Pulse on the Principles S2 E3 Final Audio Transcript

Allana: Ask any development or humanitarian practitioner, education is a foundational driver to economic improvement and self-reliance. Quality education encourages changes in knowledge, skills, values, and attitudes to enable a more sustainable and just society. It transforms individuals, and by extension, communities, creating pathways to improve livelihoods, health, and well-being.

In order to expand access to quality education, many education initiatives have begun incorporating digital technologies into their programming. This has become even more urgent in 2020 as COVID-19 has shut down schools the world over. Because of this global movement to remote learning, the United Nations has warned of a global education emergency as 483 million students still lack access to online schooling, with those from lower-income households being more likely to face greater barriers to learning.

Lack of access to the internet, the relatively high cost of purchase computers and tablets, poor security resources, and limited availability of adult support and home environments means that the most vulnerable children in our communities are being left behind. How can we ensure our children do not lose access to one of the most impactful resources available to them? It is becoming ever more apparent that rethinking education for all means rethinking digital education for all. This is "Pulse on the Principles."

Welcome to "Pulse on the Principles," a podcast series that gives you a live look at putting the principles for digital development into practice. I'm Allana Nelson, your host for our mini-season on the digital principles and education. COVID-19 has affected nearly 1.6 billion learners in more than 190 countries across all continents, and is the largest disrupter of education systems in history. Educational losses threaten to persist beyond this generation and negate decades of progress, with girls being the most impacted.

The need to adapt has pushed us to use and develop more tech more quickly but brings its own inequities, widening the digital education divide. Nonetheless, policymakers and development practitioners are exploring the potential to use information communication technologies, or ICTs, in education programs for remote low-income communities.

According to a recent UNICEF press release, countries have been transforming their educational systems to meet the current demand. For example,

governments within West and Central Africa have been working with local service providers to deliver education for primary and secondary school children by employing online tools or other technology such as radio and TV.

Despite the many new digital tools the pandemic has inspired, it is also highlighted digital educational and training disparities in rural areas, such as low literacy, low electricity, or poor internet connectivity. Compared to children living in urban areas, those from rural or isolated communities are twice as likely to be out of school due to this pandemic. This means that their access to technology and learning content resources is much more limited. Distance learning in these areas requires a different approach.

Before I introduce today's guests, don't forget that to access the latest digital principles, news, and resources, you can visit digitalprinciples.org and follow us on Twitter, @digiprinciples. That's @digiprinciples. You can also use the #digitalprinciples. Don't forget to leave a five-star rating and subscribe wherever you get your podcasts for more episodes. Now let's get started. To speak about the education sector and international development, we have Lisa Zook.

Lisa: Hi.

Allana: And to share about tools for rural development, learning and messaging, we have Toffic Dapilaah.

Toffic: Hello.

Allana: Lisa is the Director of Research and Impact at Informed International, where she oversees M&E frameworks, study design, data collection, analysis and communication. She has over 10 years of experience providing technical expertise to international development programs and focuses on bringing evidence-based programming to the field to empower local people to solve contemporary challenges.

And our next guest, Toffic, joined Literacy Gridge Ghana in 2013, which is now Amplio, and he is currently the Monitoring, Evaluation, and Learning and Partnership Development Officer. He has a degree in Business Management from Zenith University College, Ghana, and received his MSC at the Kwame Nkrumah University of Science and Technology and Project Management. Toffic also holds a certificate from the young African Leadership Initiative. Toffic and Lisa, thank you for chatting with me today.

Toffic: Thanks.

Lisa: Thanks for having us.

Allana: This podcast mini-season has been all about the potential of information and communication technologies, or ICTs, to improve access to better education. Many schools and training centers are taking advantage of technology to administer distance learning and to train teachers in new instructional methods. But there are special considerations when working with harder-to-reach populations.

And I'd like to start the conversation by first setting some context for our listeners. In international development, we often work in regions that have low internet connectivity or a strong agriculture industry. But those are vague indicators for the kind of communities that we're talking about for this episode. Toffic, can you start us off by defining what kind of communities we're referring to when we identify them as rural or isolated?

