



Harnessing ICTs in Education

A proposed joint World Bank-infoDev initiative to mainstream the use of technology in education project

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Project Summary

This proposed three-year ICT and Education program seeks to enhance support to staff from the World Bank and donor agencies as they advise client countries on the emerging use of information and communication technologies (ICTs) to meet a variety of core developmental challenges and objectives in the education sector.

The project will do this by:

- developing and maintaining a knowledge base and resource kit upon which Task Team Leaders (TTLs) and country teams can draw;
- exploring key topics of relevance to ICTs in education projects, particularly the development of ICT skills competencies to enable developing countries to compete in globalized knowledge economies;
- coordinating knowledge sharing within the World Bank, donor agencies and within the larger international community on key topics related to ICT use in education; and
- providing capacity building activities of relevance to World Bank and donor agency TTLs.

This project will be delivered jointly by the Education (HDNED) anchor unit of the World Bank, the Global ICT Department (GICT) of the World Bank and the global multi-donor program, *infoDev*.

This project will draw from and build upon a large existing knowledge base of World Bank and donor experience on this topic and benefit from analytical work developed by *infoDev* and UNESCO over the past five years on key ICT in education topics. The project will be guided by a corps of World Bank and nominated donor agency staff. This group will review Bank portfolio and pipeline projects, as well as monitor activities, trends and issues in the sector. Through the development of an ICT in education knowledge base and support for a community of practice, the program will also serve as a pilot initiative on mechanisms to inform and support operational activities in ICT in education.

Project Description

The project will have six core components, some of which build on existing work:

A. An ICT in education knowledge base

Investments in ICTs for education have grown steadily over the past decade. ICT components form a growing and increasingly strategic part of many World Bank and donor-funded projects. However, important gaps remain in the current knowledge base. There is a dearth of useful resources in short, actionable formats of relevance to key decision-makers that translate what is known to work or not work for Bank and donor staff and their client country counterparts.

This project will undertake and regularly update comprehensive regional surveys of ICT in education which show the ‘lay of the land’ of ICT in education initiatives undertaken by a range of players in the public, private and civil society sectors. This would build on the *infoDev* surveys undertaken in 2007-2008 on ICT in education in the Caribbean and African regions. In 2009, a new regional survey of ICT for Education in South Asia will be launched. Also, a regularly updated knowledge base will be created for TTLs to support their dialogue with client country counterparts, drawing on the wealth of experience, best practice and analytical work from the Bank and from other ICT in education actors. These online knowledge resources base will be rolled out in phases and will include existing knowledge products and tools (re-packaged into formats useful for TTLs) as well as new knowledge products.

B. Analytical work and communities of practice on emerging technologies

The \$100 laptop initiative (one laptop per child) has raised awareness about the potential of low-cost computing in schools. At the same time, mobile phones continue to proliferate at an amazing rate in the developing world, calling into question whether a PC-centric view of technology use in education is in fact, the right approach. Innovative services and technologies abound in the education sector, but it is difficult for TTLs and their clients to make sense of opportunities available.

This project will develop a framework paper for thinking about ICT use in education in this changing landscape, including an exploration and evaluation of new delivery models and products. Shared communities of practice will also be formed around topics related to the emergence of new technologies and solutions, which will be open to Bank staff, donors, ICT practitioners, education practitioners, technologists and companies to discuss developments in the field, share experiences and, where appropriate, develop joint projects and activities. To kick things off, *infoDev* will launch an online community of practice on the issue of low-cost ICT devices in the education sector (www.edutechdebate.org) which will use a structured debate-style format to stimulate discussion..

C. Monitoring and evaluation activities

This project will undertake a set of activities that examines what works and what doesn't in the numerous ICT in education initiatives and activities around the world. A series of country case studies will be created on successful ICT in education interventions as best practice guides. Also, the project will create tools for the successful implementation of technology use in education projects for Bank and donor agency TTLs.

D. ICT skills development for the knowledge economy

With advances in global connectivity, cross-border trade in services has grown exponentially. The availability of skilled workers is the single most important factor in the growth of the IT and IT-Enabled Services (ITES) sector. What are the skills-sets and capacity development efforts needed to ensure that these countries can indeed join a globalized world and marketplace?

The project will start by assessing what sorts of skills are needed for digital literacy. It will then examine the role of educational institutions in producing graduates that have the necessary skills to be competitive in knowledge intensive industries and identify effective models for linking course curricula with market needs. Effective accreditation standards and schemes will also be studied. Support will be sought for this work from the World Bank's "New Economy Skills for Africa ICT Program" (NESAP-ICT), which supports specific activities designed to develop ICT skills competencies among young people in eight African countries.

E. Operational cross-support to regional task teams

In order to ensure that Bank and donor agency staff effectively support their clients in the design of high quality, ICT-enabled education projects, this project will offer cross-support by a core team of specialist staff and external consultants. It will also develop an operational checklist for the design, preparation and supervision of ICT-enabled project components.

F. Capacity building

A capacity building program will be developed for operational staff of the Bank and donor agencies which is anchored in the *infoDev*-UNESCO ICT and Education Toolkit for Policymakers, Planners and Practitioners; a planning tool developed by *infoDev* and UNESCO to systematically formulate, plan and evaluate education development programs enhanced by ICTs. The capacity building program will also benefit from the ICT in education knowledge base mentioned above and will be linked to the "ICT for Education Leaders: From Vision to Reality" week-long capacity building course run by the World Bank Institute.

Key Partners

HDNED, GICT and *infoDev* will collaborate on setting the strategic direction and coordinating the implementation of this project. Capacity building activities will be coordinated by the World Bank Institute's ICT and Education group. Other key partners in the effort include UNESCO, the Global e-Schools Initiative (GeSCI) and the Commonwealth of Learning as well as any relevant donor agency units interested to support these efforts.

Program Work plan and Costing

Expected Outputs	Duration	Cost (in \$US)
A. An ICT in education knowledge base	South Asia study to be launched in 2009. One additional study per year plus maintenance of existing database	US\$120 K per year for regional studies plus US\$30K per year for maintenance = US\$450 K
B. Analytical work and communities of practice on emerging technologies	Completion and launch of community of practice website in 2009. Content creation and maintenance 2009-2011. Framework paper to be published in 2010.	US\$150 K
C. Monitoring and evaluation activities	Four mini case studies to be produced, 2010-2011	US\$120 K
D. ICT skills development for the knowledge economy	Development of knowledge map in 2010. Cross-support, as required	US\$80 K
E. Operational cross-support to regional task teams	As required.	Estimated US\$30 K per year = US\$120 K
F. Capacity building	A series of workshops will be offered, in conjunction with UNESCO, to operationalise the ICT for Education toolkit	US\$150
Total	2009-2011	US\$1'070 K over three years

Implementation Risks and mitigating measures

The main risks to the project include:

- Technological and market obsolescence, if the knowledge base on ICTs for education is not regularly updated and refreshed.
- Lack of interest from operational TTLs on the inclusion of technology in education projects.
- Analysis which does not properly “close the loop” with operational staff and client countries on the effectiveness and applicability of the ICT in education interventions.

Steps taken to mitigate these risks include mixing research and assessment with operations, to ensure that the work stays rooted in practical application and also taps into cutting edge best practice worldwide. Also, the Bank and *infoDev* networks of experienced practitioners in the donor, NGO, international organization and academic communities and private sector will ensure that the project creates and maintains awareness and buy-in from the relevant parties.