continued to thrive, in 2014, we put in place something called the Remake Learning Council, which is a council of about 40 multi-sector CEOs, executives from our county executive in Allegheny County to heads of major education philanthropies to the head of the Carnegie libraries, the head of the Children's Museum of Pittsburgh and others, CEOs of businesses as well, which is important, and others to come together and set symbolic and strategic strategy. To say, "Yes, this is an organic network. Yes, we're doing lots of things but what are we missing as a region? How can we be more strategic about the things that we're doing to really push the network forward? How do we not just rest but continue to push?" In 2017, now we have Remake Learning Days which was an initiative, strategic direction out of the Remake Learning Council, we just reformed our mission and vision. We're continuing to think about how do we as a network continue to move, continue to innovate as we go forward. We're continuing to grow ourselves.

You're starting in exactly the right place in exactly the right ways. Hopefully, it won't take you as long either because now there are so many examples, not just in Pittsburgh but across the United States and across country of regions and cities that have come together to do this work.

That's very interesting because the team you have is a small team and the budget is quite small. The most important thing is how to activate this leadership actually and how you can find these different actors. The important thing is how to mobilize the resources that you have, you don't always need a big budget for that. You need to understand which are the needs and what all the actors want. This is the most important thing in this stage.

Then another question, there are a lot of initiatives which try to do the same in our country and in other countries and it looks like they manage to really unblock some potentials, but oftentimes schools are not changing anything because teachers also have this huge pressure of results and they are not open to that, sometimes. Because we have a system which is based on the classical curricula and sometimes well they don't have the tradition and they don't have this capacity of knowing how to change things.

Which are the aspects that you needed to change in the schools? How did you manage to have schools to become active in this learning because sometimes schools are too passive, how did you manage to get them?

That's also a great question. At first, we started with folks who are ready. We started with superintendents who were already thinking in forward ways and said, "How do we support you in ways that can really accelerate your work?" The first thing that we did and very early on in the network was that we supported a lot of technology enhancements in any way that we could, so makerspaces, 3D printers, iPads, computers, things that would increase the digital ability of schools.

What we started to realize was as a network, as a region, educators were getting all these tools and they were saying, "I have no idea what to do with this". We weren't meeting educators where they were. The strategy completely changed from a network perspective and we started to really encourage and showcase professional learning and all the places in which professional learning happens. At this point, right now, I run a working group of 60 professional development providers in the region.

They are school districts themselves that host professional learning for other school districts, that's innovative and peer-to-peer and focused on modern pedagogies like computer science and project-based learning and maker learning and things like that. There are also higher education institutions that host professional learning. There are traditional professional development providers that have really stretched their ability to teach in innovative and compelling ways and created makerspaces for teachers in particular so that they have a dedicated space to tinker and play and be curious and take risks.

We have a lot of professional development providers that are even a tech companies that provide free professional development in the use of their products throughout the region. We bring all these folks together from different sectors and say, “How are you serving educators? Are we supporting educators enough? Are we supporting all educators? Are there gaps?”

We have put a strong emphasis on professional learning in our region to make sure that teachers feel comfortable with innovation and also that their administrators, their leadership level also feels comfortable with it. Because a teacher can do all the innovation that they want in a school but without a supportive administration that can fizzle pretty quickly and educators can become discouraged. Then, how do you change the culture of a region that can then spill over and change the culture of a school and vice versa as well. How does the culture of the school impact other schools and spill out into the culture of a region? There are lots of ways that we support school districts specifically.

I would also say that we make sure that professional learning includes both in and out of school educators. In school educators have a lot to learn from each other but they also have a lot to learn from out of school educators, museum educators, library educators, after-school program educators, that often teach in very different ways that could be applicable to this type of innovative learning.

Third, they all say to the piece about standardized tests and traditional forms of learning and assessment. There’s a growing body of research around project-based learning, interdisciplinary learning as at least not having a negative effect on test scores and assessment and in some cases having really good positive effects particularly on disadvantaged populations.

We actually, in Pittsburgh and across the United States, are trying to, not only conduct more of those studies so that there’s a larger evidence base, but also to make sure that we’re creating meta-analyses of these studies and communicating them as widely as possible so that there is less of this fear of changing the traditional systems just because assessments haven’t caught up to the new ways that teachers, educators in and out of school are thinking about learning.

