

# Intel in School Education

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## Intel Education in India

Accessibility	Connectivity	Capacity Building	Content
<p><b>Platforms</b></p> <ul style="list-style-type: none"> <li>Affordable, Energy Efficient Computing models</li> <li>Purpose-Built Access Model</li> <li>Ownership &amp; funding models</li> </ul>	<p><b>Connectivity</b></p> <ul style="list-style-type: none"> <li>Wired</li> <li>Wireless</li> <li>WiMAX</li> <li>Telco Bundles</li> </ul>	<p><b>21<sup>st</sup> Century Skills</b></p> <ul style="list-style-type: none"> <li>Public Private Partnership programs</li> <li>Intel Teach, <i>1m teachers, student teachers &amp; teacher educators</i></li> <li>Capacity building for district, state officials</li> </ul>	<p><b>e-learning</b></p> <ul style="list-style-type: none"> <li>Skoool platform</li> <li>Local subject content ecosystem providers</li> <li>Build on teacher owned content</li> </ul>

Intel offers solutions and support on these four pillars that are fundamental for any successful IT in Education Program

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## We are your partner in addressing some of your ground challenges

IT Infrastructure & Connectivity deployment
Energy Efficiency
Regional Language Content & Software
Policy Planning & Execution
Teacher Professional Development

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## eLearning Roadmap for Secondary Schools

Learning Value

Technology Access

Basic ICT

PC Labs

Classroom eLearning

1:1 eLearning

Some digital curriculum integration

Complete digital curriculum integration

Student-centered learning

Focus on learning PCs

Project-based learning

Group collaboration

Lab instructor only

More people, deeper instruction

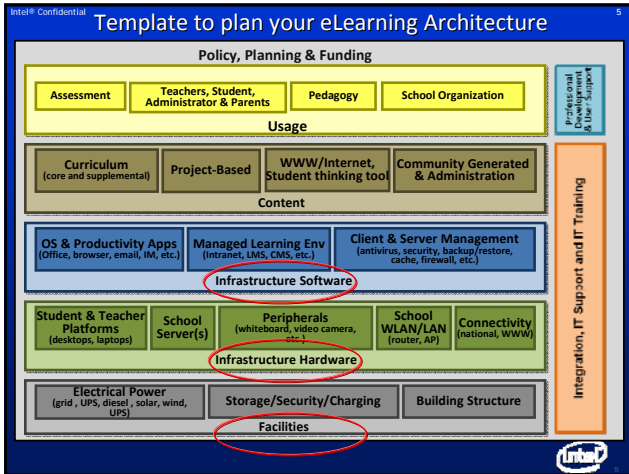
Broad, fast coverage (WiFi, WiMAX)

Most people, thorough instruction

Wireless in classroom

Computers-on-wheels or shared desktops, Teacher PC Programs

Netbooks (1:1) with Teacher PC Programs



Intel® Confidential **Intel Processors Power a Range of Devices!** 6

Want a simple and affordable devices for Internet usage models?

Want the "best internet experience in your pocket"?

Want a richer, fuller experience?

Get a Netbook or nettop

Get a Mobile Internet Device

Get a Notebook or Desktop

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Small Smart Affordable Uncompromised

Affordability barrier

**WHAT ARE WE DOING**

Optimized for affordability

- Small
- Power efficient
- Uncompromised Internet

Intel® Confidential **Nettops & Netbooks – Affordable Platforms for Education** 8

Nettops, based on the Intel® Atom™ processor, is an innovative device offering basic PC functionality. These purpose-built devices deliver an affordable basic computing experience and easy access to the Internet

Netbook Platforms enable a simple and affordable platform for Internet centric usage models

**Classmate PC Category** is a sub-set of the Basic Notebook Platforms that is focused on Education Usage Model

- Kid/Classroom Friendly ID
- Custom Education SW
- Rugged Design
- Water Resistant KB

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## Some innovative eLearning working models

**Computer on Wheels**

- CMPC Storage and Charging Rack
- Wireless Access Point
- Classmate PC

**Charging Storage Solutions**

**Classmate PC lab**

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## Building Broadband Infrastructure

