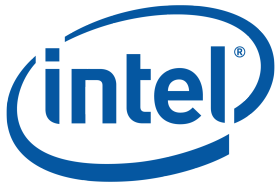
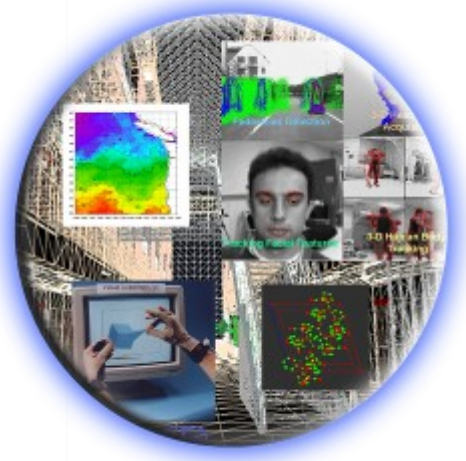


Intel Innovation in Education

Dr. Joya Chatterjee
Government and Education Programs
Channel Platforms Solution Group
Intel Corporation

The Environment for 21st Century Learning



Resulting in a change in the way….

We work

We communicate

We create

We live

Critical strategies for success

Digital literacy
Higher order thinking
Good Communication
Work effectively in teams
Life long learning
Student attainment

In order to prepare our kids for success in the changing world….

Learning must be different …

Teaching must be different …

Transforming the Way We Learn

Skoool™

A public and private sector collaboration led by Intel to drive new learning and teaching usage models and practices in education

Transforming the Way We Learn

West Bengal Public Schools, India

The Opportunity
Geographically situated in eastern India with a population of 80 million, the state of West Bengal is at the forefront of attracting foreign investment. Several Fortune 500 companies already have a significant presence in the state, and many more are in the advanced stages of setting up operations. West Bengal estimates that it will need hundreds of thousands of trained IT professionals to fill an estimated 400,000 additional jobs by 2010.

The Challenge
The state of West Bengal in Eastern India hopes to see 400,000 new IT-related jobs by the year2010. To provide trained workers for these positions, the government decided to broadly deploy technology in its secondary schools, where 94 percent of the state's children are educated.

Solution
The government of West Bengal launched an ambitious computer literacy program across its secondary schools, equipping them with standardized Intel® processor-based PCs and servers running the Linux* operating system. The West Bengal Board of Secondary Education developed the curriculum, and Indus Integrated Information Management Limited provided training for teachers.

Benefits
West Bengal is realizing nearly $180 savings per seat in software costs by implementing Intel®-based computers running the Linux operating system and open source software. The standardized infrastructure makes large-scale rollouts easy and resource efficient. Their familiarity with Intel based PC's running Linux allows students to more easily acquire similar computers at home and take advantage of the broad assortment of open source software. Access to computers have improved students reasoning abilities and boosted self confidence. West Bengal's Computer Literacy and Training program as of 2005 has 500 schools, 160,000 students enrolled

"We need to empower the bottom of the Pyramid, bridging he digital divide in the rural areas, the best way to do so is through education in schools. " Mr. Ravi Kant, Webel technologies

Transforming the Way We Teach & Learn

Indiana Public Schools, USA

The Opportunity
Indiana Department of Education (IDOE) staff needed a fiscally sustainable model that would ensure that, over time, all students would have one-to-one access to computers. In the working world, people often access multiple computers during the course of a day. If they had to share a computer with a co-worker, their productivity and efficiency would be severely curtailed yet in school, students one computer with three or four other students. Indiana had an impressive student-to-computer ratio of 3.1 students per computer, ranking them fifth in the US. IDOE staff observed students in school, and they found that students were averaging about 35 minutes per week at a computer. Computers were provided in labs and libraries and shared among classes. Several times a year, the labs became unavailable while they were being used for state-wide, end of-course testing. Availability wasn't consistent enough for teachers to integrate the computers into their curriculum

The Challenge
In 2003, Indiana Public Schools faced severe budget cuts that forced IDOE staff to question their approach to integrating technology into education. They needed to find an affordable, sustainable way to leverage the potential of one computer for each student, or "one-to-one" computing, throughout the state school system. It was becoming clear that intermittent access to computers in a lab was not enough to allow teachers to integrate technology into the learning process.
"If we gave you a pen for only thirty minutes a week for 12 years, you'd barely be able to learn to write your name," says Laura Taylor. The technology had to be available on demand in the classroom to provide teachers with the tools and students with the access they needed to create a successful learning process and would ultimately serve at least 300,000 students.

"Our vision was to bring education into the real world—to give children the best possible tools for them to learn and to help teachers find the best ways to use the technology to meet curriculum objectives," says Mike Huffman, Special Assistant for Technology IDOE

Solution
IDOE is piloting a one-to-one computing initiative called ACCESS, or Affordable Computers for Every Secondary Student. ACCESS places affordable Dell* desktop computers with Intel® Celeron® processors running a Linux* operating system and open source software in front of high school students in language arts classrooms throughout the state. The pilot project currently encompasses 1100 systems in 24 high schools and 120 classrooms. Once the pilot proves successful, plans are to extend ACCESS program to all 300,000 public high school students. English language arts and writing are the first areas of focus because writing is central to many disciplines and an essential skill in the work world. Students would learn to complete all the tasks associated with effective writing online—from research to a rough draft, revisions, and a final draft. At the same time, writing evaluation tools would give students immediate feedback about grammar and structural issues, freeing the teacher to focus on working with students to develop thinking skills and refine content.

Benefits
Dell desktop computers with Intel Celeron processors provide a reliable, affordable hardware platform that is easily replicated and supports a sustainable fiscal model. The use of open source software significantly reduces software costs, allowing resources to be shifted into additional hardware purchases. Students are more engaged in the learning process and teachers are revitalizing their curriculum with technology based tools . Students have one-to-one access to computers on a daily basis. IDOE staff members were surprised to find that English teachers with 25 or 30 years experience were among the most fervent supporters. .

About Intel

Technology Leadership

We advance silicon technology and move the industry forward, empowering people to do more:

- Enhance their knowledge
- Strengthen their connections
- Change the world

Community Commitment

Presence in 48 nations, creating pockets of innovation around the world

Year founded: 1968

Number of employees: 78,000

Revenues: $30.1 Billion (2003)

Worldwide offices and facilities: 294

Intel® Innovation in Education

The Intel® Innovation in Education initiative is a sustained commitment—in collaboration with educators and government leaders worldwide—to inspire innovation in teaching and learning.

Summary/Next Steps

We recognize the need

We recognize the opportunity

Several programs in place to collaborate with the global education community and achieve this vision

Let us know how we can work with you