



Intel in Education

Transforming Education:
Creating classrooms where students connect, learn, and thrive

Intel helps schools roll out innovative technology to engage young minds

Innovation is moving at a dramatic pace, and that will only continue in the coming years. The jobs of tomorrow must address the challenges of the 21st century—making solar energy economical, advancing health informatics, and engineering the tools of scientific discovery, to name just a few. To prepare for success in the new knowledge-based economy, today's students need to develop proficiency in math and science, critical thinking, communication, and innovation.

Intel has contributed over \$1 billion¹ to a wide array of education initiatives throughout the world because advancing education is a driving passion within the company. Intel's education transformation model helps governments around the globe—from Kenya, to Italy, to the United States—improve the quality of their education systems, leading to economic and social opportunities for its citizens.

The model combines advocacy for policy reform, curriculum standards and assessment, sustained professional development, information and communications technology, and support of research and evaluation. We collaborate with governments, policy makers, and local vendors to implement eLearning solutions based on the education transformation model. Intel is uniquely positioned to help countries excel in global economies due to the breadth of its technology, education programs, and partnerships.

Because Intel has been improving education for more than ten years, the company's dedicated team has a keen sense of what works—and what does not. As a result, Intel is able to help governments greatly improve education policy and create effective programs that open an exciting new universe of learning to millions of school kids.



For any society that wants to compete in the knowledge-based 21st century economy, success will be dependent on the education of that country's workforce. The higher the education level, the higher the per capita income, the higher the standard of living, the higher the competitiveness.

FITTING THE NEED

No two learning environments are the same. There are a range of needs—based on the country, school, grade level, and even teaching style—so Intel always offers a range of options. When implementing a student PC program for example, a younger student may need a basic computer and WiFi in the classroom, while a university student might need a more powerful PC and campus-wide connectivity. Intel works closely with governments and schools to find the best solution for each situation.

Education Transformation

Intel takes a holistic approach to integrating ICT into education. State-of-the-art technology is only the beginning. A successful program includes the following elements.

Policy

To help create policy that will advance eLearning programs, Intel's team of experts works closely with governments, as well as with nongovernmental organizations (NGOs) that specialize in education such as International Society for Technology in Education, Partnership for 21st Century Skills, and UNESCO.

Well-crafted policy can:

- Improve access to education by providing technology tax incentives, subsidies, grants, vouchers, and loan guarantees
- Influence education standards, including content and language requirements
- Create effective assessments to measure academic performance throughout the country

Progressive education policies can set the stage for powerful changes to come.

In the US, for instance, President Obama announced a 10-year, \$200 million Intel campaign to train math and science teachers from all 50 states, as part of his STEM initiative, Change the Equation.²

Curriculum and Assessment

A deep examination of curriculum standards is critical to the success of education transformation. They should be designed to support digital literacy and the acquisition of 21st century skills, such as collaboration and critical thinking. Information communications technology (ICT) supports the implementation of curriculum standards by creating eLearning environments with rich digital media resources and powerful tools to support the teaching and learning process.

With education programs operating in more than 70 countries, Intel supports

governments and policy makers around the world to develop a strategic approach for the implementation of 21st century curriculum standards and assessments. Intel has blueprints and benchmarks for development and implementation of digital content strategies, virtual learning environments, and effective assessment systems.

Intel works with a number of respected organizations to improve curriculum and assessments, including Achieve (www.achieve.org), The International Society for Technology in Education (ISTE) (www.iste.org), and UNESCO ICT-Competency Standards for Teachers Project (www.unesco.org/en/competency-standards-teachers).

Professional Development

Once a program is implemented, Intel wants to ensure that teachers get the support they need. They should not only be comfortable with their PCs, but know how to use them to their best advantage in the classroom. Through the Intel® Teach Program, teachers master problem- and project-based approaches to learning. They also learn how to use technology, including Web 2.0 and social networking, to keep students interested and engaged.

Information and Communication Technology

Technology is an essential foundation of education transformation. Intel acts as an advisor, sharing its best practices to create a sustainable model that will be effective not just today, but for years to come.

