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ALL CHILDREN READING:
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PARTICIPANTS:

SESSION 2: INNOVATIVE APPROACHES TO ADVANCE LITERACY

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P R O C E E D I N G S

MS. CATOR: We have had all manner of amazing stories this morning, description of challenges and barriers, and lots of inspiring ideas.

So, what we're going to do now is take this to -- take another topic, which is the promise of technology -- how can different technologies potentially help us get to the problem of providing literacy education for people throughout the world.

So, we in the U.S. published the National Education Technology Plan in November, and laid out a broad vision for learning that is powered up by technology that can allow all students to access a personalized, more individual opportunity to learn, the kind of personalized instruction that is, in fact, very participatory, that people can connect with each other, building in social technologies, building in mobile learning opportunities, building in amazing kinds of digital content that's being designed and developed, and building in the opportunity to continually learn from the interaction as well.

So, I am actually not going to talk more about that, and I'm going to turn this over to our panel because we have a fantastic panel. And they have a lot to tell you.

What we've asked them to do is do some kind of short, snappy presentations, and we will go just a little bit over at the end of this. I'm glad most of you stood up at least and stretched and took a bit of a break. We'll go a little bit over, but we will time for some audience questions hopefully, so be thinking about kind of what's inspiring you, what's interesting to you, what kind of innovations are you listening -- are you hearing, and what do you think is the promise of innovation and innovative technologies for improving learning throughout the world.

So, with that, you have the bios in your package, so I'm not going to read those to you. I am just going to simply introduce the panelists as they speak.

So, first up is Anthony Bloom.

MR. BLOOME: Okay, great.

MS. CATOR: How are you?

MR. BLOOME: Thank you, Karen. So, don't start the timer yet, Steven. I have a quick question for the audience. How many of you can guess what the cost of the first mobile phone was when it was introduced in 1984? Just yell out numbers.

SPEAKER: Five thousand.

MR. BLOOM: Oh, darn it.

(Laughter)

MR. BLOOME: Am I giving this presentation?

(Laughter)

MR. BLOOME: So, 1984 the first mobile phone that came out cost $4,000. That just gives you some idea of costs of innovation in learning, the cost of technology.

I recognize, though, Karen, that I may be one of the only ones talking specifically about technology. I believe there are a variety of other innovations that are going to be discussed here. And Karen asked me to be provocative, so I'll start off after your break with a provocative set of slides.

Okay. We've heard a lot about quality this morning, and don't need to underscore it further. It's hard to imagine how we will achieve our millennium goals -- the challenges of schools and children having low resource settings, not having enough schools -- without thinking about the contributing role of technology. Now, this isn't to supplant the importance of teacher professional development and the importance of traditional education systems, but as Nita Lowey had said this morning, how we reach learners in all parts of the globe. And, again, it's hard to imagine how we could do that without creative uses of technology.

This is a picture that I took when I was in Mozambique with a number of kids that were trying to get in, and I thought this was an apt metaphor of kids outside the school system that all of a sudden what happens when they get into the school? What kind of challenges are we going to have in regards to access to technology?

So, we're fortunately at what I would suggest is the tipping point in terms of regards of uses of technology. We have a number of pilots that USAID and other development partners are supporting looking at low cost technologies and interventions, whether it's interactive media, such as radio, hand-held devices. We see the costs of these are being lowered, and at the end I'll present a challenge in terms of our collaborative opportunities to lower these costs further.

Of course, we want to make sure that it's cost effective, accessible, and scalable, and sustainable. So, again, it's not to supplant the importance of rigorous evaluation about the contributing roles of technologies. But we're excited about what we see currently and over the horizon in regards to creative

uses of technology to promote early great reading.

Now, our strategy -- the new USAID education strategy, there's specific reference to the importance of partnerships. There was a question from the panel, somebody asked about engagement with private sector, because this is an important area of collaboration as a development community that we recognize the innovation, the opportunities to collaborate with private sector organizations.

