

China Creates New Education Opportunities Nationwide

Introduction

China's education transformation is giving youth in urban and rural regions new opportunities to thrive in the 21st-century information society. At the same time, China is developing a better educated and skilled workforce that can support the country's continued economic growth.

As part of its transformation, China's central and provincial governments are working closely with Intel to bring computers, Internet access, and digital learning to students throughout the country, particularly in formerly underserved rural areas. Already, government agencies have delivered thousands of computers to schools across the nation, and more than 1.5 million teachers have been trained through the Intel® Teach Program.

By 2015, the central government's goal is to increase the education budget to 4 percent of the GDP and provide one PC per class. By 2020, the government plans to provide one PC for every four students, ensuring that students have access to the education and training they need to succeed in the global economy.

Challenges

- Deliver the benefits of ICT to rural and geographically remote schools.
- Help teachers learn to use technology to improve their teaching.
- Help students develop ICT-related skills through digital learning resources.

Solutions

- New policies address technology access, professional development, new curricula, and more.
- Government-led programs like Thousand Villages accelerate ICT access in thousands of remote locations.
- Public-private partnerships create innovative opportunities to make technology more affordable and accessible.

Results

- More than 1.5 million teachers have learned to integrate technology and 21st-century skills training into their classrooms with the help of the Intel® Teach Program.
- More than 350,000 youth in 450 formerly underserved communities benefit from online learning opportunities through the Intel® Learn Program.
- Thousands of students, parents, teachers, and others in rural and urban areas can afford PCs and broadband Internet connections thanks to government-led regional purchase programs.



Five Key Components to Education Transformation

The variety of education programs implemented in China fall into five general areas (see Figure 1).

In Intel's work with China and more than 70 other countries around the world, these five interrelated categories have proven essential to support long-term, comprehensive changes in education.



Governments have the power to implement policies that establish the conditions necessary to transform education.

Examples:

- New policies address technology access, curriculum, professional development, and research.
- Several governmental PC purchase programs provide financing, tax refunds and subsidized pilot programs to make technology more affordable and accessible, even in rural and remote regions.

Curriculum and Assessment



Curriculum standards and assessment tools are necessary to track the success of education programs and build ongoing public and private support.

Examples:

 Curricula are being adapted nationwide to emphasize digital literacy and other 21st-century skills.



Intel has helped to implement more than 200 education programs in over 70 countries, and has invested more than USD 1 billion in the last decade to improve teaching and learning environments.

Professional Development



Teachers, and their professional development, must be a central element in any sustainable education solution.

Examples:

 More than 1.5 million teachers have been trained through the Intel Teach Program. a professional development program that helps teachers learn to promote critical problem solving, project-based learning and other 21st-century skills to students.

Information Communications Technology (ICT)



Optimal teaching and learning requires a full range of ICT tools, including broadband Internet connectivity, appropriate software applications, and operating environments.

- Collaboration between Intel and 100 Chinese universities provides technology access and training for thousands of students.
- The ICT for Education program has launched 25 1:1 eLearning pilot programs and donated 9,000 PCs to rural K-12 schools.
- The Ministry of Education raised RMB 20 billion to establish 1,000 schools and 100 colleges that will demonstrate vocational education through 2010. More than 10% of the investment led to ICT purchase.
- More than 350,000 underserved youth have gained access to technology and education through the Intel® Learn Program in 450 locations nationwide.
- A teacher purchase program in Chongqing City provides teachers with greater access to PCs.

Research and Evaluation



Research and program evaluations provide valuable information to governments and other stakeholders as they define and make adjustments to education reform programs.

Examples:

• The Intel Teach Program evaluations indicate positive effects of the training on both students and teachers. For instance, evaluations show that teachers are integrating ICT in their daily lessons more frequently, and students are improving their 21st-century skills.

Working with governments, policy makers, and local vendors, Intel helps to implement eLearning solutions that provide professional development to teachers; support student achievement and development of 21st-century skills; and enable access to relevant, localized digital content.

Thousand Villages Project

The Thousand Villages Project has turned more than 18,000 retail stores in Sichuan Province into central hubs in a network that distributes information and services to formerly underserved rural populations.

The Sichuan Ministry of Commerce worked with Intel and a local telecom company to develop an affordable ICT bundle that includes broadband Internet access, reliable computers, training and localized software.

The project—which is expected to expand to at least 40,000 additional stores—provides enhanced access to distance education and has already led to new economic opportunities and social improvements in rural communities.



THREE BEST PRACTICES

The ongoing success of China's education transformation depends on several best practices that also reflect Intel's experiences with similar programs worldwide. Other countries can follow these best practices to achieve similar success.

Best Practice 1: Bridge the urban-rural divide

China's government recognized the economic and social value of integrating technology into schools in rural and geographically remote regions of the country. Through subsidized pilot programs and extensive purchase programs, the government has begun to address the disparity in education between urban and rural areas, and has improved ICT access in hundreds of schools nationwide.

Best Practice 2: Utilize online tools

Online resources offered through Intel education programs have helped teachers across China acquire free tools and examples to support their work. For example, the Intel Teach Program offers online curricula that have helped more than 1.5 million teachers develop new skills—skills that will. in turn, benefit millions of students.

Best Practice 3: Emphasize professional development

Sustained change in the classroom depends on professional development that helps teachers learn to integrate technology throughout their work. The Intel Teach Program has helped more than 1.5 million teachers across China develop new skills—skills that will, in turn, benefit millions of students.

Conclusion

Transforming education in any country, and especially in a country as immense as China, requires sustained government support, extensive planning, and strong public-private partnerships to execute programs across the country.

The five-part, systemic model that describes China's efforts is available to other countries worldwide. Working with Intel and other public and private partners, countries can create sustainable programs that provide social and economic opportunities for years to come.

Achieve Your Vision

What's your vision of the world ahead? Intel's model of education transformation can help governments improve the quality of the education system, leading to greater economic and social opportunities.

Contact your local Intel representative to discuss how you can implement a sustainable, technology-based education program in your country. Visit us on the Web at:

www.intel.com/education