Well this is a very interesting issue and this is key also. We are very interested in this experience because it's brilliant first of all and very effective. Of course, other similar experiences have been done before and they failed. You also had to learn from this failure. Sometimes, other examples didn't connect with teachers. Everything has a story behind it. In particular, we would like to know how did you implement in practice this customized model based on the interest of the students because this is very interesting as an idea.

This customized learning idea is very powerful because when students learn based on their motivations we know that these interests are very powerful in terms of knowledge and learning. Then you need to make this effective and you need to implement this customized model. How did you do that? How did you meet that challenge? Maybe you could tell us some story about how a traditional school faced this kind of challenge in the beginning?

Different organizations are doing this in completely different ways. There's a organization called Youth Leading Change in the Pittsburgh region that's part of the Remake Learning network that brings together youth from, I think six different individual districts in the Pittsburgh region, and brings them together to solve large community and societal questions. They're really critically examining the political structures, the economic structures, the social structures within which they live.

They're critically examining it, they're starting to deconstruct those systems and then they're starting to propose new solutions for an entirely new different, more equitable world. That's a great example of Remake Learning in practice as well, we want students to be actively engaged in their learning and we want to trust students to be able to do that. I have found in this work that it's really hard for adults to trust students.

You can't customize learning to students, you can't let them really be active and explore and engage in interdisciplinary and active ways unless you trust them to be able to do that. That's a big step and again that's something that we talk about both in our mission and vision of the network but also we hope that our network partners are promoting this idea when they're delivering professional learning for instance. Other

schools have done things like 3D printing design challenges. They have done community projects and design challenges. I think about the Steel Valley School District in Pittsburgh, right outside of Pittsburgh actually, that created an innovation zone that was in an old wrestling room and they transformed it into this incredible space. They're actually working with community partners in this innovation space and the youth are leading in economic development change in their small town outside of Pittsburgh and really taking that on themselves.

When we talk about personalization and customization sometimes people get this image in their mind of a student sitting in front of a computer and the computer decides what they're going to learn at exactly the right level and it's one teacher and 60 kids and there's no engagement. That's not what we're talking about in Pittsburgh. We're talking about saying, "What do you care about? to learners. What problems do you want to solve and how can we help you get there with all the tools that are available, with all the knowledge that we have as educators and with all the knowledge that you have as a learner and all the knowledge you have at your fingertips?"

With that technology is obviously really important but it can be used in lots of different ways. We like to think, in the Pittsburgh region, of technology as a tool not an end in itself.

Then I will also say that a way to get to customization -- When I was a teacher, I have these horrible memories of taking attendance by hand. I have these memories of collecting exit tickets at the end of every day and entering them into an Excel spreadsheet for hours to try and to determine where my students were at different levels in math and reading.

We're getting to the point now where artificial intelligence and other technologies can actually allow for greater efficiencies in these bureaucratic tasks. Teachers don't necessarily have to spend hours diagnosing their students and doing these by-hand assessments. They don't necessarily have to take a lot of time doing attendance themselves and can find more efficient processes via technology to try and figure out where their students are in the learning process.

That opens up potentially a lot of time that teachers can really pay attention to the needs, interests and levels of their students and be able

to customize and personalize learning in a way that's much more meaningful to every student. That time to build relationships and deep and meaningful relationships with students and their families and how technology might allow for that is also going to be incredibly important in this customizing learning and giving youth more agency and opportunity to be able to activate their own learning as well.

With the same idea, apart from that what do you think the gestation of the technology, what is the added value of it? From your experience, what would be a technological failure? What can you identify as a failure in terms of technology? Which are the potential mistakes that we can also make, apart from what you mentioned?

What are other potential positive uses of technology? What are the mistakes people make with technology? Well, I'll start with the mistakes, I guess. I think the mistakes are...there are lots of studies especially with younger kids that show that you can't just hand them a piece of technology and let them go. You need to be able to, as an adult, sit side by side with that student using that iPad and be able to guide them through the process and build relationships as you're using technology.

It's far too easy in this day and age to just sit students in front of the computer and let them go. We, again in the Remake Learning network, are really trying to encourage this idea that it's not about the shiny object, it's not about these awesome tools and technologies in and of themselves. I think a mistake that we make is we say, "Oh, this thing is really cool. Let's put on this virtual headset and it's going to be awesome". What learning is actually coming from that necessarily?

Now learning can come from that. Some positives about technology, I think about our project at Propel Schools in Pittsburgh working with some out of school partners as well, they had students actually filming, audio recording and then showcasing at different community events Virtual Reality Tours of poverty in their region. Again, student-created, multi-disciplinary use of technology that was guided by an educator in very thoughtful and intentional ways.