It's also important again that we underscore the appropriate uses of technology through rigorous evaluation. We don't want our technology interventions in countries to be led by technology of convenience. Either that's being promoted by private sector in developed worlds looking for an additional market, or the aldorum (?) technology as opposed to seeing how it can it can be fortunate and integral part of an education program. So, that's why we want to make sure that we have this rigorous evaluation.

USAID has been supporting a variety of challenges to raise the level of awareness and to catalyze new ideas in regards to the use of science and technology in development. Our administrator came on board and launched a series of grant challenges, including the first, which is a grant challenge on saving lives at birth. Education in a few months will be announcing its grand challenge, "All Our Children Reading." So, again, specific opportunities and interventions to use science and technology to promote early great reading.

We're delighted that World Vision came on board as our initial founding partner, and recently I've heard that AusAID has also come on board. So, we're excited, looking for other founding partners.

We also suspect that we'll have a variety of applications that are related to mobile applications. And what I mean by mobile applications is not exclusively just your mobile com. I don't know if any of you've seen the Pico (?) projectors. Has anybody used these Pico microprojectors? You can now purchase them for $100. What is the opportunity to connect a Pico projector to a flash drive to bring a mountain of resources into a low resource setting? Flash drives are another example.

USAID recently co-hosted a symposium with a variety of international institutions interested in mobile applications for education and development. And we're thrilled that we'll have a formal alliance in short order to build upon those experiences and best practices.

Oh, and I'm on my last slide. Excellent.

(Laughter)

MR. BROOKE: This is a picture of someone from the Philippines when I was there. Our previous instructor, David Barnes, had always said to me, Tony, whenever you talk about technology, how is it going to help a girl learner in wherever you're working? And I don't know if Dee is here as well, but I think about that in regards to the appropriate uses of technology as well.

I'll tell you the opportunity, and I mentioned this at the beginning in regards to challenges, is if we work together as a development community to identify appropriate technologies that are sustainable and appropriate, how can we help lower the costs of that technology penetration in the communities that we're trying to serve?

We represent a wide array of development institutions. Let's challenge the world to help lower the costs of access to bring those technologies to contribute to a great need? Thank you.

MS. CATOR: Thank you very much. Yeah, so that's interesting. We've been talking a lot about how we launch these types of challenges to the world's investors and entrepreneurs. So, we would love to talk with you more about that. That's a worthy challenge of the best minds, the best innovators, to attack that.

And, yes, this is a panel more about the best variety of innovations, not specifically technology. So, yes, I apologize for that.

So, the next speaker is Francois Gerin-Lajoie, and he will be quickening through this fast presentation. Thank you.

MR. GERIN-LAJOIE: Thank you, Karen. I'm Francois Gerin-Lajoie. The Paul Gerin-Lajoie Foundation was named after my father when he stepped down from ACEDA, the International (inaudible) Agencies. My slides are in English, but my tongue is in French. But as I'm Canadian, we have both official languages, so I'll try to do my best in English. Thank you.

The Foundation today, the core of our business is more towards employment, employment amongst the youth. And we are more into vocational training assisting program.

But we did quite a lot in literacy, and we did quite a lot also in basic education. So, if I can go through these.

We also have -- and I'm not talking about it today because five minutes wouldn't give me a good chance to talk about it. But we have this tremendous and humongous contest, which is called

(Speaking French), which is a dictation contest that we've been running for 20 years. And it's dictation, as I said. It's a dictation called (Speaking French). And we're among six sub-African countries in French, and we gathered in the last 20 years, 4.5 million participants from (inaudible). We had 1.5 coming from Africa.

And every year, there's African winning the contest, so it's just to tell you that they are avid at reading because we do distribute materials so they can win the contest. So, that's a good entry. We're very proud of that project.

