Intel Education Initiative. Focus: Romania

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Abstract
Most of the world states recognise the importance of education for social and economic development. Examples offered by countries such as Japan, Finland, Ireland or United States constitute the best reason to properly appreciate the benefits of long-term, thoughtful and coherent investment in human resources development towards an authentic Knowledge Society. Responsibility for education is a share responsibility. Therefore, complementing governmental and other corporate initiatives, Intel Education programmes are set to help teachers teach, students learn and universities around the world innovate. Since recently, Intel initiative has start bringing added value for education in Romania. The pedagogical use of new technologies in education gained therefore a strong and committed supporter.

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1. Intel Education Initiative

The Intel® Education Initiative is a large-scale, sustained commitment to accelerate education improvement for the knowledge economy – as a trusted partner to governments and educators worldwide. Intel’s education programs focus on:
- improving teaching and learning through the effective use of technology;
- advancing math, science, and engineering education and research;
- advocating for and celebrating 21st century educational excellence.

1.1. Improving teaching and learning through the effective use of technology

Intel Teach Program

The Intel® Teach Program (www.intel.com/education/teach) is a professional development program that helps classroom teachers effectively integrate technology to enhance student learning. It is the most successful professional development program of its kind.
- More than 5 million teachers in over 40 countries trained since 1999.
- Results: 89 percent of teachers report using technology with their students as a result of the Intel Teach Program.
Intel Computer Clubhouse Network

The Intel Computer Clubhouse Network (www.intel.com/education/icc) is an after-school program that enables youth in underserved communities to access cutting-edge technology and become self-confident, motivated learners.

- There are over 100 Intel Computer Clubhouses in 20 countries serving over 25,000 youth annually.
- Based on a learning model created by the Boston Museum of Science and MIT Media Lab.

Intel Learn Program

The Intel Learn Program (www.intel.com/education/learn) is a community-based program in emerging markets designed to help learners (8-16 years) develop 21st century skills (technological literacy, critical thinking, problem solving, and collaboration). The curriculum uses an engaging project-based approach and is delivered in community technology centers.

- Currently offered in Brazil, Chile, China, Egypt, India, Israel, Mexico, Russia, and Turkey.
- The program was launched in 2004 and to date has already reached more than 662,000 learners.

1.2. Advancing math, science and engineering education and research

Intel International Science and Engineering Fair (ISEF)

ISEF (www.intel.com/education/isef) is the world's largest pre-collegiate science fair; Intel has been the primary sponsor for 11 years.

- The 2007 fair drew more than 1,500 young scientists from 51 countries, regions, and territories to compete for USD 4 million in scholarships and awards.

Intel Science Talent Search (STS)

The Intel Science Talent Search (www.intel.com/education/sts) is America's oldest and most highly regarded pre-college science competition.

- In 2007, more than USD 1.25 million in scholarships were awarded.

Intel Higher Education Program

The Intel Higher Education Program (www.intel.com/education/highered) focuses on advancing innovation in key areas of technology and developing a pipeline of diverse world-class technical talent for Intel and the broader industry.

- Efforts focus on research, curriculum, student opportunities as well as entrepreneurship.
- Intel's higher education support extends to more than 150 universities in 34 countries.

Intel Schools of Distinction Awards

The Intel Schools of Distinction Awards (www.schoolsofdistinction.com) recognizes U.S. schools who demonstrate excellence in implementing innovative, replicable programs supporting positive educational outcomes in the areas of math and science achievement.
• Schools receive grants of USD 10-25,000 from the Intel Foundation as well as additional prizes.

skoool Learning and Teaching Technology Program

The skoool™ Learning and Teaching Technology Program (www.skoool.com) provides secondary level teachers and students access to science and mathematics resources and tools set in an engaging, multimedia environment to help improve learning.

• Currently offered in Australia (New South Wales), Ireland, Nigeria, Portugal, Saudi Arabia, South Africa, Spain, Sri Lanka, Sweden, Thailand, Turkey, and United Kingdom
• Available in multiple languages: Arabic, English, Portuguese, Spanish, Swedish, Thai, and Turkish.
• During 2007, the program has reached more than 3 million students and teachers.

2. Intel Teach Program: Powering the Magic of Teachers

Technology is a powerful tool, but ultimately, it is only as valuable as society’s ability to harness it. Helping students develop and strengthen the skills to help them succeed in the global economy lies at the heart of Intel’s global commitment to education. Because one teacher can reach generations of students, training teachers is an important way Intel fulfills this commitment.

For close to a decade, Intel Teach Program has been helping teachers around the world integrate technology into classrooms. To date, the program has trained more than five million teachers in more than 40 countries, including Vietnam, Ukraine, South Africa, China and the United States. In January 2006, Intel Chairman Craig Barrett announced plans to expand Intel Teach to an additional 10 million teachers by 2011.

This reach and impact have led Intel Teach to be called the most successful professional development program of its kind.

2.1. Background

In the early 1990s, independent research revealed that U.S. teachers were struggling to understand how best to incorporate technology into their classrooms. Intel and other technology companies worked together to address this gap between available technology and its application in the classroom. In 1998, the Intel program reached more than 1,200 teachers in six U.S. states; in 1999 the program expanded to three more states and 2,400 more teachers. By the time the program concluded in 2000, Intel’s program had trained nearly 4,300 teachers.

