



**NCTI 2009 Innovators Conference**

***Tuesday Keynote***

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**Transcript**

Good morning. So, I am actually here to listen. I have a few comments. I think Kwasi really related that quite well what the vision is and what we're going to attempt to do. What I'd like to do is talk a little bit just about how we see maybe going about this and it's not easy, but it is going to take a village.

I'd say in my first two weeks at the department, if I could kind of summarize it in one way, I'd say technology is everywhere and technology is nowhere.

So there are people all over the department, all over the country, people that I've known for years, [who] have been immersed in figuring out how technology can help students learn. We all know the stories, we know the way that that happens, and we know what to do.

But when I look at kind of the broad over-arching messages and kind of the big work going on, there is work to do to get it inserted in its proper place throughout all of those kinds of things.

So the first kind of start at that is the **National Education Technology Plan** and Linda Roberts who's going to be on the next panel, my mentor and dear friend and advisor, is going to be talking about that. She's been kind of holding down the fort, working on that, consulting on that project and she'll be able to talk more about that as well. But what I'd say about that is it really is a bit of a national education plan; it's more than just about technology it is absolutely, maybe over-reaching. Don't tell anyone, but really trying to lay out the vision for how all students can learn. It will have a learning section, and it will lay out these are the kinds of things that will help all students learn.

And I want to just stop for just a second there and say that this notion of all students is really critically important and Mike Russell came up this morning and re-introduced himself, and we knew each other back when I was in Juneau, Alaska, which is like 15 years ago, and at that time, it was a little bit ahead of its time but we sold a bond issue – we didn't *sell* we provided information so that the community would vote positively – on a bond issue, I'm in the government now I've got to sort this out, for technology for all the schools and in there we had a whole section on assistive technologies and we started an assistive technologies library for the community of Juneau, Alaska. And so from way back, that's kind of one slice but the other slice that is absolutely critical is the fact that these technologies that all of you people know about, we know many of those are good for all kids, right?



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So if we know that the kinds of things that we worked on at Apple with the accessibility technologies built into the operating system, things that would, you know, you click on a word and it'll read to you, it would change the colors it would change the layout, you can make the text bigger, you can have it speak to you, single switch stuff, you can do all sorts of things within these technologies and we saw ways that these were good for every single kid, not just those who it was particularly designed for, so I think somehow we have to sort of **rise up above the niche and speak loudly and clearly about how these technologies are really, really critical for all students.**

So one thing I would encourage you to do, I know one thing is the National Education Technology Plan and we'll have a draft in January that you can all kind of shoot holes in, add to, add stories to, add examples, add ideas. We really want to create this in a bit of a wiki-type environment so there will be the opportunity to add value in a large context to the national plan.

But the second thing is, and I know you already have these as well, but go back and find the best stories, the best stories that we can have at our fingertips so we can show legislators who are thinking about how do we fund this or that, stories that will explain to people what it looks like, the stories that will give people the vision for how they should be thinking about technology in support of all students.

So national tech plan – stories. What else?

I think just one of the quick things, the PISA, the OECD, the Organization of Economic Cooperation and Development, is in the final stages of creating a report on a study that they did to analyze the correlation between student use of technology at home and at school and how well they did on the science exam when they were 15 years old. Interesting hundred and whatever page report, interesting bottom line is the technology use at school did not correlate to success on the PISA exam, but technology use at home did. So what that means, some people will say “oh, then we don't need technology in school, technology in school is not effective”. **I think what it means is that we need to learn from how kids use technology outside of school in informal settings** and figure that out.

Kwasi did a great job of laying out personalization, and the fact that technology allows and enables personalized learning environments, right? So personalized learning isn't just differentiated, isn't just individualized, but it's who am I as a person, and where's my personal learning network? Who do I know, who are my experts, who looks like me, who thinks like me, who acts like me, who can be my support group?

Linda told me a story from yesterday about someone who talked about the small support group that was unbelievably powerful in a group of people's lives. There are those stories everywhere, you know, from the special needs populations to the knitters to the Great Pyrenees dog owners, there's a community for everybody.



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So personalization is really about engagement and motivation, and that's what we know about outside of school technology use, it's a choice that kids decide what they want to do, they find their friends, they interact with people, that's kind of the other part of the personalization. So learning from what kids do outside of school and your comments about games are really important.

One of the things that we're really thinking about is how to **launch an entirely new research and development agenda**. We know the questions and we know that there's unbelievable research being done right now across the country and I know many of you are involved in it. So the question is, how do we build that as an agenda, as a large scale, shine a big old spotlight on that research agenda... on the research being done, the development being done, so that it doesn't stay in its small space but it can blow out and go somewhere. So we're talking to the National Science Foundation and others about how to take those developments happening there and scale them out, disseminate them, market them if you will, provide the opportunity for these things to kind of see the light of day outside of the research halls.

The second part of research is kind of the research and evaluation. In 3 years from now, if we still have people saying technology doesn't work because we've done these little scientific studies on this product or that product with this group of kids in random ways, it's not the way that we need to understand the efficacy of using technology in learning, so we need to figure out how to do new kinds of research so that in 3 years we understand the impact of technology and student learning across the board so it has to have context, it has to have bigger questions, bigger ideas about what's the environment that technology works within, what are the essential conditions, how does it create a success for each and every student.

So those are just some of the things that we're thinking about. I would just lay as groundwork for you to think, in your thinking, that if the FCC is successful, we will have broadband everywhere, right? So **we need a broadband everywhere mindset**, we need devices in the hands of all students, and I hear you loud and clear, but [with] accessible devices and I'm going to go back and figure that out, or just ask some questions about that, but **devices for all students**. Something that a student has 24/7 that they can access the content, the tools, the simulations, the visualizations, all of these things that bring content and learning to life for students.

The third is content, right? So we need the **new development and inter-operable content**, content that people can find. And when I say content it is all of those things, it's the simulations, it's people, it's the kinds of environments that allow people to see things that they couldn't see without technology and to learn things they couldn't learn without technology.

And finally, **community**. So broadband everywhere, devices everywhere, content that you actually can find and the interoperability of content, and then the access to community, the access to the people that can form your personal learning network.



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So with that I'll stop and hopefully we have a few minutes for questions and I'll sit back over there, and thank you very much.