If I go to the first project. Okay. I have three little projects here that I want to present to you. This first one started in my backyard in Montreal. The middle one is a little community of 5,000 inhabitants, and we're aboriginal nation. They're totally, totally illiterate. We went there last year with my volunteers, Educators Without Borders, which (inaudible) one little ID. The multidisciplinary project that was put ahead, ACHIEVE. And we decided to team with them, which was the seasons. (Inaudible) natives, they have six, contrary to what most North American countries. And those six seasons are based mainly around their hunting and fishing season.

So, we decided to use that as a subject, and from there we went on to do an acute reading program that was for four weeks. And it was very, very important to involve -- like some ministers said this morning -- to involve parents, and to make sure also that grandparents would be in the portrait, and that finally that we would finish it off with a one-month program on the radio. And today, one year later, we're not there anymore, but the program is still going on and going very strong.

The second project, which is from Quebec from and I'm one who really, really put it on. And this project is called the Quest for Knowledge. So, as you can see, I'm going to go read through my -- it's going to be easier for me. I'll just make the description of the project because it's very interesting.

We took a group of students, five to eight, armed with Dictaphones, and we have interviews and questions of storytellers on three subjects. And then, the kids choose their favorite project, translate it from dialect to French, and then (inaudible) the story into books, tailor content, chapters, interdiction, conclusion, and acknowledgment. And, finally, illustrated their (French term). And the final act was a grand celebration at the village, where they would act, sing, or recite their own story. So, if you look at it, this is what would look at the end. You have it in dialect on the left; you have it put on computers on the right. And you've got the illustration here. So, we did great with that, and it was not (Speaking French).

And, finally, I'm sure everybody around here knows a little bit about interactive pedagogy, which we did also in 13 FSO. And their success was that at the end of the project -- it was a project of a year -- the ministry decided to have a seminar and constructed a policy around it. And today, they have an inter-pedagogy among 15 FSOs. But the difficulties are the same that the administrator of USAID was saying this morning. The problems are always the same. We don't have ways of measuring how it goes today, how it's done today.

So, this concludes a little bit my presentation, the end of the five minutes. But just read maybe this President Barack Obama presentation. We also looked at how we can foster the innovations that can be the game changers in the program.

Thank you.

(Applause)

MS. CATOR: Thank you. And one of the key things that I heard Francois say is talking about compelling projects that engage communities, engage participants, engage communities. There's a lot of storytelling -- really interesting focus on the human dynamic. And that's one of the things that we absolutely have to do. We can spend hours talking about the measurement, but we won't.

So, with that, we'll pass it on to Corey Heyman.

MR. HEYMAN: Thank you very much, Karen. Good morning, everyone.

My discussion about innovation this morning is also not about electronic technologies. Instead, it is our attempt to grapple with the issue of global illiteracy using very traditional resources, teachers and books, but using them in strategic ways.

At root, one of our main organizational goals is to help children to become lifelong, independent readers. We started 11 years ago by building libraries, more than 1,400 libraries in school plots built to date, and 11,000 libraries established overall, and stocking them with donated books, more six million donated books to date.

We quickly realized that donated books were not helpful for our children at the earliest stages of reading if the children could not read the books in their own languages, and began to publish exciting storybooks and nonfiction in local languages. Approximately four million books distributed from our local language publishing program; 550 titles, including books in 25 languages.

We have also learned that to become lifelong readers, children need to develop the habit of reading and reading skills, and have, therefore, initiated large-scale research and development efforts in nine countries, now 10, in Africa and Asia to bridge gaps in teachers' ability to teach reading, supplementary materials to support language textbooks and children's reading habits.

Our research and experience to date indicates that it is important to think about the kinds of resources that are needed at each stage of a child's adversity to development to foster the goal of lifelong reading. This is particularly important for children from economically disadvantaged backgrounds who may have little exposure to books or reading before they come to school.

Our first focus on teacher instructional support is being designed to help teachers think about how to and when to promote a range of literacy skills, including listening, speaking, reading, and writing at different phases of literacy development from pre-reading, where children develop speaking skills and listening comprehension, to decoding, to fluency and reading comprehension.