Timeline: Q2'09, Q3'09, Q4'09, Q1'10, Q2'10, 2H'10

Technologies: ADSL, CDMA / WiMAX, RSI / WiMAX, WiMax / 3G

**An ideal opportunity for providing connectivity to secondary schools.**

**Rural Connectivity for Education – BSNL USO Project**

Background: 29K DSLAMs eligible for INR 4.5K subsidy for 31 connections / DSLAM

USO (4500 INR) → BSNL → Customer (Ship, Install, Maintain for 60 months) and OEM (PC Pass through USO Pass through)

Other milestones: Spectrum Auction, Spectrum Awards, WiMax / 3G Commercial Launch, Pan India Availability, Rural Phase II WiMax FOC Libraries.

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## Building Content: skool™ Program

- Instructional:** Allows teachers to effectively impart basic concepts (Knowledge Acquisition)
- Multi-modal (text, audio & visual):** Complements various teaching and learning styles – visual, aural, read / write (Knowledge Acquisition)
- Interactive:** Enables teachers to create real-world application of taught concepts (Knowledge Deepening)
- Open-Ended Tools:** Allows students to explore and expand on learned concepts and teachers to track progress (Knowledge Deepening & Creation)
- Collaborative:** Allows students and teachers to collaborate within the class, school, community, real-world, and experts worldwide (Knowledge Deepening, Creation & Sharing)

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## Teacher Professional Development : Intel Teach

**Intel® Teach Program**

ICT Teachers	Classroom Teachers				School Leaders	
<b>Skills for Success Course</b> Training on a student curriculum that develops digital literacy, problem-solving, critical thinking, and collaboration skills	<b>Getting Started Course</b> Introduction to classroom software productivity tools and student-centered approaches to learning	<b>Essentials Course (CPE for In-service and Pre-service)</b> Training on how to integrate technology into existing classroom curricula to promote student-centered learning	<b>Essentials Online Course (Hybrid P2F &amp; online for In-service and Pre-service)</b> Training on how to integrate technology into existing classroom curricula to promote student-centered learning	<b>Thinking with Technology Course</b> Training on effective technology integration skills using online thinking tools to enhance students' higher-order thinking skills	<b>Advanced Online Course (Hybrid P2F and online)</b> Training that enables teachers to build communities to advance their integration of technology and 21st century learning	<b>Leadership Forum</b> Interactive, face-to-face forum focused on leadership in promoting, supporting, and implementing effective technology integration in schools
<b>Enhancement &amp; Refresher Materials</b>						
<b>Online Tools and Resources</b> Help Guide, Assessing Projects, Designing Effective Projects, and Thinking Tools						

• Public Private Partnership model for states, education bodies & universities  
 • Aligned to National Curriculum Framework  
 • Research and Evaluation driven

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## Technology Ownership Programs for Teachers

Move from Accessibility to Ownership – in order to manage the resistance!

Teacher quality is the most important lever for improving student outcomes

**Potential Benefits**

- Support Learning & Integration of ICT in Classroom
  - Improve Access to Information & Education Resources
  - Facilitate Preparation of Course Material & Lessons
  - Improve Instruction & Teaching Methods
- Support Career Development & Retention
  - Increase Skills & Confidence in Using ICTs
  - Improve Job Flexibility, Mobility, & Work-Life Balance
  - Enhance Career Opportunities & Professional Dev
- Improve Education Administration & Operation
  - Cataloging, Retrieval, & Transfer of Information
  - Recording, Storage, & Communication of Plans & Reports
  - Communication w/teachers, students, parents, administration

**"Computers are not magic... Teachers are"...**  
*Dr Craig Barrett,*  
*Ex Chairman of Intel & Chairman UN-GAID*

**"The quality of an education system cannot exceed the quality of its teachers"**

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## Education Partnership as a Trigger for Economic Development – Portugal Magellan Initiative Example

Classmate PC Vision  
<http://www.youtube.com/watch?v=Jl8o0V0390>

Classmate PC in Portugal  
<http://www.youtube.com/watch?v=De-IR5800>

**"You must be the change you want to see in the world"**

**- Mahatma Gandhi**