



Intel-Powered Classmate PC

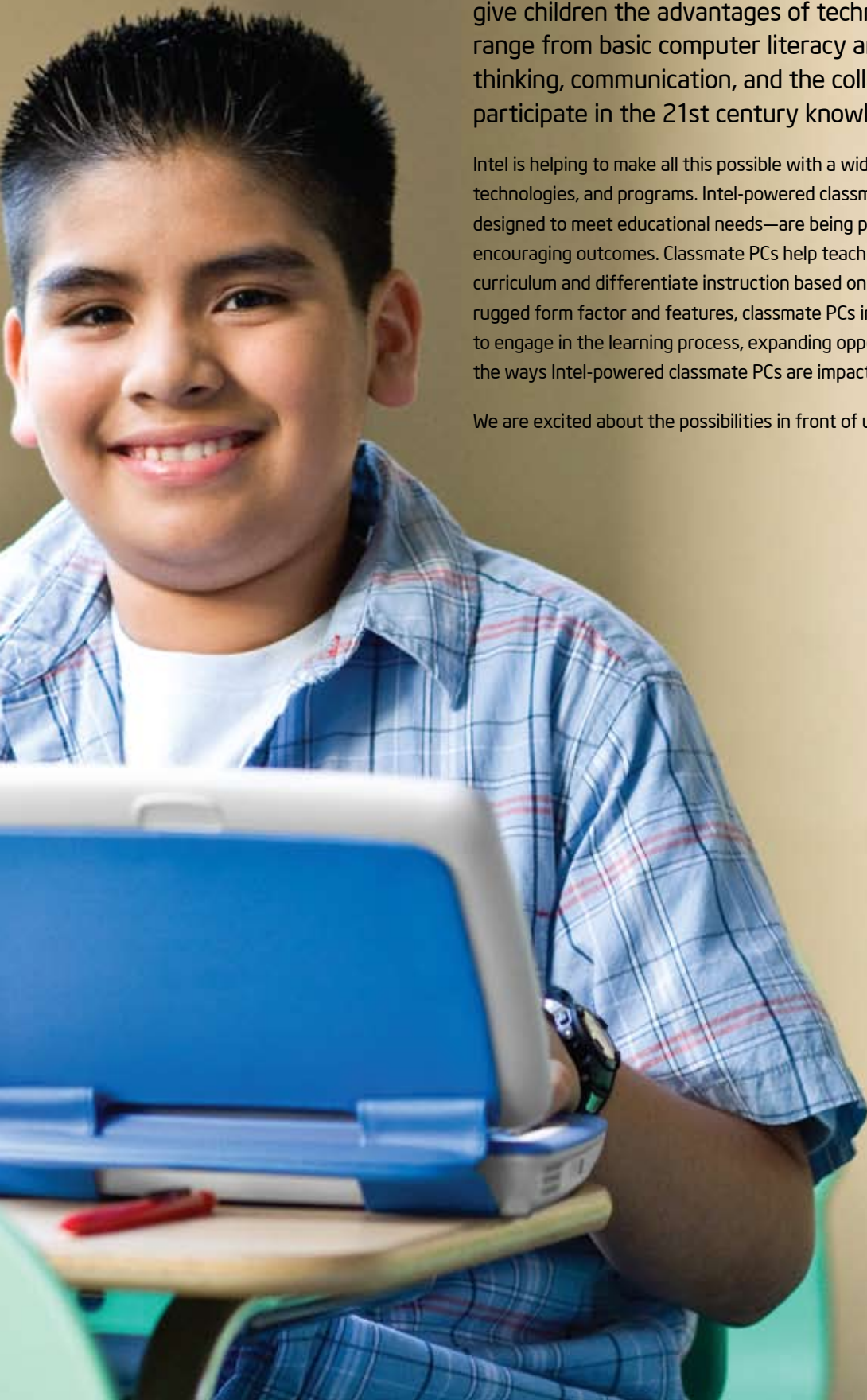
Technology solutions designed for students and teachers worldwide.

Expanding opportunity.

Countries around the world are looking for affordable ways to give children the advantages of technology. These advantages range from basic computer literacy and Internet access to critical thinking, communication, and the collaborative skills necessary to participate in the 21st century knowledge-based economy.

Intel is helping to make all this possible with a wide range of education solutions, technologies, and programs. Intel-powered classmate PCs—purpose built netbooks designed to meet educational needs—are being piloted in schools worldwide with encouraging outcomes. Classmate PCs help teachers integrate technology into daily curriculum and differentiate instruction based on individual learning modalities. With a rugged form factor and features, classmate PCs invite students, teachers, and parents to engage in the learning process, expanding opportunities. Here you will see a few of the ways Intel-powered classmate PCs are impacting education.

We are excited about the possibilities in front of us. Please join us.



MEXICO

Opportunity

All 45 schools in the mountainous, semirural province of Malinalco had traditional desktop PC labs, but only a few had Internet access, and without opportunities for in-depth training, many teachers' computer skills were limited. Malinalco's leaders wanted more for their schools and community. They chose Intel-powered classmate PCs and Intel's collaborative approach to developing a supporting ecosystem to move toward a vision of one-to-one mobile computing.