Toffic: I think in simple terms, when we say "rural," we're talking about committees that are very far from urban areas, and committees that have limited access to education, health, and other infrastructure. So basically, the rural areas are kind of usually focused on farming. They kind of have challenge in getting the normal basic amenities that the urban areas also kind of have access to. So basically, that's the kind of setting we call rural areas.

Allana: Yeah. And I think also another term we sometimes use is "last-mile communities." So that idea that oftentimes the last communities that get connected to the internet, electricity, those types of things because they're harder to reach, given their locations, and the road infrastructure, and that sort of thing. Even for isolated rural communities, digital technology has become central to receiving education and basic information globally.

We're seeing more investments being made and these sorts of initiatives. Lisa, I know you've been working with Save the Children to strengthen school leadership and management in rural communities with the aim to improve children's educational outcomes. Can you tell me more about this project?

Lisa: So Inform's been working with Save the Children to develop a project model that focuses on school leadership and management, it's called SLAM. And the project came about because we were carrying out an evaluation of a previously funded Save the Children project that had mixed results. And the results in the schools where school leadership was very strong were much better than those places where leadership was a bit weaker.

And so they decided to develop a project that really targets the school leaders and the broader school community to bring together these various stakeholders so that the school has a very strong leadership presence. We spent probably about the last year carrying out a developmental evaluation with a variety of stakeholders.

And then we were in the process of designing the interventions to address school leadership, were just about to launch when COVID hit. So the project has been in a bit of a standstill since then, and we've been trying to sort out what our next steps are, and what things look like in this new global pandemic that we find ourselves in.

Allana: That's a really great point. I think COVID has really thrown all of us for a loop recently, but especially in the education fields. And I'm curious to hear a bit more about how you've pivoted your programming to adjust to COVID-19, and who have been the key partners and stakeholders. Can you give us any insight on ongoing conversations about how ICTs are being used in the education sector now that so many of the world's children are out of the classroom?

Lisa: Yeah, I mean, it's really difficult. I don't think any of us have experienced something like this. And it took us all by surprise. So when things first went into lockdown, we stopped any plans for these large gatherings and these large trainings and started to shift our focus to, how do we ensure that children have access to learning materials during this time?

And, of course, that had to come in very close communication and relationship with the governments because across all of these different countries, each government has a very different strategy to adjust education currently. And so in the case of Nepal, the schools actually are still closed, but the government has been doing radio and TV broadcasting to reach children.

That's certainly filling a gap, but there's lots of concerns with that. It's not helping us to reach children that are in the hardest-to-reach areas, and often, those children were at a disadvantage before the pandemic. So for the SLAM project, we've actually been looking at the government's response, and how they're providing information through these various areas like with the radio and the TV and seeing, where can we supplement that, and where can we really strengthen and fill in the gaps that the government just isn't able to do currently?

And so where we've shifted is to actually support teachers, and headteachers, and parents during this time through technology. So we've been trying to implement a few different solutions that connect those parents, and teachers, and headteachers to provide them with support as they then provide support to the children in these rural areas.

Allana: Digital tech solutions are being used more in development projects, and digital transformation has become a big part of international development goals. For example, my organization, DIAL, is supporting the ITU, the World Health Organization, the Food and Agriculture Organization, and UNESCO to implement that Niger Smart Villages project, which aims to improve the quality of life for rural citizens through an inclusive digital transformation process.

To help with service delivery, the Smart Villages project actually uses a resource that you both are very familiar with, "The Talking Book." To our listeners who may not be familiar, "The Talking Book" offers health and child protection messages to community members and provides great lessons on how we deliver education information to rural communities, especially now as we have to do it in safe, socially distance ways.

Toffic, you've been working with "The Talking Book" for some years now. Can you describe how this tool works for our listeners, and what are the best lessons you've learned about using new technologies to reach rural communities?

Toffic: The way "The Talking Book" works is that without any content, it's just an empty tool. But then the way that that happens behind it is very important as to how they use it. So a team of experts where you get that designing content in different formats, depending on where we are going to use it for. So content can come in the form of a drama, a song, and it can come in the form of an interview, sometimes through the same kind of message.

And after we've recorded the content with SPES [SP], and we also record them in different dialects, depending on where we are going to operate. For example, if we look at the upper west region, it's about 800,000 people, but the upper west region alone speaks about 6 different languages with about 9 different dialects. So Sisaala language alone has about four dialects. So if you want to kind of give people audio messages, you have to kind of consider your target group and every dialect that they speak.

After we record the content, we disseminate this information, this content, through "The Talking Book" in the various forms that we want to use them. So "The Talking Book" depend on how you want to use your project. It can be in

the form of a group, individual listenership through households, or maybe individual listenership, every individual having "The Talking Book." You normally look at it and see what you can afford, and then see the best way you can design a project to fit "The Talking Book" usage.

Allana: Do you have any examples of how it's been used for the COVID-19 response?

Toffic: What we are doing with the COVID-19 project is that we recorded content, the government and Ghana Health Services who wanted to reach the rural people. We also considered using these Ghana Health Service structures we normally call the CHPS. The full meaning of the CHPS, C-H-P-S, Community Health-Based Planning Services.

So these are small form of clinics based in the communities, and they are run by nurses postered from Ghana Health Service, but also with the support of community health volunteers around the community. So they all come together to help in dealing with health issues in that district. So, when we were also planning this project, we realized that there might be a possibility of a lockdown.

So if there's a possibility of a lockdown, staff from Literacy Bridge, might not be able to even go and train people how to use "The Talking Book," for example, the health people and all that. So we considered using the community health volunteers and community health nurses in the district. So instead of bringing them together like we usually do in a workshop form and training them, we train every CHP individually.

So if you said the CHP will train two or three nurses, they're usually two or three in the facility, so you train them and they move to the next CHP. So we did this and disseminated about 200 teachers facilities and about 73 community health volunteers in districts in the upper west region. We also added batteries and loudspeakers to amplify the sound because of the protocols that came regarding social distancing.

Then community health nurses also do health promotion, which is one of the paramount ways Ghana Health Service is using to educate people how to prevent diseases. Instead of finding treatment, they kind of reduce cost. They're educated more on basic health promotion in the communities and also involve the community health volunteers. So when this came, there was so much miscommunication around COVID.

As a new disease, people were just giving whatever they might have heard about it, and a lot of them be lies. So the people that are supposed to lead in the communities to even educate people didn't really have the knowledge. Secondly, there was restricted access. So even if it means there's going to be a gathering, it was limited to about 25 or less.

And they normally have these women groups that they sits with in every community, the CWC sessions. So this is where they were using "The Talking Books." We realized that even about 60% of the nurses couldn't even speak the local dialect. So how do you even help promotion if you can't speak the language?

People believe "The Talking Book" more than even the nurses because they kind of have a feeling that this is a message coming from Ghana Health Service. To give the message some validation, we recorded some endorsements from religious leaders and also some opinion leaders in their community, people they kind of value, that these people are learned or these people have the wisdom to be able to educate them.

So we incorporated their voices in all these things. So it kind of gave people the confidence that, "If I'm listening to whatever is coming from 'The Talking Book,' it's authentic." With time, there was also some new literature around the disease and also new protocol from government regarding wearing of nose masks at all time, or in every public gathering, the increase of gathering from 25 to about 100, but then there should be a lot of social distancing in terms of the sittings, there should be hand washing facilities made available, and all those things.

So issues coming up regarding domestic violence because people were staying home also, issues with stigmatization. Should it be that somebody even was suspected of COVID, how people kind of behave towards that person, and all that. So we had to record all this and did "The Talking Book." So "The Talking Book" allows for updates anytime you want.

They usually have these committee meetings. They have to plan how they're going to fight this pandemic in a district. And Literacy Bridge Ghana also participated in that and also took views from all the people that joined the committee. So it became a Literacy Bridge project but owned by Ghana Health Service.