The training worked: 97 percent of participants said they developed new skills that would help them incorporate technology into their curricula; 94 percent thought the training would benefit their students [2].

In 2000, Intel decided to significantly expand its teacher training program – and Intel Teach was born. Based on research and developed by teachers with expertise in curriculum development for teachers, Intel Teach is provided at no cost to elementary and secondary school teachers around the world.

By 2011, Intel Teach will have reached 13 million teachers in more than 40 countries – and their 1 billion students.
2.2. How it Works

Intel Teach uses a “train the trainer” model to provide both face-to-face and online instruction to help teachers around the world integrate technology into their classrooms. Teachers create lesson plans that can be immediately implemented and that meet local and national education goals and standards.

Working with governments – national, regional or local – worldwide, Intel introduces the program in interested countries and communities, which are selected based on the strength of their commitment to the program. Intel then works with an initial group of teachers to help them become Intel Teach trainers themselves. These trainers in turn are responsible for sharing their new skills with other teachers in their region.

To ensure that program curriculum maintains relevancy and reflects lessons learned from feedback and research, Intel regularly provides updated material to the Intel Teach trainers. Supporting material to supplement classroom courses is available at www.intel.com/education for all teachers.

2.3. Impact and Validation

Reviewed by the International Society for Technology in Education (ISTE), Intel Teach was found to “clearly support implementation of the ISTE National Educational Technology Standards” by providing objective, third-party validation of the program’s value and impact.

Intel Teach has so far provided professional development to more than four million teachers in more than 40 countries and is committed to reaching 13 million teachers by 2011.

3. Intel Education Programs and Initiatives in Romania

Several education programs have started to be developed by Intel in Romania since a couple of years ago, in an effort to connect Romanian teachers and learners to global education communities and to wider initiatives aimed to raise the quality of the education systems.

3.1. Background

In Romania, the emergence of a knowledge-based economy and the need to assure conditions of social inclusion to all for the 21st century have brought into light the necessity to enhance the continuous development of the human capital according to a lifelong learning perspective. In these regards, innovative education policies supporting the integration of ICT in learning can represent an effective and viable way to provide methods and resources for inclusive lifelong education. After undertaking several significant initiatives in the area of implementation of computers in pre-university education, the Ministry of Communications and Information Technology and the Ministry of Education and Research are in the process of developing a coherent educational policy related to the integration of the ICT tools and resources in the education process for the primary and secondary school level.

Therefore, ICT implementation in education system is the next two years’ the most significant education reform component, which, along with the efforts towards raising the quality of the education process, will be in the focus of all the future relevant education policies.
3.2. Supporting National Programs

The support offered by Intel programs in Romania complements the demarches of implementing ICT in education, creating the premises for adequate education reform. The areas of support show the concern and the added value provided by Intel to Romanian education system in the last years: development of education policies towards implementing education solutions for XXI century, teacher training programmes, access of teachers and students to reliable IT equipments, access to Internet and knowledge, support for education process through pedagogical materials for teachers, establishing a common arena for elearning stakeholders: education policy makers, researchers, teachers, education software developers, opinion leaders.

Some achievements are constantly being brought into light as examples of good practices:

• Under the name “Classroom of Tomorrow”, a series of consultation meetings was initiated by Intel in December 2007. The first seminar – 1:1 Education Environments for the XXI Century – gathered representatives of the most significant institutions active in the field of elearning in Romania: Ministry of Education, Ministry of Communication and IT, companies, NGOs and research institutes, universities. The key-points of the first consultation meeting revealed the need for sustainable initiatives towards building an authentic Romanian Knowledge Society, but mostly the need for common public-private efforts in weaving a quality agenda for the education system in the next years.

• Intel Teach Essentials programme was accredited by the Ministry of Education, Research and Youth in 2007. Implemented by SIVECO Romania and with the support of the County Teachers’ Houses, the Teach Essentials course is run all over the country and the Romanian teachers can now have access to a successful global initiative which trained 5 million teachers around the world.

• 1:1 education solution for XXI century was piloted in Horia village, giving rural pupils the opportunity to take classes using education software and to access information on the web for homework and for non-formal education projects. 20 Classmate PCs with Internet access were used for an entire semester by 4 grade learners. The education software was ensured by Intel (Skoool) and by SIVECO Romania (AeL eContent). This pilot project is currently under continuous development, as convergence with new education research objectives pushes further the teaching practice, the learning experiences and the education software developers’ knowledge.

• Intel is supporting the localisation of two significant packages of support-materials for teachers: Designing Effective Projects and Assessing Projects. Romanian teachers will now have access to pedagogical instruments, education projects templates and examples, in an extended range of curricular domains and levels.

• ICT Competency Standards for Teachers, launched by UNESCO in January 2008, were translated into Romanian with the support of Intel Education Romania. The national education policy documents are therefore benefiting from the international expertise and experience.

4. Four Decades of Educational Excellence

Intel believes all students, everywhere, deserve to have the tools they need to become the next generation of innovators. From local schools to global universities, Intel works to help improve the quality of education around the world. Over the last four decades, Intel has invested significant resources to help teachers teach, students learn and universities innovate – particularly in the areas of math, science and technology.

Since recently, Romania is part of this global education initiative which brings closer innovation, creativity, competence and commitment, in an effort to raise the quality and the equity
of the education system and to complement the governmental steps towards developing an authentic Romanian Knowledge Society.

REFERENCE