Solution

Through the Malinalco project, 400 students gained access to Intel-powered classmate PCs, loaded with educational tools and applications to make the process of learning more engaging and fun. Twenty-five teachers received laptop PCs and teacher training through the Intel® Teach Program.ˆ

Other collaborators in the project, including government agencies, education service providers, and local businesses, helped to develop a network to support the effort, including locally developed software and content, high-speed WiMAX* networking Internet connectivity, and professional development for teachers.

Impact

The effect has been positive and immediate. Student excitement is translating into increased motivation for learning. Teachers are learning effective ways to use technology for student-centered learning. Local providers are developing relevant educational content.

The Malinalco project is yielding best practices that can help Mexico and other nations use this new generation of learning devices to improve education and expand social and economic opportunities.

"It is not easy to leave behind our ideas and methodology and adapt to the learning style of the children. It is a challenge. But it is also beautiful and interesting to see that our students are capable of doing many things that sometimes we can't even imagine."

*Abigail Ugalde
First Grade Teacher, Secondary School 156—Ignacio García Téllez*

"We don't want children to only consume information. We want them to generate it, to produce ideas and knowledge and put them to the service of the community, as well as produce their own means to survive in the future."

*Guadalupe González
Academic Advisor, Malinalco Project*

One of Malinalco's participants was an 11-year-old boy who worked in his parents' small grocery store every afternoon. When he was allowed to bring a classmate PC home, he did more than homework. After observing his mother's difficulty locating and checking inventory on a product, and having learned the basics of a mathematical software program, the boy started a computer inventory for his parents' store. He also used the program to manage the store's cash intake. As a result of these improvements, his parents see the value of technology, not just for their business, but for their son's future. They are currently saving for their own computer.



"Digital inclusion brings about a level playing field. It means that the little girl in a village in Nigeria can get the same information for her research project as a little girl in Washington or China."

*Turner Isoun
Minister of Science and Technology, Nigeria*



NIGERIA

Opportunity

One-third of Nigeria's population lacks basic literacy, and education infrastructure is lacking or out of date. The Government Junior Secondary School in the Jabi District near Abuja, Nigeria, did not have Internet access. Most students had not touched a PC.

Solution

Intel equipped a classroom of 36 students with Intel-powered classmate PCs to facilitate a one-to-one learning model. Their teacher received a laptop to use for developing curriculum and assessment, as well as for simply managing the classroom. To help teachers learn to integrate technology effectively in the classroom, professional development training was provided by the Intel® Teach Program. ^

Suburban Broadband installed a WiMAX* network in the classroom and the surrounding area. With Internet connectivity, students can access a world of resources, including educational tools and applications.

Impact

Students work in a one-to-one learning model, and teachers incorporate PCs across the curriculum. End-of-semester tests showed the pilot class scoring higher than two comparable classes in all areas of the curriculum. Scores in computer science and introductory technology were significantly higher. But the pilot students also scored higher in mathematics and English, and significantly higher in integrated science, social studies, and physical/health education.

"In terms of exams and test scores, there have been great improvements in the pilot class as compared to other classes in the same grade. I believe the introduction of classmate PCs caused these improvements."

*Edegbe Osamwoni Perry
Teacher, Government Junior Secondary School, Jabi*

THAILAND

Opportunity

Thailand's educational system provides for more than 12 million students nationwide. The country struggled with a significant lack of teachers to adequately cover the existing student populace and deliver the attention that students need. Thailand's vision is to educate its citizens to compete in the global market. From kindergarten to sixth grade, students are expected to achieve academic excellence and acquire practical skills in IT, especially in the basic use of computers and access to information via the Internet.

Solution

The Intel World Ahead Program worked with Chulalongkorn University Demonstration Elementary School to establish an effective 1:1 eLearning environment by allocating Intel-powered classmate PCs to each student in the classroom. Teachers were provided with full-size, laptop PCs based on Intel® Core™2 Duo processors to facilitate content creation, along with training in hardware and software operations. Technical consultation was provided to the school as a whole. In addition, high-speed ADSL Internet connection was provided by TOT Public Company Limited, a Thai state-owned telecommunications company.

Impact

Students are spending more time on their schoolwork and teachers are finding it easier to meet curriculum goals and tailor curriculum to

individual student needs. With classmate PCs, teachers are becoming supporters and facilitators for students, while providing rich media for teaching and learning. Classmate PCs and connectivity are allowing teachers to serve the large student population more effectively.

Today, curriculum at Chulalongkorn is delivered almost entirely on computers. Students engage in learning through interaction with teachers and other students and through Internet-based research—all with the help of their Intel-powered classmate PCs.

Chulalongkorn is seeing an increase in the competitiveness of students and improved teaching and learning across the board and hopes that the Intel® technology-enabled 1:1 eLearning model can be shared with other schools throughout Thailand.