Allana: And how difficult is it to record new information when you need to? So especially with this disease, as you pointed out, it was novel. We had never seen

anything like it before, and so a lot of the information we've gotten over the months has changed quite rapidly. So how difficult is it to record those updates and then get them to the existing talking books that are already within the communities and update the messaging? What does that look like?

Toffic: It's pretty easy. Since we are working with Ghana Health Service and they are the custodians of the information, they also have District Health Promotion officers who are people that can also speak the local dialect. So if it's time for us to record the content, we create a manual with Ghana Health Service regional, or maybe one of the districts.

And after that, we use that particular manual to record in all the dialects that we are supposed to record in. Usually, we travel to where we can meet them, find a cool location, and then we record the content. And there are times too, if it is a drama, we have to bring a group of kids that we want to use, we bring them to a central location, we rehearse it, we rehearse the drama, and then after that, we record it. So it's pretty easy. It's pretty easy recording new content.

Allana: I really love this idea of a drama. It's a very exciting way to learn information. We certainly are not putting out health updates in drama format. And I think more people would pay attention if we did. So when we talk about education, we also need to remember that it's not just about handing kids new and shiny gadgets.

So let's discuss how ICT tools are also being used to support the bigger education ecosystem, including families, teachers, and adult learners. Lisa, can you start us off by talking about how nonprofits are helping children access education and any ICT solutions that are being introduced to other learner groups within rural communities?

Lisa: I mean, it's interesting because I think up until this point, the education sector, at least for international development, has been very skeptical of ICT. And it's this fear that there's an idea that we can take technology and kind of place it in front of kids, and that could replace the role of a teacher in some of these strained areas.

And it's been proven time and time again that we can't do that. And instead, the ICT solutions need to support the existing education structures. And in particular, they were never going to replace what teachers are able to offer us in the education sector. So there's been, I think, a lot of conversations across the nonprofits of, "Well, now that we can see that education can kind of be taken away and our access to teachers can be taken away very quickly and very

unexpectedly, how do we prepare for this moving forward if this were to ever happen again?"

And so you do see ICT solutions coming up that support that broader ecosystem kind of surrounding the child. And so it's interesting, before the work that I'm currently doing, I spent about six or seven years working with World Vision and Save the Children on a project called Literacy Boost. And we pride ourselves in the fact that all the solutions were really homegrown, all the materials were from within the community.

But the way that we trained and the way that we brought communities together to do this project was through big gatherings and big trainings, then setting up community centers for children to come and sing and be together with their friends and read books and learn kind of outside of the school. And we no longer have the ability to do that.

So I think there's a lot of really interesting and innovative solutions coming out to try to get that same level of support for children in their community, whether it be parents, or teachers, or community leaders, but without that face-to-face contact, which is kind of an ongoing challenge, right? And I think, hopefully, in the future, we won't be quite as skeptical of ICT solutions and we'll just know how to use it more effectively so that we can provide those support structures moving forward.

Allana: Yeah. I think that's a theme we keep hearing echoed from a lot of our guests, which is to say that COVID-19 is really coming out as an opportunity to move our particular work sector but also the broader global community forward in its acceptance of online platforms and digital solutions generally. And the implementation of tools like talking books seems to be the easiest way to reach more people, but especially for rural or media-dark communities, their unique challenges in introducing ICTs.

Oftentimes, digital education solutions presented to rural communities are designed elsewhere with little understanding of the practical day-to-day realities that exist within these communities. Lisa, can you expand more on your project in Nepal? How is your team assessing the kind of technology that would work or be useful in that environment? And, how do you socialize and train communities on how to use those technologies?

Lisa: It's a great question. And, I think it's something that Amplio and "The Talking Book" does very well as well. And so for the Nepal project, we have been fortunate that we had a funder for that particular project that gave us space

to work with the communities, really dive in and carry out this developmental evaluation for a year to really understand what that surrounding ecosystem that we're working in looks like, and in particular, from a tech perspective.

And so it's been interesting. We've brought people together, and we've brainstormed... Well, we've identified challenges, and one of the challenges that we identified among the teachers, especially in Nepal, is just how isolated they are. And, you know, you can picture in the Himalayas, the schools are kind of tucked in the mountains, and it's two days walk to the school.

