

**Testimony of Aneesh Chopra**  
**House Committee on Education and Labor**  
**“The Future of Learning: How Technology is Transforming Public Schools”**  
**June 16<sup>th</sup>, 2009**

Chairman Miller, Ranking Member McKeon and distinguished members of the Committee, it is indeed a great honor to appear before you today. As the father of two young girls, I can assure you today’s topic is of both a professional and personal priority for me.

President Obama understands that in order to renew American competitiveness, we need to harness the power and potential of technology and innovation to revamp our educational system. We will need a greater proportion of our population with college degrees, an increased pipeline of students excelling in STEM fields, and breakthrough strategies to uncover the hidden talent we know resides throughout our country. I am pleased to share my experiences on the role of technology and innovation in demonstrating meaningful progress against these challenges as we look to the future of learning.

**A Framework for Educational Innovation**

President Obama is committed to ensuring all students are trained to use technology to research, analyze and communicate in any discipline. However, we must integrate technology into the classroom in ways that research demonstrates truly help students learn.

Promising approaches include facilitating public-private partnerships in the development of new curriculum incorporating emerging technologies; integrating technology throughout the classroom to transform the method by which we teach; deploying collaboration tools to support teachers in sharing best practices; and developing better student assessments to allow teachers and parents to make “data-driven” decisions on how to improve performance.

We are making progress on these priorities and we will continue to evaluate their impact. We're also proud of OECD's recent ranking of the US as #1 in broadband access to schools as it has built upon the \$2.25 billion annual contribution through the E-rate program.

I've seen the promise of an investment in technology as Virginia's Secretary of Technology. When properly deployed, it can serve as the foundation for technology-led educational transformation. With your permission, I thought to share a few examples from nearly a dozen innovative "proof-of-concept" initiatives that might better demonstrate the future of learning.

**Virginia's Physics Flexbook:** In 2007, Governor Kaine challenged a volunteer panel of scientists and engineers to review our physics, chemistry and engineering curriculum. Led by a now retired NASA scientist, Jim Batterson, the panel strongly recommended a focus on contemporary and emerging topics that could be updated through an online collaboration platform. By July, 2008, and in partnership with legislative leaders, the Secretaries of Education and Technology and the Superintendent of Public Instruction jointly issued a call for volunteer contributors to propose contemporary and emerging physics and lab modules. Within six months, a dozen or so authors, at no pay, completed ten chapters as a supplement to the traditional textbook covering areas key to Virginia's economic growth like modeling and simulation, and nuclear physics, available at [virginia.ck12.org](http://virginia.ck12.org).

Powering the demonstration project was a free online collaboration platform, CK12, which facilitated a rigorous quality review process and design interface for teachers, students and administrators to seamlessly incorporate new content into curriculum.

Albemarle County Schools Superintendent Pam Moran secured board approval to purchase low-cost "netbook" computers for every physics student, pre-loaded with the flexbook. By capturing the savings from eliminating the purchase of new physics textbooks, she lowered the school's total cost of ownership and has dispatched her

instructional team to focus on the content her students need to learn in order to be globally competitive.

**Learning Without Boundaries and the “Mobile Learning Apps Challenge”:**

Virginia’s Department of Education demonstrated a new approach to teaching and learning through the use of wireless mobile computing devices on the premise that 93% of 6-9 year olds lived in households with a cell phone. To test the benefit of this platform, Virginia issued a national application development challenge on the problem of poor test scores in 6<sup>th</sup> grade mathematics (68% pass rate in 2008, up from 60% in 2007) at [www.lwbva.org](http://www.lwbva.org). With modest prize money (\$5K) we are eagerly anticipating the results by the end of June. Early designs have shown tremendous creativity in exploiting the features of the iPod Touch to inspire kids to learn fractions, proportions, and measurement.

**Virginia “Open Classroom” Project:** Mecklenburg Public schools, a rural district, secured a Governor’s Productivity Investment Fund grant to lower IT operating costs while delivering greater value for classroom instruction and professional development. Through the deployment of open collaboration platforms, Mecklenburg has dramatically increased the ability for teachers to exchange ideas, curriculum “objects” and student/parent messaging resources. These initiatives delivered \$123,000 in cost savings this fiscal year and enabled the district to launch [www.vaopenclassroom.org](http://www.vaopenclassroom.org) as a portal to replicate results across dozens of other districts.

**Spirit of Commonwealth – PlugGED In:** The real test for transformation, however, is in our ability to harness technology to uncover hidden talent. Invoking Virginia’s “spirit of Commonwealth”, we launched *PlugGED In*, a bold experiment to connect high school dropouts to technology jobs within six months. A broad coalition of adult education instructors, community colleges, 4-year institutions, and even technology companies built a program that offered an accelerated GED, a Microsoft certification, and a project assignment to guarantee entry-level tech job interviews for each graduate. We will see the results of our first graduating class this July but the experience reminds us that every

American, regardless of background, deserves the chance to compete and win in our technology-based economy.

I would in closing like to mention the importance of technology as an aid to learning for students with disabilities. For example, captioning, computer reading and dictation programs and the growing availability of instructional materials in convenient accessible formats are tremendous advances. The electronic equipment accessibility provisions of Section 508 of the Rehabilitation Act and the compliance efforts by hardware and software providers have greatly increased the capacity of individuals with disabilities to use and benefit from technology in education.

In conclusion, with ubiquitous connectivity, mobile platforms, compelling content, well trained teachers, and further research into what works, we can deliver a whole new world of learning opportunities. We can transform the way teachers teach and students learn.

I welcome any questions that the Committee may have.