CASE STUDY
Morocco
Intel® World Ahead

NAFID@ Teacher PC Program integrates teachers into Morocco’s digital era

Via the NAFID@ program, Morocco is spreading the integration of information and communications technology to the educational system, providing strong support for the country’s overall education reform initiative.

Recognising the importance of making developments in information and communications technologies (ICT), Morocco has been applying ICT in the educational system for many years. This integration fits into an overall reform in the country’s educational framework.

However, in order to ensure these efforts achieve the desired outcome, certain measures of support are required. One of these is the NAFID@ program. This innovative program is designed to:

• enable access to new technology tools
• customize training content
• boost the exchange of best practices among teachers
• deliver counseling and pedagogy support to teachers

Transforming Education

Launched in 2006 by the Ministry of National Education, the GENIE program, with a budget of USD 250 million, has the aim of speedy and effective integration of information and communications technology (ICT) in public education. It also prioritises the betterment of educational quality through the efficient use of these resources by teachers and students.

However, certain difficulties have been encountered in reaching these goals. For example, insufficient Internet connectivity hinders information access, while lack of training and support in the use of ICT means teachers are often not able to make the most of pedagogical digital content.

This is where the NAFID@ Teacher PC Program has brought an advantage.

NAFID@ Program

NAFID@ seeks to enhance teachers’ skills and train them on the use and integration of information and communications technologies in their teaching methods. The end purpose therefore, is to improve the quality of learning for students.

The NAFID@ Program is the result of an exemplary coalition of public and private organizations. Participants include the Mohammed VI Foundation, Ministry of National Education, National Telecommunications Regulatory Board (ANRT), Ministry of Commerce, Industry and New Technologies. Private partners include Intel Corporation, three Morocco telecommunications operators, seven national computer equipment suppliers, software companies, and digital content designers.

“The NAFID@ program is an innovative initiative that will contribute added value to the reformation of the educational system by helping to build an up-to-date, open school fitting perfectly into its external environment.”

Ahmed Akhchicine
Moroccan Minister of National Education, Higher Education, Managerial Training and Scientific Research

Moroccan Education Sector in Figures

• 9,000 primary and secondary public schools
• More than 90 universities and advanced education institutions
• 270,000 teachers
• 9 million students

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The existing program was set up to run from 2008 to 2010, with a full range of products and services for teachers. Specific program goals include:

- facilitating access to ICT for the teaching community
  - enabling teachers to access mobile (3G) or fixed (ADSL) Internet connections. Each participant can benefit from a global subsidy of USD 280 (i.e. USD 7 per month for 36 months)

- encouraging use of computers in education
  - facilitating teachers' acquisition of laptop computers for greater mobility. The laptops are equipped with Intel® PC Basics tutorial software specially designed for teachers, helping them acquire beginning computer skills. The PCs also include Microsoft Windows Vista® Business operating system and Microsoft Office® Standard program. A wide range of other high-quality products are also made available at preferential rates negotiated and subsidized at USD 260 per beneficiary.

- offering distance learning
  - on-line training in several areas of competency

- enabling access to a wealth of diversified training and content
  - providing broad and diversified training to support the pedagogical mission of teachers, through the creation of an e-Learning platform and on-line media library

Positive Program Impact

Six months after its launch, the NAFID® program has far exceeded its original goals. An impressive 105,000 participants have subscribed to a subsidized Internet connection, and 22,000 have acquired laptop computers.

The initial Internet connection target of 100,000 was reached in only six months. Given that, the ceiling was raised by 50,000 to a total of 150,000 subsidized Internet connections.

In addition, a satisfaction study conducted by the Mohammed VI Foundation showed that 71 per cent of program participants are satisfied with the Internet rates, and that 66 per cent are satisfied with laptop pricing.