It's very hard for those teachers to reach other teachers, and this theme of teachers being very isolated in these very small schools. So schools of, you know, one, two, three teachers, and you have no support mechanism. And I think about all the different people I interact with on a daily basis, or get ideas from, or bounce ideas off of, and they just didn't have that.

And so one thing we wanted to do is to identify some solution that could act as that support mechanism for those teachers and develop a network for them to talk, and interact, and share ideas, and share failures, and be like, "Hey, I'm really struggling with teaching this particular topic. What are you guys doing?" And so after we identified that that's where we wanted to get to, we brainstormed a list of specifications that we would want the technology to be able to do.

And then we also, kind of, alongside that, looked at, "Well, what kind of infrastructure do we actually have access to?" These are very remote areas, and so there's no budget to put up infrastructure really. We needed to work with what was existing. Fortunately for us, the schools where we were working all had access to smartphones.

And so we decided to start looking for a platform that could live on those existing smartphones and hook into the existing infrastructure. But I think that speaks to how there's different solutions for different populations and geographic areas. And so we were very fortunate to be able to have the space to dive into that and develop a solution that really worked for them and met them where they were.

Allana: Toffic, "The Talking Book" has been successful for its original purpose. With the onset of COVID-19, though, many of us have begun to adapt and reimagine other technology tools to respond to the outbreak. What can we learn about repurposing "The Talking Book" for general education and not just health messaging?

Toffic: So how we can repurpose "The Talking Book" for medication is if you look at how we are able to do audio learning through the radio, or learning through the television, "The Talking Book" work is similar at times. But advantage with "The Talking Book" here is just like we have in our traditional books, but this one is in an audio form.

And "The Talking Book" has a feature where we program content in categories, and in each category, there are sub-categories. So if I want to put it in an educational context, for example, I want to teach people something to do with maths, English, and science, so we categorize it that way, maths, English and science. And under maths, there are every topic in maths that we want to teach them will be a sub-topic, same with the science, the same with the English.

And once school children are able to know how to manipulate "The Talking Book," which is pretty easy, we can just take some few minutes to know how "The Talking Book" operates. Once they know that and the content is programmed that way, it becomes easy for them to manipulate and play the particular message they want to listen to.

So if it means they want to repeat it 100 times, they can repeat it 100 times when they really grab what they're learning, as compared to relearning through the radio or television whereby in as much as they'll go very slow so that children can catch up. Should it be that you miss it for any purpose, you'll now be able to kind of listen to it again.

And I sometimes also consider the fact that we also have Muslim communities are on some of where we operate. And Muslims pray about five times a day. Should it be that, for example, there's a program of maths or English and they happens in time when they have to go and pray, looking at how strict Muslims are when it comes to these things, it means the person will have to step out, spend about 10 to 15, 20 minutes praying.

By the time the person comes up, the program might have gone. So "The Talking Book" gives you the luxury to kind of listen to contents, audio education at your will. So looking at how we've operated in the past, we use "The Talking Book" in household form, too. So this will be pretty easy.

For example, if we identify a particular school or a particular committee that wants to teach them, we can segregate them in classes because it may be senior high school, junior high school, maybe lower primary, and all those things and

Ghana Education Service design the content that they want these people to be studying.

But one key strategy that I think will work for this is that if you are doing something, for example, what they are doing with... We are doing something in Ghana here, GBC, Ghana Broadcasting Corporation is doing something like that through radio. Since our official language is English, it's taught in English. But in our physical classrooms in Ghana, teachers don't only teach in English.

They also teach and they use the local dialects to explain. But we speak about close to 30 different languages in Ghana. So GBC broadcasting to the whole Ghana can now use a particular dialect to explain. So, it has to be strictly English. So this also, again, favors the urban areas. But with "The Talking Book," where you even use teachers, for example, in the particular area, and they are very popular and they know about, just that you know and seen the person explain the content in English and also in the local dialect so that those that are not really good in English can also still understand that.