At the same time, our focus on materials development also takes into the evolution of children's literacy skills. At the very early stages of learning, there needs to be a substantially greater emphasis on materials for instructional support. This is particularly important to fill the gaps in introductory reading textbooks, which often progress too quickly from a focus on letter/sound combinations to complex texts.

As children begin to develop their reading skills toward automaticity, the point at which they're able to read word combinations with enough fluency to remember text, there can be a much greater emphasis no pre-reading activities to develop a longer-term habit of reading.

The question is how to bring instructional support and materials together in an integrated approach. That is the innovation that is and will be Room to Read's research and development focus over the next few years. The anchor, of course, is sensitivity to the stages of children's literacy development.

In terms of teacher engagement with reading resources, there is also an evolution of responsibilities with the gradual release of responsibilities from teachers taking full responsibility of children's literacy skills development to children's independent reading.

In terms of instructional support, Room to Read focuses on the development of supplemental instructional materials that fill in the gaps in existing curriculum and provide children with

extensive practice materials, practice, practice, practice, at the earlier stages of learning.

At the same time, we provide a variety of storybooks and nonfiction in classroom libraries and school libraries to expose children to the wonder of reading and the excitement of colorful books that they can feel and touch. At the early stages of literacy development, these include illustrative books with beautiful pictures that teachers can read to children as well as books without words for children to make up their own stories.

We then provide picture books that help children practice their reading skills with text that they can negotiate with teacher support, as well as books and formats that teachers can share and which children can follow along.

Once children gain a level of fluency that they can comprehend more complex texts, we provide advanced books and perhaps chapter books for practice and enjoyment.

To conclude, I have a few pictures. This first one is a page from a storybook in which children are able to develop their own stories. Here is a photo of a teacher working with children on exercises to supplement the government language textbook. A variety of materials designed to promote reading skills and the habit of reading. A teacher helping children to write using their fingers and the ground. A teacher reviewing and commenting on a child's written work. Children's stories colorfully written and illustrated on a classroom wall. Using letter cards to make words and play games. Paired reading with a buddy to support skills development. Creative writing exercises with practice drawing circles, lines, and hearts. And, last, children with workbooks to supplement the government curriculum.

MS. CATOR: Thank you, Corey.

(Applause)

MS. CATOR: It just reminds us of the power of story and the power of language, and the interaction between people as we build child literacy skills.

It also reminded me that we as we create technology to supplement these kinds of practices, really focusing in on the best of what Corey just said and other researchers have said about how people actually do develop language in order to read, and the importance of social connection. There's a lot to learn, and if we can get the entrepreneurs and investors to totally understand those things, then we have hopes of building supplements that can potentially scale up some of the best practices that we have across the world.

So, thank you.

I'd like to turn this now to Sakil Malik for the next presentation.

MR. MALIK: Thank you, Karen. This is a very happy day for me, of course I'm sure for many of you, because this came along.

The reason that we are all celebrating the International Literacy Day at USAID, which is very new, and this is the first time in the history of International Literacy Day, because we have advocated for this for a long time, that we do it together.

Of course, many of you are used to the tradition of International Literacy Day being celebrated by the International Reading Association and in our different venues and partners' venues. But we are also doing this here, too. There is a parallel event going on right now at Georgetown University, but it is completely focused on domestic issues in the U.S. And, of course, I have not cloned myself here, so I cannot be in two places.

The second celebration is, of course, really important that in this particular day, UNESCO awards the National Literacy Prize. And I want to congratulate -- this is a coincidence that Cory is sitting next to me, the award winner this year, one of the (inaudible) winner is (inaudible).

(Applause)

MR. MALIK: And there are four other awards -- goes to Mexico, Burundi, Democratic Republic of Congo. So, this is our second celebration issued for us.