That experience is completely different from the experience of just here's a roller coaster on a virtual reality headset that's in the school. Again, technology does not replace the educator. Technology enhances the experience. Technology can absolutely make learning more engaging for kids, especially kids that have grown up with an iPhone in their hands. We need technology to engage with today's kids for sure, but we cannot fall into the trap of saying that technology is it and it's enough to just give kids technology and let them go.

Educators are needed to support students in that process. Educators are needed, again in a network scenario, to help each other to figure out the best ways to be able to do that.

Okay, we will have a debate with you, and so you will have a mic. If you have questions and if you are home or at your job, you can use the hashtag and we will get your question. You will have the opportunity of asking questions to Sunanna. Start activating your brain for questions. Let's talk about families because they play an important role because they are now investing more money than ever in some after-school activities.

Sometimes, they are more important than the school activities themselves, be it music classes or math classes or Chinese classes or German classes, but then we also have other families or maybe the same families, they have a different attitude towards the school. They think that classical learning is very important, maths, language etcetera. They think that all the other things are just on top of the rest, so it's less important. Sometimes, we can have the family resistance also.

In your case, how could you get the support of families and avoid this resistance?

I'll say first that classical studies like math and language are still incredibly important. We don't say, "You don't need any of those academic skills, you're good kids" [laughs] I think what we what we think about is how do we teach math? How do we teach literacy? How do we teach science? How do we teach these very hard skills I suppose in ways that are again engaging relevant and equitable? There is no one

way to teach a child to learn how to read. I know that from being a first-grade teacher.

I wish that I had more than one way when I was a first-grade teacher to teach my kids how to read because not all of my kids picked up a book and read in the way that the textbook told me that they would. [laughs] Not all kids were engaged by that. It wasn't relevant to all kids. Not all kids learn math in the same way. How do we as educators be able to personalize that experience and teach kids academic skills? Of course, also teach them complex problem solving, collaboration, communication all of those things as well

There is a lot of resistance sometimes from parents and families because, again, I talked about in the beginning of my presentation how we've had this system of education for hundreds of years now. We have had all of us I think, even though I grew up in the United States many of you grew up here, we probably all have a similar conception of what being in school looks like, what it feels like, the experience of a teacher standing in front of a class and giving us a lesson is something that all of us know what that is.

As education starts to change and we start to think about education, not only in school differently, but think about education as existing out of school as well, think about the school building is not the only place where kids learn, that's even in itself a dramatic shift and is something that parents sometimes struggle with. That's actually why we started Remake Learning Days because what we really wanted to do was to have a massive marketing campaign to parents and families to get them to come out and experience a very different type of learning themselves. Themselves and with their children to see when I'm doing this hands-on coding a robotics project and the educators they're supporting but it's a very different type of environment, "Wow, this is really hard. I'm actually learning in a way that's very different from the way used to learn but I'm learning more. I can see my student is so engaged and my student is learning and interested".

There's this really interesting change that happens in parents and families when they themselves experience the change because we can talk about the change all we want. We can write as many reports as we want, we can talk about it all we want but until we actually experience

what this type of different type of learning looks like, feels like, it's really hard to actually understand why it's necessary and why parents could or should start advocating for this type of learning in their own schools.

What we're really trying to do as well with Remake Learning Days is build demand among parents and families for this type of learning. We're not the only people as practitioners in the network advocating for it so that families are advocating for it. Families in all different neighborhoods, again suburban, urban, rural and making sure that everyone has a chance to experience it. That's one way that we've done it is we've just helped our network partners with that community engagement and family engagement piece so that their parents and their constituencies could really experience the change.

Another key issue apart from wanting to increase the quantity, the quality or the accessibility of this or the accessibility of these learning experiences for children. Your initiative basically wants to solve a challenge, which is to make sure that this learning identifies the problem, so the experiences may vary. We need to identify the benefits. What is the role of the digital badges, I think you said. What's the added value of that aspect?

What's the added value of digital badges?

How they work?

How they work, right. We've been experimenting with alternative forms of assessment for a long time in Pittsburgh. Certainly digital badges, but also things like digital portfolios as well, micro-credentials, all kinds of different things. The reason for that is that the workforce was saying we need people entering the workforce who they don't necessarily need to know the skills, we can teach them the skills.

We can teach them how to code in Java, for instance, but we can't teach them how to be collaborators, how to communicate, how to solve complex problems and really work together. Educators, how do you

prepare students to do that, and then to the workforce. We were thinking while we're doing that at the age of all level, we make learning as 10 years old.