What I'm trying to say is 10 minus 2 is 8, for example. Instead of the English word, "minus," people might understand it better if you use a local dialect to say, "Minus this from this." So from where I'm sitting and from how I'm looking at this, I think "The Talking Book" fits perfectly if we want to use "The Talking Book" for educational purposes. It fits very well. And the interface of "The Talking Book" is also very user friendly for adults, and also even for kids, much especially for kids.

And usually, when you're introducing technology as a form of education at the beginning, there's always some excitement from kids from the beginning because they don't have to sit in class and maybe feel like sleepy, and all those things that we usually get in class. So, it's at their own comfort. So it's easy for you to say, "I didn't get this," and replay it again, instead of being in class, sometimes you don't want to raise your hands and talk.

So complementing this with other platforms that are also available is one of the best ways I think we can use "The Talking Book" in this pandemic, or in the current state of the world right now.

Allana: I mean, I'm sure that "The Talking Book" is also very popular with math as dramas. I just love that idea. So we recently held a "Pulse on the Principles Webinar," where we discussed using digital technologies to communicate with communities. Historically, face-to-face communication has been the best way to

disseminate important information, but COVID-19 has forced us to change our communication methods and rely on digital technologies.

One of the most common questions that we received from the webinar was how to get communities to trust digital technologies when they have so far relied solely on in-person communications. Lisa, as you're starting to integrate more digital tools into your programming, how are you building trust in technologies?

Lisa: For the project in Nepal, we had the benefit of creating some relationships before the pandemic hit. And so as we're trying to roll out ICT solutions, we've been able to have some one-on-one meetings to kind of introduce it. But that's because we're working on a relatively small scale, and we have that relationship.

But that has been really, really helpful. I think we've also done a lot of thinking about how to create material on the platforms that is motivating but also creates kind of a safe space for people to share to help build that trust. So one thing we're doing with the Nepal project is we set up guidelines and standards for the community of practice where these teachers will be communicating with one another and sharing resources.

And we have someone that is moderating that and watching it to ensure that those standards are upheld and kind of addressing any problems that arise. And that's just in the effort to keep it as a place that people want to go. You know, I think personally, several of the forums that I've been on recently have degraded because of the politics in the U.S., and they've actually shut down the comments section or the Listserv just because the conversations have become unproductive and negative.

And so we wanted to set that up from this standard and kind of build that initial relationship so that people found the place to be safe. I think something else we've talked a lot about is filling that community of practice with reliable and accurate messaging, which I actually often think of an example from Toffic's program that Amplio did with the COVID-19 response and where they had, I think you referenced it, Toffic, these local officials, religious or political leaders record the messages.

And that helped. I mean, it was based on the usage statistics from the project those were the most listened to messages that were put out on "The Talking Book." And it shows that especially in this time of COVID, people are looking for really reliable, accurate messaging from people that they trust. And I think, finally, one thing we've talked about as well is establishing this level of responsibility.

So if something does come to our attention through the ICT platform and people's interaction with Pat, we have a responsibility to act on that. You know, in projects with "The Talking Book," and people are recording user feedback, if something comes up where there's a child protection issue or some sort of threat within the community, you know, it is our responsibility to act on that.

And I think if we set up those parameters from the beginning, and then show that if someone does raise a problem or a challenge and we are willing to do the hard work and take action when those things arise, that also helps build trust in the platform so that people keep coming back to it and know that it's a reliable source. But I think the biggest thing is that it's not just sending tablets out and kind of seeing what happens, it is a platform that needs to be monitored and watered to grow and turn into something beneficial.

Allana: Usefulness of ICTs in education depends on proper delivery and sustainability. In Sub Saharan Africa, nearly 600 million people still have limited access to electricity, making the cost and upkeep of digital devices much more challenging Toffic, can you tell me more about model practices of cost-effective and country-differentiated solutions of "The Talking Book?"

Toffic: I think when it comes to Sub-Saharan Africa, the problem of access is not only about electricity, but also the internet, also about even road access, and also about digital transmission through television, and all those things. It's across all platforms. We should rather think about effectiveness. There may be platforms that might be cheaper because the systems are already in place.