The type of thing that I want to start with is that, of course, my topic when we started to talk about what I would be talking about is teachers. And before I start my few points of particulars, I want to take this moment to, you know, really pay my respect and my gratitude to all my teachers. And one of them is sitting right here, Dr. Steve Klees from the University of Maryland, College Park. And it's amazing. Without them, none of us, we would be here actually. So, again, thank you, our teachers.

Basically, there are four or five things I would just mention in the innovation of teacher professional development. What we have seen over 60 years at International Reading Association is that there are a few things that we need to really take seriously and give attention to when you are developing (inaudible) teaching. And I'm taking you one step higher -- we are not deliberately going to the student (inaudible) yet. Before you go there, you have one step, which are the teachers, and then just go one step

above that is the teacher and educators who are training the teachers.

So, we talk about evidence based student line up. This is still very difficult work for me. I don't understand all of this too much.

(Laughter)

MR. MALIK: But I understand the teacher and educator. If the teacher and educator is not doing a good job, and then the teachers cannot do a good job, and the students will not do a good job. It's a very simple cycle for me.

So, how does an active teaching (inaudible) look like? There are a few important issues. One is creation of supportive instructional environment. This is very crucial, and it would include a lot of things -- more efficient time management within the classroom, and we all know this, 80 and 100 children in the class most of the countries where we work. And, of course, our (inaudible). All of you know how you do with your big classrooms and the teachers. So, instructional environment is very important.

Attention to skill and strategies for reading success. Just because I aligned sociology throughout my master's degree, I'm not a sociology teacher. I cannot -- you need to learn how to teach teaching, you know. And so, lining about reading pedagogy is crucial. Just because I work in the education system doesn't mean that I know reading. That's why there is something called reading specialists. That's why there's something called reading research. It's very important to give attention.

When you have a problem, you know, in your heart, you go to a cardiologist. You don't go to an internal medicine doctor. So, it's important to give attention to those people, that they are reading numbers. They know what to do, and they can help us.

The hard thing is separate instruction. It's really important that observe modeling by the teacher, participating in guidance practice. There is demonstration and demonstration back. Try out new strategies and skills on their own, and then you can give feedback. A one time, one shot training program is not going to work. We have to give attention that these training programs are attached to mentoring, coaching on weight measuring in the programs.

Comprehension of the language and disciplinary contracts. I went to families who live in Liberia. To really make reading as a content area, not literacy of the content area, not saying that we do reading in other subjects. Yes, we do need to do all of them, but making literacy as a content curriculum.

This is a very important step.

Ongoing and informal assessment. Great assessments going on (inaudible) is very important all the national assessment. But ongoing assessment by the teacher himself or herself in the classroom on a daily basis. And that's very important to think about. And, of course, cannot say enough about the family involvement into all of this, how the teacher and family interact to help the children when they come home.

Finally, there is no substitute for teachers who are knowledgeable, flexible, strategic in helping children learn to read. And, of course, I will end with a very simple metaphor that I always use. We always talk about think outside the box. I don't think we know enough about inside the box yet.

(Laughter)

MR. MALIK: So, it's time to learn our inside the box and do well, so what are the four corners of our house? The inside, you go outside. And thank you very much. If you want to know more about that, go to reading.org. Thank you.

(Applause)

MS. CATOR: Thank you very much. Yes, the power of teachers and, again, what we can know from basic research. I had the opportunity yesterday to talk to Charles Perfetti who is at Carnegie Mellon, has been doing amazing research for many, many years. And we know a lot about how to teach people to read, but how that actually gets translated to people in the classroom. And love your analogy about specialists. Good point.

And now, I will turn it over to Jane Meyers. Thank you.

MS. MEYERS: Thank you. The intervention that I'm going to talk about at the Lubuto Library Project is fundamentally sort of different than the other ones talked about. It's an institution that can take advantage of all of these different kinds of interventions, but it's filling an important institutional gap in society.