We've really been trying as educators to instil these different values in our children, but we have no way to show it. How could alternative forms of assessment like digital badges certify that, "Yes, I worked with peers over the course of the year to develop this project at my library, or at my museum, or at my school? How do I actually show that I did that in really relevant ways that mean something not only to their different learning environments but also to the workforce as well?"

We experimented for a long time with digital badges, and digital badging was implemented, again, across all different types of network partners. Actually, libraries are still using digital badges right now to do things. They're actually not digital anymore because the technology wasn't quite there, which is one of the issues we've had with digital badging. It's just that sometimes, the technology isn't quite there to get us in a place where our network partners can easily work with it. We're hoping it's getting there very soon.

They'll use badging to unlock a device, so if a student wants to check out a very expensive or complex camera, they have to go through a series of learning opportunities, earn a badge, and then they're able to rent those cameras from the library. Hundreds of kids have earned this badge because they want to rent the camera, and so there's some incentive there.

I know that in Austin, Texas, excuse me, they're experimenting with digital badging. In their case, students can unlock digital badges through sets of experiences and actually unlock apprenticeship and internship opportunities that way.

There are all really great examples across the United States right now of using digital portfolios and digital badges to certify skills that are very difficult to quantify which we're continuing to work on.

My hope for digital badging in the future is that...in a very practical example, if a student learns basic coding on scratch junior at a library, that student can get a digital badge that is recognized at their school so that when they go to school in their coding class, they don't have to retake scratch junior and be bored for a few weeks. They can go on to

the next level. Then they can earn a digital badge on that next level of coding at their school.

Then the school might say, “Listen, you’re ready for Python, and the place I can teach you Python is this maker space down the street from your house, so go there.” The Maker Space recognizes the digital badge from the school, the student then goes on and continues on their learning journey in their pathway somewhere else. That creates a connected learning environment, and it reduces duplication for that student so it makes learning more engaging and relevant for that student.

It also reduces funding duplication in the system, it creates efficiencies in the system that we never had before, and it just accelerates these learning pathways for kids so that when they’re learning in and out of school, that learning is connected, it’s streamlined, and it all works together. Then hopefully, once they’ve earned the highest badge that they can earn in coding, then they can go to a job even if they’ve only graduated from high school and say, “I know how to do this. Here are all my certifications here is my pathway. I am completely certified in being able to do this job. I might not have the technical certificate that’s traditional, that you normally look for, but I can do this work.”

It also unlocks possibilities for kids that have often been shut out of traditional systems, of employment traditional systems, of economic mobility that disadvantage in the process some students in some populations, and so it creates those opportunities too for students that may not have otherwise have those opportunities. That would be my vision for digital badging. Right now, we’re still little ways off, but we’re still working on getting to something like that.

At the beginning, you said that you made a big effort in terms of branding and communication, so you had to create this brand so that all the offer around your network could share this identity. You had this branding for the different members. You had this very visible ecosystem. You had this come and link which was your brand even of these resources and the members were different, so making visible what is invisible is a very important strategy.

You have invested a lot in these Remake Learning days just to amplify your potential, and you also invested a lot in your playbook so just to document everything that you have in this very common language. Can you very briefly explain how important this brand is, how important it is to make this brand visible? Which are your recommendations for us?

Sure. Marketing and branding is incredibly important. Digital Promise I know spoke here perhaps a year ago, they lead an effort called Education Innovation Clusters where they create sets of toolkits for different regions and cities to be able to actually set up ecosystems for learning, Remake Learning in their own places. One of the things that they say that is critical is, “Who answers the phone?”

When someone wants to get in touch with someone else in the network, what’s the phone number? What’s the website? Where does someone go to actually interact with this network? When network start, they’re often quite informal. They’re often just people coming together thinking about, “We should do this. Here, let’s pull in some more people. I know someone else you should talk to, let’s bring this together,” but where I’ve seen networks fail is where they never get to the point of solidifying that brand, that identity.

As you say really well, making the invisible visible, that was a huge step in creating a more stable infrastructure for Remake Learning to move forward. I think also that non-profits, by and large and through no fault of their own, because this is often a funding barrier as well, but don’t have the expertise and also don’t have the time or the money to be able to market what they do or really to be able to communicate what they do to a larger audience.

That’s also why marketing on a network side is so important, because a huge part of what we do is we tell the story of our network members. We say, “Look at this school over here doing this amazing thing. Look at this out of school program, let’s write a blog about them, they are doing some incredible work. Look at this educator at this library, oh my goodness, we have to tell the story of this person.”

We write blogs, we’re on social media. Find us at Remake Learning on Twitter and on Facebook. We go to places like this and talk about all the

wonderful people doing wonderful work in the network. That serves the purpose locally of helping people connect, and helping people get in touch with one another, and helping people spark new ideas. It also helps nationally, and we've gotten some national funders to come to Pittsburgh and contribute to our regional work, because we've been able to tell the story.

You talked about the Playbook. The Playbook is online, remakelearning/playbook. You can actually order a copy for free online if you want a hard copy, but the whole thing is online. What we did there is we said, "Here are the plays that we used to start the network in Pittsburgh." We talked about how you can communicate your work, and what are the discrete things that you can do, and how do you make it happen? How do you convene people? What are the different types of events, large and small that you can do?

How do you champion the work? What are the strategies that you can use for that? It's literally a book of strategies. We open-source the way that we did our network. We think everyone should have a network like this, and everyone can. The Playbook just helps people not from Pittsburgh start and expand their networks. Also in the Playbook, there's lots of case studies. Case studies of museums, and of libraries, and of schools, and other spaces that have collaborated with others in the network and created some really innovative experiences. Again, marketing, telling the story, is so important in building a network and creating that connective tissue between organizations, but also creating an incredible energy and movement both within the region and then outside, nationally and internationally as well.

Great. How do you assess the impact of your network? How do you find indicators or assessment systems about the scope, or the impact or the quality of what you do?

Some of you in your hands...and I don't know, there probably was not enough for everybody, but there's a publication called Learning Together. It's purple and square. Some of you might have one. We actually just published that, and it is a 10-year impact report. It's very quantitative in

nature, also some qualitative stories as well, but it talks about, in numbers, what has been the impact of Remake Learning over 10 years.

We have lots of outcome measures across our network, so 170 maker spaces as I talked about hundreds of professional development opportunities, millions of dollars invested, thousands of families showing up for Remake Learning days, thousands of educators participating in professional development opportunities, all kinds of measures like that that show the scale and the growth of the network itself.

When we talk about outcome measures, it's a little bit more difficult. Not only more difficult because we're a network of multiple...well, over 500 organizations, so gathering student outcome data is very difficult across all those places, but also the fact that Remake Learning really focuses on and cares about things like critical problem-solving and collaboration and communication.

There's no standard instrument that's practitioner-friendly that measure those things across different domains. It's very difficult to measure those things at all. At this point, we're trying to figure out a way to measure those things across different learning settings. If you're at a museum, or at a school, or at a library, what are the student outcomes in those very hard to measure competencies and how do we figure that out? Again, digital badges is the way that we try to do that as well.

We do a lot of qualitative analysis. We do a lot of case studies. We work with folks like the University of Pittsburgh and Carnegie Mellon University to think about what are the outcomes for students that we can at least see in qualitative studies across our region? For instance, we just completed a research study about equity and educational innovation in rural communities, and how we can spur more educational innovation in our rural and agricultural communities, interviewing lots of people and lots of different stakeholders from those communities in order to do that.

We do have an emphasis on research. We do make sure that we're doing as much as we can to learn from the learning sciences and to bring that into our work, but we still have a long road to go in measuring student outcomes as they relate to collaboration, and problem-solving, and creativity across the different learning environments and being able to bring that together into a holistic picture.

Open questions

How does Remake Learning work on social-emotional learning?

I'm going to go in order. I think these two questions actually relate to one another a little bit. In terms of the humanities, we get this question a lot and it's incredibly important. One of our oldest and most incredible partners, two of them actually that I think go with your question, one is the Mentoring Partnership of Pittsburgh, which coordinates activities of hundreds of adult mentors across the region. It helps them connect with young students and engage with them in ways that develop their socio-emotional health and understanding. Socio-emotional learning and the research, the robust research that's been going on around socio-emotional learning, has been incredibly important to our network. In fact, in the new mission, vision, and values which you can find on our website that actually just came out a couple of weeks ago, a large emphasis is placed on deep and caring relationships and on making sure that students are developing in ways that they're caring and compassionate, and loved and trusted.

These socio-emotional capacities, both for adults to be able to teach those things and really develop deep and caring relationships and also for students and young learners still remains incredibly important. With the humanities, we have lots of really interesting projects of English. I think about things like a poetry robotics workshop that's interdisciplinary that happened in one of our schools, but it doesn't even have to involve technology.

We actually are starting a conversation in Pittsburgh right now about remaking the humanities and what does it mean to remake the humanities. It doesn't necessarily mean using technology as a tool. It could mean all kinds of different things. It could mean going back to

more Socratic teaching methods, and teaching history in revised ways, and going outside the textbook to really think about different histories of different populations of people within the United States and across the world.

What's not in the textbook that we need to investigate? How do students take an active role in really investigating their own history, and culture, and context, and community, and country? Again, Remake Learning is about students taking an active role in their learning and not being passive consumers of information. With your question, I also think about all that is...I believe we published an article on our blog about how to fight back against fake news and about media bias, and all of those kinds of things, and how can students, again, take an active role instead of just passively consuming media without questioning it?

Again, technology is a tool, but it's not the end result. We at Remake Learning, really believe and we're encouraging our partners no matter what they teach. If it's STEM and if it's engineering and math, that's great. If it's English, if it's literacy, if it's again, teaching first graders how to read, that's also fantastic. There are ways to do all of those things in innovative and new ways that, again, put more trust and autonomy in the hands of students themselves.

Yes, there's a focus on that, and yes, I also realized and I should think about this more often when I present that it does come off in a way that, "This is all about 3D printing and technology, and iPads, and all these shiny things." Really, it's about something a lot more deep and fundamental, I think, across all subjects and all disciplines.

How do you get organizations and teachers involved in this network?

Then the second question, if I remember it correctly, and I think this is integrated because we also want to invite in English teachers, because sometimes, they don't think that this is for them or designers, or people that have nothing to do with education at all. How do we make sure that they are invested and involved? That goes back to my point about creating a diverse and inclusive network.

I think this is actually one of the things that were one of our stumbling blocks early on in the network. It was that we basically said, “Okay, everyone’s invited. Come join us.” [laughs] The people that came and joined us were the people that resonated and who felt that it was for them. What we realized, especially in the past few years, was that we had to be a lot more invitational. We had to actually have the human capacity infrastructure on our sites. We actually hired in April, a community -- this April, so fairly recently, a full-time community manager. Her entire job is to go out and invite, to go out and see what’s going on in the community and invite people who wouldn’t normally be involved and say, “This is for you. How can we be of service to you? How can we support you? Who can we introduce you to to really spur your work in new ways?”

I think as well, when I talked to Early Networks, I like to say, “Be welcoming.” For sure be welcoming, but also be invitational, and go out and have the human capital capacity to go out and invite people to come in. Also, to connect with other networks, because really, Remake Learning is just a network of a bunch of different networks. How do you find all of those networks? You need someone who’s dedicated to that job and to do that diplomatic work. It’s a great question.

What role does the public authority play?

In talking about public policy, that’s also something that has recently developed, and we’ve also been invitational with our public policy leaders as well. For instance, we wrote individual letters to every state representative in our region, every city council member, every county council member, every school board member on Pittsburgh public schools, we sent them a personalized letter during Remake Learning day, actually before it, and said, “Here are all the events that are going on in your area.” These are events that your voters are going to, that your voters are putting on, that your schools, museums, and libraries are showcasing. Please come out and support these opportunities and see what this looks like.”

That's really gotten elected officials far more involved in Remake Learning. Again, getting them to really experience what this looks like. We also often talk to public officials in the language of economic development and workforce development. In Pittsburgh, we have lots of open jobs in STEM fields specifically, in things like computer science, advanced manufacturing, and things like that.

We also say, "Hey, we're teaching these things in new and innovative ways that lead to having a more robust workforce in our region, and leading to the potential and sustainability of our region." How do we connect all these things together? How can you see the importance in the work that's happening in the K-12 space as again even more important? Our public officials, especially in recent years, the Pittsburgh mayor, our county executive of Allegheny County. We have, again, state representatives. We have a very supportive Pennsylvania Department of Education and secretary right now. We're doing a lot of policy work to think about how to infuse this innovation and cement it at the policy level as well so it's not as fragile at the local school district learning environment level as well.

Have the schools come up with new ways of organizing their time?

Different schools have done this completely differently. Some districts have decided that they're going to change the schedule of the day entirely and have blocks instead of a specific hour for biology, hour for language, hour for something else. They've created biology literature classes and folded classes into each other in order to create more holistic approaches. There's a school district recently in the network who is requiring all of their high school students to take advanced computer science. It's not an elective anymore. Everyone has to take it, regardless of what they're taking. In the United States, it's called the Advanced Placement Test. They're changing the regulations around graduation requirements too, to fit more innovative work.