"Intel's technology leadership, commitment, and collaboration on this project have not only been invaluable, but have really opened up a whole world of education possibilities for all teaching professionals here in Thailand. And we hope to share our positive experiences with other schools, especially in areas of initiating and managing e-lessons in various subject matter."

*Ladda Pukiat
Director and Associate Professor, Chulalongkorn University
Demonstration Elementary School*



"Subjects such as math and science are now taught predominantly using Intel-powered classmate PCs, with students searching for information on the Internet to contribute to classroom sessions and then sharing information with each other. This allows them to take ownership of the subject matter, enhancing the learning process in an unprecedented manner."

*Ladda Pukiat
Director and Associate Professor, Chulalongkorn University
Demonstration Elementary School*

Crossing the digital divide one child at a time.

Lebanon

Students learn science from virtual experiments.

In an economically challenged area of southern Lebanon, teachers are using Intel-powered classmate PCs to enhance middle school instruction. As part of the science curriculum at the school, students engage in study of physical forces such as magnetism. This year the science teacher was able to find applicable lesson plans online through Intel's skool™ program. When their teacher demonstrated the effect of a magnet on the magnetic field of a compass, students didn't have to huddle around a lab table. They were able to see the experiment clearly on their classmate PC screens and enter results directly into their computers. With the help of technology, students had more time to engage in analysis.

India

Internet access solves real-world problems.

When an unfamiliar species of insect began decimating farmers' crops in Faridabad, India, a fifth grader came to the rescue. As a participant in an Intel-powered classmate PC program at her school, she turned to the Internet to identify the insect. Using her classmate PC, the student was able to identify both the bug and its insecticide. Her father put this new knowledge to quick use, saving the family's crops and informing other farmers in the area.

Romania

A motivated class learns its lessons.

As part of Romania's national curriculum, students learn about the country's rivers. Though a veteran teacher had tried numerous techniques over the years to help students master this material, she had never seen a very good class score on the test for that section. After obtaining Intel-powered classmate PCs for her class and receiving training through the Intel® Teach Program, she had each of her students research a river on the Internet. The students developed computer-generated presentations on their chosen rivers to present to the class. The result: for the first time, every student in the class got a 100 percent mark on the "Rivers of Romania" unit test.

Brazil

Students are empowered to share knowledge.

In an Intel-powered classmate PC-equipped classroom at the Bradesco Foundation, Campinas, Brazil, students used a software application to create animations about books they were reading. When one of the students tried to share her animation with the class via a linked SmartBoard, technical difficulties arose. The teacher asked if anyone could help. A boy who had become the resident "classmate PC expert" volunteered and fixed the problem in less than a minute.

China

A student explores a wide range of online activity.

In a community primary school in Shanghai, China, a fourth grader who is able to bring an Intel-powered classmate PC home learns not only from the Flash* courseware, but also by surfing the Internet, practicing oral English with an interactive software program, blogging and keeping an online diary which she shares with fellow students, posting questions for her Chinese teacher on a shared Google* spreadsheet, and logging on to play games with friends.

Chile

Students collaborate and solve problems.

At the Atenea School for Girls in the Conchali Province of Chile, eighth graders are collaborating to solve problems and improving their analytical skills with the help of educational software on their classmate PCs. After integrating classmate PCs into its curriculum, the school was granted an award for being one of the best-performing schools in Chile.

Libya

Technology sparks peer-to-peer learning.

In Benghazi, Libya, students not only learned quickly how to use an Intel-powered classmate PC, they spontaneously began sharing their new skills with each other. They also found ways to personalize their classmate PC experience. For example, when they discovered they could change the desktop image, they began to create customized images for their classmate PCs.

The ecosystem for education.

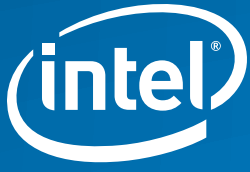
Intel works with non-governmental organizations, education experts, governments, software and hardware providers, local computer manufacturers and content providers all over the world—supporting private-public partnerships to achieve excellence in education.

Our local partners are increasingly important in building a sustainable and local business ecosystem. They are developing relevant, localized content; applications; peripherals; and services to package with the classmate PC and adding value to the classmate PC educational solution.

The power of commitment.

Intel-powered classmate PCs are a key element of Intel's sustained commitment and worldwide programs to improve education and expand opportunities for the digital, knowledge-based society. More than 36 countries are piloting classmate PCs in primary schools and many countries are working on wide-scale deployments.





To learn more about Intel-powered classmate PCs and Intel programs for enhancing education worldwide, visit www.classmatepc.com and www.intel.com/intel/worldahead/classmatepc.

^ Programs of the Intel® Education Initiative are funded by the Intel Foundation and Intel Corporation.

© 2008, Intel Corporation. All rights reserved. Intel, the Intel logo, Intel Core, Intel Teach, and skool are trademarks of Intel Corporation in the U.S. and other countries.

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

0808/PR/CMD/XX/PDF 320110-001US