Lubuto Libraries are a somewhat open system and a closed system because schools, as important as it is to improve them, and we work with schools all the time, schools are a closed system. You're either in or out. And unfortunately there are many children who are out of school, particularly after the basic school level. And so, that's why this institution is needed.

The objective of our project, which is a scalable project and is going to scale right now in Zambia, is to ensure access to high quality educational services to support holistic development and power for the children who use it to fill capacity, to train teachers and communities to do this.

Again, literacy actually is a means to an end, and I think a lot of those speakers earlier this morning talked about the role literacy plays. So, we are going -- we're aiming toward that end goal as well.

We've also found that effectively serving the most vulnerable youth -- out of school children, vulnerable children and youth, requires professional library services drawing on a range of technologies, and creating innovative programming that benefit the entire society and not just the vulnerable youth.

Public libraries can, and Lubuto libraries do, educate girls without depriving boys, provide access to shared technology and comprehensive book collections. And this shared is important. I hope someone asks a question about that. Educating out of school children, child head of households, and teen mothers. So, we are able to reach out and bring these children in, and we have done it in huge numbers. Provide early childhood education -- again, that's something that happens all the time every day in our libraries. Improve teaching and education quality -- I'd love to have a chance to elaborate on that, too. And to serve as a bridge to schools for out of school youth.

Our libraries have been recognized within the library profession as a model for library services for disadvantaged children anywhere, with a powerful and measurable impact.

One thing that we know about the profession is that there are three necessary elements for successful libraries, ones that will really have an impact and be sustained. You have to have an excellent and comprehensive collection, relevant programming, and effective outreach. And the collection needs to include all of the kinds of materials previously mentioned, including information technology.

We have seen that our library program is especially necessarily for out of school children. And I hope you all were able to pick up a handout that I had out where you pick up your badges that talk about our programs. There's one in particular where we have engaged family and teachers in partnership with the ministries of education and created 700 reading lessons -- mother/child reading lessons that can be used in our library that can be used throughout the country. In other words, we have engaged children and teachers to create 100 in each of the seven Zambian languages. So, that's one thing that can be done in a situation like ours.

Also, for such program to be effective and sustained, you need to be working with the government and communities, and both need to own it. You need to develop specialized architecture that has facilities that will accommodate the need. Capacity building is obvious, what Sakil talked about, training teachers. And also, what librarians do all over the world, just preservation. So, it seems to get forgotten that there have been in the past lots of materials, wonderful materials, in Zambia in local languages. And we have created the digital archive. We track those materials now that don't exist in Zambia any more. And we've created a digital archive.

So, I have one more minute left. Anyway, just a tiny little story at the end, and I hope I can squeeze it in because it's about my mother, and I want you all to know about it.

My mom was born in Philadelphia, in South Philadelphia, in 1912 into a very poor Irish immigrant family. And when she got out of high school, as we were closing into the Great Depression in this country, she had absolutely no chance of going to college, and she desperately wanted to. But fortunately, she lives in Philadelphia and could spend all of her free time at the Philadelphia Free Library, the iconic first public library in the world, an innovation of a guy you may have heard of named Benjamin Franklin.

And one day in the mid-30s, a woman physician at the end of her career came in and said to the librarian she wanted to send another woman to college and medical school, and did the librarian have any ideas. And, yes, indeed, my mother got a scholarship to college and medical schools thanks to the Philadelphia Free Library met my dad in medical school. And all five kids in our family grew up knowing that libraries were a magic place and opportunity.

And that is what drives the Lubuto Project, and I hope someday I have the opportunity to tell you about Labness, and Miriam, and Betty, and Joe, and David, and all of the people -- all of the young people (inaudible) whose lives have been transformed by our libraries. Thank you.

(Applause)

MS. CATOR: That's fantastic. Thank you. Thank you, Jane. The power of libraries is, I think, even more important today than ever. A lot of people have been talking about the future of libraries. I was also reminded that we were talking earlier that the first Carnegie libraries had a room in them designed to teach people to read. So, really thinking about the power of libraries, sustaining that, and also making sure that professional librarians can continue to evolve and help us deal with the vast quantities of information and

data on the Internet as well.

And with that, we'll turn it over to our final speaker, Debbi Winsten.

MS. WINSTEN: Thank you very much. I'm Debbi Winsten. My organization is called Literacy Bridge, and I am the partner relations manager based here in Washington, D.C. so that we can work with you.

And, okay, so this is a talking book. Anybody speak Twi? Okay, so it doesn't look like a book, but it does speak in any language.

Just a little bit about our work, an example of our education programs, and then a bit about the benefits for the entire community that we've been talking about.

So, we're a small NGO in Ghana and the United States, headquartered in Seattle, Washington. Our founder is a dedicated open source software engineer, who designed this small, durable touch pad computer, also very inexpensive, to make vital information in education accessible to billions of people in resource poor areas. We're passionate about ending global poverty, and so we work in remote rural areas to find solutions to bridge the literacy gap.

The talking book is simple. It's interactive. It is a computer, and it doesn't require electricity, Internet, or cell service. So, even a single talking book can serve dozens of learners with up to 140 hours of content in a variety of languages. Very easy for users to add the audio instructions in their own local dialects.

It can also transfer learning materials to another talking book -- it has a USB cord built in -- without the need for a laptop. And it captures relevant user statistics and user feedback. We were looking at the upper West Ghana, very remote area, and the Haim Primary School in Jurupa District, has only four trained teachers. You may know schools like this. There are six grade levels. The smallest class has 64 students; the largest one has twice that.

So, children work on subsistence farms. They rarely pass grade six. There's no electricity or running water. But sometimes there are textbooks, and the children can listen to recordings the teacher made, and then practice by recording their own reading. This improves their English pronunciation.

Two or four students can work together using headphones or in small groups with a built in speaker, so that even without a teacher or a classroom they can learn. They can write words in dirt with a stick or with their fingers, or use whatever is available for learning materials. And they tailor their experience

because the speed of the playback can be controlled by the user.

Interactive multiple choice quizzes on the talking book, test reading comprehension, and define new vocabulary words are introduced. We called them audio hyperlinks, so a bell and a light signal that there's a definition for the word, which the user can access without losing her place, or skip over it if she already knows the definition of the word.

So, this is important when teachers are absent or unavailable, and the students can still improve reading comprehension and pronunciation. Adults who can't read can sit with their children and a book to share the learning experience, another community impact.

And there are talking books on the table outside, so please try them. You'll see that it's really designed to be durable. It uses standard D cell batteries, which are available for approximately 35 cents, U.S., the equivalent in most places in the developing world. And so that users can actually afford to buy them.

Just a little bit about our other work. When subsistence farmers use the talking books for crop planting guidance, which was delivered in their own dialect, they grew 48 percent more food. This means they could send their children to school instead of keeping them on the farm. Traditional birth attendants have recognized the value in this, and community health workers use them for positive behavior change in hygiene and maternal child health, again, for good outcomes. And adult non-formal learners use the talking the talking books for functional and financial literacy.

So, we think the talking books are a sustainable solution to increase literacy among the poorest of the poor. We hope you think so, too.

(Applause)

MS. CATOR: Thank you, Debbie. Sustainable and scalable. It sounds like that is --

Okay. I think we have time for one, maybe two questions. Does somebody have a question, and you're free to direct it at a specific panelist or the panel in general. What are you thinking about?

SPEAKER: All right, Tony, or somebody on the panel. Part of the problem with innovations and trying to do research -- what you call research innovation -- is that by the time the research comes out, there's a new innovation that has made the research sort of irrelevant. So, how do you keep pace with

changing technologies and changing ideas and changing environments, and keep a good, solid evidence base going along?

MS. CATOR: You want to hand the microphone down?

MR. MALIK: I think you need to talk to Best Buy. They have a buyback program.