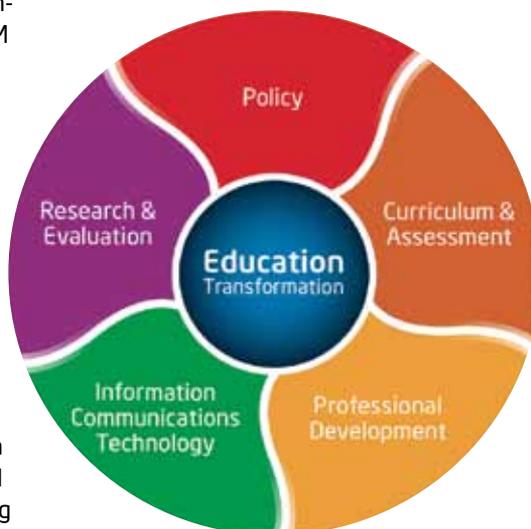
Key components include:

- PCs for teachers, students, and administrators for communication, accessing information, collaboration, and content creation.
- Fast (broadband) Internet connections that allow extended access for research, communication, and more.
- Servers with software to provide the support network that is needed for website hosting, content management, student record-keeping, file storage, and more.

While global partners may be brought in, Intel also connects with local vendors, often coaching them on how to best serve the education sector. The result is a comprehensive, seamless approach to technology-driven education that empowers teachers and students to participate in the digital world.

Research and Evaluation

Data gathered through research can help governments and other stakeholders define their education reform programs. Education transformation plans should include well-defined metrics of success from the very start to measure impact. Program data can then be used to guide any adjustments that might be needed.



Building an effective education program involves evaluating every aspect, from local policy, to technology, to professional development.



U.S.—Boston’s Henderson Inclusion Elementary School: The Power Of Flexibility

At the Dr. William W. Henderson Inclusion Elementary School, an academically rigorous school in Boston, the student body is truly diverse. One third of its 230 students have disabilities such as Downs syndrome, autism, and learning disabilities. The school also includes many gifted students who qualify for Boston’s Advanced Work Class program.

To provide a truly flexible curriculum that would accommodate its unique student body, Henderson partnered with Intel on a pilot of 1:1 mobile eLearning and followed the technology best practices laid out in Intel’s K-12 Computing Blueprint.

Henderson began with a computer lab, but then integrated PCs into the classroom. Students with print reading disabilities use text-to-speech software. Meanwhile, software called Achieve 3000, which provides content in over a dozen reading levels, allows an entire class to read about the same topic, each at their own reading level. In science classes, Web access has enhanced student research and brought science alive in the classroom.

A survey found that all Henderson teachers agreed that the use of mobile computers improved quality of instruction in class, student achievement, and access to the curriculum for students with disabilities. As the pilot begins its second year, Henderson plans to expand the program so that each student will have a personal laptop to use at school and at home, including over summer vacation.

200

Intel programs around the world³

70

Countries that have implemented Intel eLearning programs⁴

8 million

Teachers trained through the Intel® Teach program⁵

Once you get started and begin to see the success, it becomes contagious. There is so much more that we want to do. There are so many more opportunities that we want to provide.

– Tricia Lampron, principal, Dr. William Henderson Inclusion School



As more jobs become information- and technology-focused, ensuring that students have up-to-date skills is more important than ever.

Contact Intel today to begin working on a plan to transform your education system.

www.intel.com/ITforEd

For more information, visit:

[Intel in Education](#)
[Intel® World Ahead Program](#)
[US Library of Congress for Teachers](#)
[World Digital Library](#)
[Project Tomorrow](#)

¹"Intel in Education: Transforming Education for a World of Opportunity," p. 1, (323860-001 Intel_in_Education)

²"Intel in Education: Transforming Education for a World of Opportunity," p. 1, (323860-001 Intel_in_Education)

³Intel Corporate Affairs Group Q3 Newsletter

⁴"Intel in Education: Transforming Education for a World of Opportunity," p.2, (323860-001 Intel_in_Education)

⁵"Intel's Approach to Education Transformation: Messaging Framework," June 3, 2010, p. 10 (Intel_Ed Trans Messaging_June 3 2010 FINAL.doc)

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL® PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER, AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. UNLESS OTHERWISE AGREED IN WRITING BY INTEL, THE INTEL PRODUCTS ARE NOT DESIGNED NOR INTENDED FOR ANY APPLICATION IN WHICH THE FAILURE OF THE INTEL PRODUCT COULD CREATE A SITUATION WHERE PERSONAL INJURY OR DEATH MAY OCCUR.

Intel may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined." Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The information here is subject to change without notice. Do not finalize a design with this information.

The products described in this document may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request. Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order. Copies of documents which have an order number and are referenced in this document, or other Intel literature, may be obtained by calling 1-800-548-4725, or by visiting Intel's Web site at www.intel.com.

Copyright © 2010 Intel Corporation. All rights reserved. Intel, the Intel logo, and Xeon are trademarks of Intel Corporation in the U.S. and other countries.

*Other names and brands may be claimed as the property of others.

Printed in USA

0910/GOPO/Medal/PDF

Please Recycle

324304-001US

