



Transcript of podcast with:

Tom Greaves, chairman, [The Greaves Group](#)

Chauncy Rucker (CR): Welcome. I'm Chauncy Rucker. I'm at the 2008 Technology Innovators Conference. It's hosted by the National Center for Technology Innovation and the theme this year is "Thriving in a Global Marketplace." I'm having a conversation today with Tom Greaves and he is the Chairman of The Greaves Group. I understand Tom that your presentation today was on mobile computing and I'd just like you to highlight the kinds of things that were in that presentation.

Tom Greaves (TG): Thank you very much Chauncy. It's been fun to be here. This is my first time at this conference and I've enjoyed it immensely.

We talked today in the mobile computing [breakout session] really from a global perspective. A lot of my remarks were taken from the [America's Digital Schools](#) study that I did of the top 2,500 school districts where we asked them a lot of questions. One of the things we found is that over the next five years, the predominant number of computers in schools is going to move from desktop computers to mobile computers. We define mobile computers as laptops but certainly cell phones and other types of mobile computing will be in there as well.

The transition from desktop to mobile opens up a lot of opportunities. Primarily every student getting their own computing device, using it like it's a textbook almost. By that I mean they can take it with them, it can be wherever they are and that really allows you to personalize education which is one of the things I like most about it because we're all different, we come from different backgrounds, there's probably 100 different ways of personalizing each different student from another student and there's no way to deliver a personalized education without digital technology. There's no way to deliver digital technology wherever a student might be whether they're at grandma's, at the soccer field or orthodontist without mobile computing technology and so as we move towards mobile then we have the opportunity to go digital and we have the opportunity to do it wherever the student is and that whole personalization factor is what's really important.

What we found is that some 27% of America's schools already have a pilot on one-to-one or better and we define a pilot as at least a full grade in a school and so that's up year over year and there's about 1,600 students average in these pilots or better. Something like 3% of the school districts are reporting 20,000 and up in one-to-one implementations, that's Henrico, Maine and other places like that and so we're seeing a movement now that where the schools are going mobile and the schools are starting to adapt this technology and the students are taking it with them. It's becoming quite personal.



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I remember one student said that it's the computer is like a member of her family. I went another time visited a school it was in Lemon Grove and I asked one of the sixth graders there I said, "Do you remember before technology and now?" because there every student has a little computing device and she said, "Yes" and I said, "What's the biggest difference?" and she said, "Well, before technology, I just couldn't get the answer to questions. I'd have a question, I couldn't find the answer. After technology, I can find the answer to any question. I said, "Any question? What if it's a really hard question?" She said, "Well, hard questions might take a few minutes longer." I said, "Well, what about before technology?" She said, "Before technology, there's a lot of times I could never get the answer to a question."

When I was growing up, I wanted to know why rain clouds were black. I never met a teacher that knew the answers to why rain clouds were black. Now if I were in school and I had that question, I would type it into Google and ten seconds later I'd know why rain clouds were black. If you look around the world, we're seeing that this movement is really taking off, some cases, more advanced than the US.

In Australia, the government just announced that they're going to provide a computer for every ninth through twelfth grade student. It's going to cost them a billion dollars a year. We're seeing, there's probably a list of 20 countries I put on the board that are adopting mobile computer either OLPC [One Laptop Per Child], the famous \$100 laptops, or Intel Classmates or ACER's or some of the others that are coming out.

The next part of what I talked about was about a bandwidth crises. Part of the problems is you've got all these computers, their now connected to the Internet, kids are actually using them and each use sucks up the bandwidth, but the report pointed out that the bandwidth that schools think they are going to need in five years is about a fifth of what they're budgeting and so we've got a gap there. E-rate only covers about \$2.25 billion dollars and we'll exceed that with Category One services here next year so we've got a crises in the bandwidth that we've got to get solved if we're going to be able to really support mobile computing the way we'd like to.

So those are some of the big things going on is the world's going mobile, it's allowing us to personalize education in ways we never thought of before, but it's going to take a lot of bandwidth and we'd better get ready for it.