Importantly, school districts are also changing their budget to allow for this as well. Instead of hiring five teachers in different subjects, they

might hire three teachers in the individual subjects, and then they'll hire two teachers that are dedicated to science, humanities, arts, and math, and have an interdisciplinary focus.

In Pennsylvania at least, individual districts and individual schools have control over their schedules and their budget for the most part, at least superintendents do. I understand that in Catalonia, it's a bit more centralized. It has to go a little bit farther up the administration. I talked about earlier that it's very important, particularly in schools, that there is both horizontal culture change. What I mean by that is peer to peer learning, educator to educator, principal to principal, district leader to district leader, so horizontal in peer levels in different hierarchies within a district. Also, that there's vertical alignment and culture change. A teacher can be doing a lot of innovative things, but if their schedule doesn't allow them to do what they want to do or if their principal isn't supportive of them working with a museum, then their hands are tied.

You need those innovative educators, but you also need innovative principals and innovative superintendents. One thing that we've done in the network is, and again to fill a gap, is that we've started professional learning that's innovative in peer to peer at the principal and at the district administration level as well. You have superintendents from very different districts working together to learn from each other and do that innovation because, in the end, they're the ones who are going to change the schedule, change the budget, and do all those other things.

Yes, also I would say a lot of innovation happens within traditional structures. Educators are incredible. They work around policy, they work around structures, and they figure it out. I've seen that over and over again as well. That's not the ideal scenario. The ideal scenario is that there's support across all levels of power and hierarchy within a district, and that that innovation creates a culture within an organization.

What types of schools are participants in the project?

You had asked about different types of schools. I would say that again, in the beginning, I had talked about how we just said, "Raise your hand.

Who wants to join this movement? Let's start with the early adopters as they're sometimes called." What we realized is we needed a really intentional focus on equity. Now, out of our 500 members -- Pittsburgh's public schools, which is the largest urban district, there are about -- I think it's at this point 75% of the students in the district are living in poverty.

They are one of my shining examples of this type of learning. It's not across the entire district yet, but they have really dug in deep and really started to think about how do we connect out of school learning opportunities? How do we connect teachers in our district? How do we infuse this type of innovation? The examples that I gave earlier of the wrestling room turned innovation studio, that's in a high poverty district that's doing incredible work.

The virtual reality about poverty in their community, that's also a school that's in a low-income area of Pittsburgh. There are incredible things going on at all different types of schools.

Has there been any change in school drop-out rates?

You also asked about drop-out rates. Our earliest school member, network members back when it was pretty small, was one that's about an hour south of Pittsburgh in a rural area. It's a small district, so they don't have too many students. They saw their drop-out rate go from, I think it was 30 to 1 over the course of the time that they were implementing game design classes, making classes, and just all kinds of creative learning opportunities.

You talked about measurement earlier that we want to do a more comprehensive job of. It's hard to make a causal relationship between changes in the school environment like this and drop-out rates as A exactly led to B, but it's something we're trying to keep more track of, because we think that...our hypothesis is obviously that if learning is more engaging and relevant, then students will want to be at school. Students will stay longer and persist longer. That's something that we're looking at in terms of measurement as well.

How do you manage to get different organizations working in coordination?

Oh my goodness. How to connect everybody? That's the question, isn't it? I talked about marketing as an important part of that infrastructure, and it is, in getting non-profits, businesses, schools, and all kinds of organizations to work together. The marketing piece is important. I think even more important than that are the humans, the humans who work in a neutral way to convene people. Listen, every organization in every city is competitive.

They're all competing for prestige. They're all competing for respect. They're all competing for funding. There are egos everywhere. That's the human condition, I think. A lot of my job is to be a diplomat. It's to be a neutral convener. It's to really look across the landscape, understand what's going on and say, "The work that you individual organization and person are doing is incredibly important. You could increase your impact. You could leverage resources.

It is mutually beneficial for you to work with this other person instead of competing with them." We are doing better for our region's kids when we work with this other person, instead of competing with them. Honestly, the way that we like to say it in Pittsburgh is, we're all serving the same kids. This is our region. This is a regional initiative. These are our kids.

If we compete to the point where we're duplicating activity, where we are creating inefficiencies, where we are creating gaps, then we aren't serving our region's kids.