We use Zoom, for example, like this. It is a bit cheaper because it has to do with only internet and a computer or something. Implementing programs, digital programs in rural are always going to be expensive. There's no existing structure that you can leverage on or these limited existing structures that you can leverage on. So basically, sometime you have to provide it.

If we think about "The Talking Book" setting, for example, you have to provide "The Talking Book" itself. You have to sometimes provide batteries consistently because even if sometimes they have the money, they still can't get even a dry cell sometimes to buy in their communities, so you have to provide them. In case maybe you want to use radio, how many households even have radios?

And how many communities if you have access to radio? If you want to talk about television, how many households have television? Even in areas where

there's even electricity, it's not all the households that can even collect the electricity because they can't afford it. Thinking about this, if I'm using "The Talking Book" context, if I say we want to give every child a talking book, it means the cost of the program is also going to be higher because every child is going to be provided a talking book.

But we can find cheaper models like using clubs, community clubs, education clubs. The advantage about this too is that while they're listening together, they're able to discuss whatever they've studied, instead of somebody listening to the content alone in the house. Through platforms, too, the positive thing is we can still encourage rotation among themselves.

So today we sit, we discuss. We listen and discuss, and maybe I take it home. Tomorrow when we are coming after discussing, this person takes it home. We can have a strategy where it's like when you take it home, it means the topic we are going to be learning tomorrow, you'll learn it, you'll listen to it first. So while we are listening to it together, you'll be given the explanation.

So that way, it's kind of there's a leadership role for everybody, and a reason for you to kind of pre-learn it and then also come and teach your colleagues. So I think that's one of the models we can use. In terms of reaching more people, I think we can also use this model to reach more people. If I want to use that COVID-19 project example, again, if you look at the number of talking books we're about to deploy and the platforms where the nurses are using them. So they count the number of people that we are able to reach.

So if it's a group session, if it's a CWC session, if it's a home visit, how many people are we able to reach in the home, and all that? If we put all these numbers together, we're counting around about 307,000 people so far in about 4 to 5 months of implementation. If we want to strike out duplication, 30% responded that they've listened to "The Talking Book" about twice in a month.

So if we strike that 30%, you're still counting high numbers. So the cost is always going to be higher than implementing in cities because we have internet, we have digital transmission to televisions, we have access to radio, we have tools. We have mobile phones, so it's always going to be easy implementing. So there's always that temptation of comparing. "I spent maybe $100,000, and I was able to do this. Why am I spending, let's say, a million dollars, for example, to do this in a rural area?" It is because you are literally the one setting every system.

If I want to do this, for example, in Accra, almost every household has a television, almost everybody has a radio, mobile phones, and all that. It's easy to read. But when I'm doing it in a rural area, if I want it to be through mobile phone, that means I have to provide mobile phones. If I want it to be through radio, I have to maybe provide a radio and even batteries to power the radios.

Literally, people have to go there physically in the community to kind of deliver the batteries, instead of something you can just transmit. It's always going to be a little bit higher than the urban areas. But in terms of effectiveness, we should look at tools like the one that we are using right now because it's able to kind of answer most of the questions that we have regarding digital tools medication.

Allana: So we're nearing the end of our conversation, and I want to get some final thoughts from each of you. Lisa, starting with you, and this is a bit of a self-serving question, but which digital principles have been the easiest or most challenging for you to incorporate into your work?

Lisa: Looking across the principles, I would have to say that designing with the user is probably the easiest. I say that with an asterisk attached, I think. The solutions are out there. The more that we can work with communities to identify their needs, and the situation that they're finding themselves in, there are ideas for those challenges. And I think that's where this design with the user is a really beneficial principle.

But I guess my asterisk with that is that we can often design it, but making it happen is a whole other challenge. And I will say that we've been getting better as large nonprofits kind of build out their approaches to ICTs and their teams. And then on top of it, we partner more. And this probably speaks to your principle on collaboration, but reaching out to tech companies.

You know, I'm based in Seattle, there's lots of tech companies that are really excited to get involved in this type of work. And so bringing together some of those problems that communities identify, the solutions that communities they themselves have articulated, that they want to see, and then making it happen. I think we're on this cusp of being able to do that.