(Laughter)

MR. MALIK: No, the important part of this is that research is ongoing. And when the old research is obsolete, it still is not obsolete because you know it doesn't work anymore. I think this is an important issue. We always talk about best practice. We talk a lot about worst practice. (Inaudible) projects. Those are very important projects because it doesn't work, and we don't want to go there again.

So, the research that you think is gone and a new innovation came back, still you need that research from previous times because some of them are distinctly needed when you program the new program.

The other issue is that whether we like it or not, many of the developing countries still are in a stage where some of the research has not worked here, but it still works there because they have not came to a sphere where they can use the new innovation yet. So, they have to cross the path through that research process. Just because technology changed from black and white TV to Android doesn't mean everything becomes obsolete. Thank you.

MS. CATOR: Jane and then Tony.

MS. MEYERS: Yes. Another thing about it, using technology in the context of libraries is important, and that's something librarians struggle with everywhere in the world. I mean, information technology by its nature is not sustainable. And so, how can a library have continuity? And it's very important to develop products that are not bound to a particular technology.

So, for example, we've been using the one laptop per child laptops in our libraries for the last few years. We are pretty certain that -- and they're excellent. They work perfectly for our needs right now. But I don't know what the future of those are. So, everything that we're developing, and we developed these literacy lessons using e-toys and a PC application, but they can run on any platform. So, for example, when I presented the e-Learning (inaudible) conference in Dar es Salaam in May, we talked to people who were developing cell phone applications in Finland, and these e-toys games can work on cell phones. They can

work on anything.

So, it's important to think of the innovation itself sort of separate from the hardware development.

MR. BLOOME: Yeah, just quickly, I'd say the same thing. Don't chase the technology. What happens is a lot of ministries of education and donors are chasing the glimmer of the eye, what they saw on the Metro as they were coming in. And I think what we need to do is appropriate, sustainable technology and apply it to the (inaudible) problems we have. So, work with the reading specialists to identify the opportunities for the appropriate use.

On the other hand, take advantage of the technology. Just how virtualization uses the power of a single computer to be able to power a number of other desktops or a number of other monitors, that's the way that you can make technology work for you.

eGranary is a project out of the University of Iowa. They're downloading millions of websites, putting it on hard drives, and disseminating it into communities that don't have connectivity.

So, what are the opportunities for us to take advantage of the power of technology to make it appropriate and accessible for the communities we serve?

The last is, of course, mobile comms. Other sectors we have heard earlier, such as health and agriculture, are using mobile phone in terms of helping their development hypothesis. How might we might use that infrastructure if not exclusively for mobile infrastructure for data and access it, yeah.

MS. CATOR: Absolutely. Debbi?

MS. WINSTEN: Well, I also wanted to speak to the power of open source software so that any user with a little bit of experience can actually tailor something like the talking book, that it has a USB connection built in on any USB so it can, if there is a single cell phone, upload and download content from the Internet, and also hook up to computers and so on.

And further, the statistics -- the user statistics are stored inside, so when it does hook up to a computer or another talking book, people themselves in the field can track what's the most effective.

So, we're trying to get the innovations to be accessible to the poorest of the poor.

MS. CATOR: Thank you. Corey?

MR. HEYMAN: Just to go back to Sakil's recommendation that we think inside the box as

well as outside the box, is just a plea that there is still a lot of basic research that's absolutely imperative that we conduct to people to understand how children learn, how they acquire literacy skills. And even if there is research that has been conducted in the United States for other developing countries with complex language structures, there's still a lot of work to be done that that Room to Read and other organizations are doing to really understand how children learn in countries where this research hasn't been conducted in the languages that are more regular than some of the languages that we tend to work in.

MS. CATOR: Well, and with that, I think we are out of time. What I wanted to wrap up is, don't get too attached to the technologies. Focus on the basic research, the best practices, the best interactions between people, and get the innovators and the inventors and the entrepreneurs to look at that before they come up with their next great idea.

So, thank you very much to a great panel.

(Applause)