What I try and look for are those mutually beneficial relationships. There is no computer yet that has taken over my job. I think we still need the diplomats. I think to your point, it doesn't cost that much money. The funding that comes into Remake Learning for the infrastructure really just funds about two and a half staff positions. Those staff positions are the ones that create this connective tissue between the organizations.

Then there's also a little bit of money that goes into the communication support, stuff like the website, and social media, and things like that. We work in a very lean way, and we work in a very human and diplomatic way to get people to see the benefit economically, as well as socially of working together across different organizations that might compete. I also think that in some cases, we connect organizations that have no reason to compete.

For instance, when I was talking about Leah, this imaginary student and the app that she used, that was Carnegie Mellon University, which is a major research institution in Pittsburgh, and The Pittsburgh Association for the Education of Young Children, which is a non-profit. They would have no reason to compete for funding in any way, shape, or form, but the problem was that they had no idea each other existed, or the networks that each other had.

Bringing those two organizations together was mutually beneficial for them. Also, it was just a way to connect people across silos that wouldn't have interacted. Those things are possible in any community because, yes, every community has organizations that are competing. Yes, every community has their own little peculiarities about how systems and structures work, but also every community has tons of assets that are not communicated widely and broadly to the rest of the community.

It just takes a little human capacity to do that relationship building, and then to expose all those assets to everyone else, and make sure that things are connected, and make sure that there's more efficiency in the system. Again, build on your strengths. Think about the things that are here. You might not have a lot of non-profit organizations, but you might have a lot of really innovative educators that are flying under the radar that could be lifted up and amplified.

What do the teachers value most?

They value all kinds of things, it depends on the educator. Sometimes, they value grant support. Sometimes, they value being able to present their professional development opportunities and say, "I'm an expert in this field, let me teach other teachers." I think teachers are undervalued as the incredible experts and professionals that they are. When they have the opportunity to do that, it's an incredibly beautiful thing and teachers really value that.

Teachers value the opportunity to have easy ways to connect with community, because teachers tell me all the time, "I've just been cold calling people, I've just been calling people on the phone that I found on

the internet to try and make these connections, and they can talk to me and I can say, ‘Here are three people you should connect with based on the project that you have.’ Because I have those relationships, now you have those relationships, and I am in service to you.”

They value that. They value the fact that they know where to find things. They know where to find professional development that they need. They know where to find community organizations to contact. If you go to remakelearning.org, you can actually pull up people in the network, and click on their email address and phone number and call them and say, “I saw you on the Remake Learning Network,” and they will pick up the phone.

Teachers value professional learning. They value all kinds of different things in different contexts, and so we try and supply as much support as possible in different ways for that reason. Also, get feedback from them so that we know what they want and need and we can provide it in better ways.

How do you involve people with disabilities in the network?

Actually, the new mission and vision of the Remake Learning Network calls out students with disabilities in particular. That’s because that’s something that we heard over and over and over again, that learners with exceptionalities need to be called out in specific ways and we need to do more to support them. Certainly, there have been projects in the network that supports students with disabilities, but there needs to be a more intentional focus.

When we think about equity moving forward, we’re thinking about learners with exceptionalities, learners with disabilities in particular, along with other learners that we know have a greater need than others in our region particularly, students of color, students in poverty, students with disabilities, and others.

Yes, let’s connect. You are all a part of our network now. I’ll be around after this. I’ll have cards. You all can have my email address. Feel free to reach out, please don’t hesitate. I’m in service to you as well, so please reach out and let me know what you need, and I’d be happy to help. Thank you, thank you so much for having me, this was incredible.

About the author

Sunanna Chand has been the Learning Innovation Strategist for the Remake Learning movement since 2015, when she moved to Pittsburgh to work for the states of Pennsylvania and West Virginia.

Before joining Remake Learning, Sunanna was the Community Outreach Coordinator for Mayor Melvin “Kip” Holden in Baton Rouge, Louisiana. She led the multi-sector public health network, known as the Mayor’s Healthy City Initiative (Healthy BR), which worked to increase the health of low-income residents of Baton Rouge.

Sunanna also worked as a first- and second-grade teacher in Baton Rouge, where she witnessed first-hand how technology could involve students, especially those who were not responding to traditional teaching methods.

Sunanna graduated from Vanderbilt University with an M.Ed in International Education Policy and Management. She also has a BA in Political Science and English from the University of Illinois at Urbana-Champaign.

Debates on Education

1. **The Cornerstones of Education in the Future.** Juan Carlos Tedesco. May 2005, 22 p.
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