A principle that I struggle with, or perhaps I find a bit more of a challenge is around designing for scale. And this is something that we talk about all the time because most of our projects want to have like a really impactful and positive pilot, but then they want to go to scale. But I think throughout this conversation, you know, we've discussed how there isn't a one-size-fits-all solution, especially

when it comes to technology to address these really challenging social problems.

So designing for scale, I thought about in a couple of different ways. I think one is that technology solution might be designed for scale in the, I guess, idea that... Like "The Talking Book," you can record messages across all sorts of languages, you can record messages across all different sectors or topic areas. And so in that way, it's designed for scale.

But from like a program design perspective, we often struggle with this designing for scale because we've then used the technology for a very specific problem. And then when we want to take that same technology and use that technology to address a similar problem somewhere else, we find that that technology isn't appropriate there. So yeah, it's this dance, I think, back and forth between funders and implementing organizations to have enough flexibility, but also accountability for how we design things to reach as many people as possible.

Allana: Toffic, I was clearly so excited about the health information dramas. So would you like to close this out on a high note?

Toffic: Okay.

Allana: Do you have one standout story of how talking books have helped individuals and the communities where you were?

Toffic: There was this lady... I'm just trying to explain how just a little information can change somebody's life. So I encountered this lady. One of the questions I was asking is, "How many times have you been pregnant?" And she said six times. "How many children do you have?" And she said, "One." So looking at her being pregnant, taking away the fact she has one child, it meant that she might have lost four.

So I asked her, "Does it mean that you've lost four pregnancies?" And she said, "Yes." And the kind of lukau [SP] traditional belief that people read into it was also very huge, so she and her husband had to relocate from their family home and all that. By just word of mouth, I explained to him the husband that she should visit the nearest CHP compound, which was, I believe, for ENC services.

And in case she's getting ready to deliver, they should come to drop off here, in case there's any complication, she can go to a CS and all that. And these are some of the messages that we are giving in detail from health professional. So

the time I was going for the end line because the time we're talking here was during the baseline of the UNICEF project, so we're going back there to interview the same people for the end line and shall deliver a baby boy.

The excitement, and it though a cesarean section, so the excitement that, if she had not received that piece of information, the likelihood that she would have lost the child is like about 90% because nobody in the rural community can do a CS. She would have lost that child too. So this is a story I kind of hold dear to my heart because that was the initial stages of me joining Literacy Bridge. So I kind of had the belief that BCC really works like behavior change really works. With just a piece of information, it can develop a lot of people.

Allana: That story was so heartwarming and uplifting, and I think a really great example of how information can really radically change lives, and in this case, help bring life into the world. And I know that, as a mom, that really touched my heart.

Toffic: Thank you.

Allana: Well, thank you both so much for chatting with me today and helping me to wrap up this mini-season on education. It was wonderful having you here.

Lisa: Thank you.

Toffic: Thank you. Thank you.

Allana: And, to our valued listeners, I am so sad to say that this is going to be my last time co-hosting "Pulse on the Principles." After three and a half years as the Director of the Digital Principles, I am transitioning on to new work. You can read my full statement about my departure on our blog at digitalprinciples.org. I am thrilled to see where we go next as a community and will continue cheering the progress on and championing it from the sidelines.

Thank you for these incredible years and for allowing me to be a small part of something so much bigger than myself. And, now, I'll give our closeout one last time. If you would like to give us feedback on this episode or any other topic in our episode lineup, you can reach out to us at principlesadmin@digitalimpactalliance.org. You can also visit us anytime at digitalprinciples.org, and follow us on Twitter @digiprinciples. That's @digiprinciples. You can also use the #digitalprinciples. I'm Allana Nelson. Thanks for listening.

"Pulse on the Principles" is made possible by the Norwegian Agency for Development Cooperation and is produced by Claudine Lim, Allana Nelson, and Abigail Shirley of the Digital Impact Alliance. Special thanks to Podcast Village for recording, sound mixing, and graphics. See you next time.