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<tr>
<th>Before NAFID®</th>
<th>12 months after the launch of NAFID®</th>
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<tr>
<td>95 per cent of teachers had no laptop computer</td>
<td>150,000 Internet connections sold via the three telecommunications operators</td>
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<td>The rate of penetration of ICT in households was 1.34 per cent</td>
<td>39,000 laptop computers sold</td>
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<td>Cost was seen as the main impediment to acquisition of a PC</td>
<td>Over 68 per cent of connected teachers subscribed to Internet to meet the needs of education and learning</td>
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<td>Over 77 per cent of teachers use online self training</td>
<td>Over 68 per cent of teachers use ICT resources, forums, etc.</td>
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<td>Over 68 per cent of teachers use ICT for preparing and enriching lesson content</td>
<td>More than 75 per cent of teachers use ICT for preparing and enriching lesson content</td>
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<tr>
<td>More than 55 per cent of teachers have a connection to the Internet</td>
<td>More than 79 per cent of teachers have a connection to the Internet</td>
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Teacher PC Program – Key Learnings for Success

The NAFID@ program shows that public-private cooperation and innovative funding models can lead to the development of innovative and unique results on a very large scale.

Subsidy by Mohammed VI Foundation and the Ministry of Education
Close collaboration between the Mohammed VI Foundation for the Promotion of Social Work and Education Training and the Ministry of National Education, has made it possible to cover 40 per cent of the cost of hardware acquisition. A wide range of laptops has been made available to teachers, equipped with the Microsoft Windows Vista Business and Microsoft Office Standard software along with 3G mobile Internet connectivity.

Efforts deployed by hardware, Internet and software partners
The three telecommunications operators, computer and hardware manufacturers and software editors have agreed to substantial reductions on their usual market prices.

Use of Universal Service Funds
The Universal Service Fund provided USD 5 every month for 36 months, for each Internet connection, with the Foundation making up the difference USD 2.5 each.

Local banks are also lending support to the NAFID@ program by offering low-interest loans to their customers and participants in the Foundation for complete financing of the hardware to be purchased.

Participants of the Foundation enjoy the possibility of choosing a laptop computer from among a broad and diversified range, according to the technical features and prices proposed by seven partner suppliers.

Intel’s Contribution

Intel, along with the Ministry of Education, actively contributes to the introduction of ICT into Morocco’s educational system, particularly through the following projects:

• Intel® Teach offers teacher training in collaboration with the Ministry of National Education. More than 20,000 teachers have been trained so far
• Intel signed a donation agreement with the Ministry of National Education for 1,000 Intel-powered Classmate PCs (laptop computers for elementary and secondary schools)
• Intel has installed a MultiCore Lab at the Moroccan National Post Office and Telecommunications Institute (INPT) that will make it possible to initiate engineering students in the very latest multi-core technologies developed by Intel
• Furthermore, Intel is currently working with the Ministry of National Education to adapt the Intel skoool™ Interactive Learning and Teaching Technology program to Morocco

“The NAFID@ program is a driving component that has facilitated the integration of new technologies into pedagogical practices. Thanks to the up-to-date tools provided, teachers can work in a more autonomous and effective manner.”

Teacher, Moulay Idriss I School, Casablanca

Mohammed VI Foundation
for the Promotion of Social Work and Education Training

• Created by His Majesty King Mohammed VI of Morocco in July 2001
• Strives for structural improvement of the social conditions of the teaching community
• Made up of 320,000 participants including teachers, civil servants and retired people of the public Education and Training sector

“With the up-to-date tools my mathematics teacher uses, I can better understand the exercises.”

Student, Moulay Idriss I School, Casablanca
NAFID@: Building the Future

In just one year, NAFID@ has made it possible for half of Morocco’s teachers to connect to the Internet and benefit from ICT in the classroom. They can now take advantage of a rich eLearning platform and collaboration space, with possibilities for future expansion. The program represents a great improvement for the Moroccan educational landscape, and has also opened doors for future initiatives.

Bolstered by first-year success, NAFID@ is now entering a new phase of training and content development. It plans to expand the eLearning portal to include collaborative aspects, and also enable teachers to post their own content. In addition, a digital media library will allow users to make their lessons as engaging and effective as possible.

What is your vision of the world ahead?
Contact your Intel representative to put together a comprehensive plan for using educational technology to help make your vision a reality.

For more information, visit www.intel.com/worldahead
Official website of the NAFID@ program: www.nafida.ma
Official website of the Genie program: www.genie.gov.ma

Intel has prepared an eLearning Deployment Guide to assist organizations preparing for eLearning adoption. Download the guide at: