



Information for Development Program

Request for Expressions of Interest

“Using Technology to Train Teachers”

A Handbook to Guide and Assess the Appropriate Use of ICTs to Aid in the Professional Development of Teachers to Benefit Education For All

Country: International – with a particular focus on Sub-Saharan Africa and countries facing the greatest challenges in meeting Education For All and Gender Equity goals as outlined in the Millennium Development Goals

Notice/Contract Number: 1246

Publication Date: 16 March 2005

Deadline: 3 April 2005

Funding Agency: *infoDev*

Implementing Organization: *infoDev*

Eligibility of Bidders: The consultants are expected to be a consortium of firms/experts, consisting of personnel with a minimum of 8 years of experience in educational research, with a particular emphasis on the impact of information and communication technologies (ICT) on educational practices and outcomes.

Request For Expressions of Interest (EOI):

infoDev invites eligible consultants to indicate their interest in providing expert services to develop *Using Technology to Train Teachers: A Handbook to Guide and Assess the Appropriate Use of ICTs to Aid in the Professional Development of Teachers to Benefit Education For All*.

The main objective of this assignment is to prepare a Handbook for policymakers and donor staff working in the education sector in developing countries recommending the most effective and relevant uses of ICTs for the professional development of teachers in countries struggling to meet EFA and education-related MDGs, especially universal primary completion, and the enabling/disabling environments for their use.

The work involved in this assignment is schedule to be completed within 4.5 months from the date of signing the contract agreement.

Interested consultants must provide information indicating that they are qualified to perform the services (brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc.). Consultants may associate to enhance their qualifications.

An approach paper for this assignment is also required that provides in greater detail how the consultants would conduct this assignment if selected. The approach paper should include the following: (i) an analytical framework and a process by which the research will be conducted; (ii) a timeline that demonstrates the consultants ability to meet the deadlines as noted in the Terms of Reference below; (iii) a brief narrative on resource allocation; and (iv) brief summaries of key personnel to be involved in the work, particularly their experience that directly relates to needs of this study. In order to prepare the approach paper, interested consultants should review the Terms of Reference, which is provided below. **We suggest that the Expression of Interest, including the approach paper and related materials, should not exceed 25 pages in length.**

Selection will be based on the “Consultants Qualifications” (CQ) method of procurement and Consultants will be selected in accordance with the procedures set out in the World Bank's Guidelines: Selection and Employment of Consultants by World Bank Borrowers May 2004 (current edition). **Electronic submission of the Expression of Interest, including the approach paper, is preferred. The EOI should be submitted via the World Bank’s on-line eProcurement web site, available at <http://www.worldbank.org/eprocurement>. Deadline for submission: April 3, 2005.**

Interested consultants may obtain further information on the *infoDev* web site at <http://www.infodev.org/education> or at the address below from 10am to 5pm US Eastern Time.

M. J. Trucano, *infoDev*
2121 Pennsylvania Ave., NW
Washington, DC 20433 USA
Mail stop: F 5P-150
Tel: [+1] 202-473-9841
Fax: [+1] 202-522-3186
E-mail: mtrucano@worldbank.org

Note: More information about World Bank procurement processes and guidelines can be found on its eProcurement web site at <http://www.worldbank.org/eprocurement>

Terms of Reference

Background

Information and communication technologies (ICTs) are widely believed to be important potential levers to introduce and sustain education reform efforts. Despite evidence of increasingly widespread use of ICTs in education initiatives around the world, however, there is little guidance available for policy makers and donor staff specifically targeted at countries contemplating the use of ICTs to help countries meet the education-related Millennium Development Goals.

Despite over ten years of investment in ICTs to benefit teaching and learning in many developing countries, little is known about their substantive impact on teaching and learning processes and outcomes. Indeed,

- The impact of ICT use on learning outcomes is unclear, and open to much debate.
- There is an absence of widely accepted standard methodologies and indicators to assess impact of ICTs in education.
- There is a disconnect between the rationales most often put forward to advance the use of ICTs in education (to introduce new teaching and learning practices and to foster 21st century thinking and learning skills) and their actual implementation (predominantly for use in computer literacy and dissemination of learning materials).
- There is very little useful data on the cost of ICT in education initiatives, especially those attempting to assess Total Cost of Ownership, nor guidance on how to conduct cost assessments.
- There are emerging best practices and lessons learned in a number of areas, but with a few exceptions, they have not been widely disseminated nor packaged into formats easily accessible to policy makers in developing countries, and have not been explicitly examined in the context of the education-related MDGs.

How – and how well – teachers are prepared for teaching is a critical indicator of education quality. Preparing teachers for the challenges of a changing world means equipping them with subject-specific expertise, effective and innovative teaching practices, an understanding of technology and the ability to work collaboratively with other teachers, members of the community and parents. Synthesized lessons learned and best practice from successful and sustainable teacher training and ongoing teacher professional development initiatives utilizing ICTs to meet these and related challenges in developing countries are not well documented. In particular, there is a lack of useful guidelines for policymakers presented in an easily accessible format directly relevant to acute policy issues and relevant to existing policymaking processes. This is especially true for specific, actionable policy advice and guidelines that relate to issues of pressing concern in countries eligible to participate in the *Fast Track Initiative*, many of which have teacher corps that are ill-trained, posted to geographically remote areas, and in many cases decimated by HIV-AIDs, and for all of which the introduction of ICTs raises potentially troubling issues related to cost effectiveness, access to education and educational equity. Much of the evidence to date advocating for the use of ICTs in support of teacher professional development in developing countries struggling to meet the Millennium Development Goals is anecdotal, presented in terms of the potential of ICTs based on experiences in non-comparable circumstances, or not based on rigorous examination of actual costs, benefits and the resulting trade-offs.

Despite widespread interest in providing schools with computer labs and connecting them to the Internet, it may be that other types of ICTs may be more relevant to the particular circumstances faced by countries struggling to meet MDG targets. For example, it is widely believed that *interactive radio* may be a particularly cost-effective way of providing regular outreach and support to teachers in these countries, especially as it relates to upgrading (a) teacher subject knowledge and (b) teacher pedagogical practices, and especially for remote communities and local language education. Despite the rich experience over the past two decades on using IRI for educational purposes as part of pilot projects, there are few case studies of and guidelines for successfully mainstreamed, scaling up and sustaining such initiatives by the education system after pilot projects have been completed.

Scope of Work

To advance understanding of these issues, and to provide guidance and recommendations for policymakers and donor staff working in the education sector in developing countries (and especially those countries eligible to participate in the Fast Track Initiative) the Information for Development Program (*infoDev*) is inviting expressions of interest for the development of *Using Technology to Train Teachers: A Handbook to Guide and Assess the Appropriate Use of ICTs to Aid in the Professional Development of Teachers to Benefit Education For All*.

In general, this Handbook will explore answers to questions such as:

1. What are the most effective and relevant uses of ICTs for the professional development of teachers in countries struggling to meet EFA and education-related MDGs, especially universal primary completion, and what are the enabling/disabling environments for their use?
2. Can the same types of pedagogical practices and transformations thought to be enabled by the introduction of ICTs be introduced and maintained in environments where ICTs are not used?
3. Which types of ICTs and models of ICT use can provide the most effective and relevant support for professional development, including enabling peer networks, and how?
4. What are the best practices for mainstreaming pilot projects involving a variety of ICTs, to aid in the professional development of teachers, including *interactive radio instruction* (IRI), and how are such projects managed and maintained over time?
5. What are the costs of various implementation models of using ICTs for the professional development of teachers?

More specifically, this Handbook should explore:

1. synthesized guidelines and best practices for conducting teacher professional development activities, with specific attention to appropriate (and inappropriate) and cost effective (and in-effective) uses of ICTs in these processes, based on existing research and concrete lessons learned from existing initiatives;
2. two substantive case studies of current initiatives underway utilizing ICTs to support teacher professional development; at least one of which is in Sub-Saharan Africa;
3. various training models, including 'train the trainer' and public-private sector partnerships, and the scaling up of pilot teacher training projects;
4. the usefulness and appropriateness of the use of ICTs at teacher training colleges;
5. the most relevant types of ICTs, with particular attention to issues related to the use of interactive radio instruction (IRI) on both pilot and systemic levels;

6. measuring and assessing teacher productivity as a result of participation in professional development activities utilizing ICTs;
7. particular issues related to teacher training colleges;
8. issues related to formal and informal, intrinsic and extrinsic incentives for teachers to participate in professional development activities;
9. formal and informal models for teacher support, including peer networks and communities of practice;
10. relevant legal and regulatory issues, including those related to intellectual property;
11. information dissemination, including media outreach; and especially
12. special and specific issues that arise because of the particular circumstances faced by countries eligible to participate in the Fast Track Initiative, including but not limited to: EFA issues; outreach to geographically remote areas, disadvantaged communities and marginalized groups; gender and other types of education equity; HIV/AIDS; teacher retention; infrastructure; content creation; teacher absenteeism; language and translation issues; cultural and political issues; cost and human resource capacity; infrastructure; and appropriate and relevant assessment models.

Analysis and recommendations should be supported by hard data and evidence from specific implementations of ICTs in education.

The guidelines and recommendations contained in this Handbook should be specifically relevant to the particular resource constraints and challenges faced by countries at most risk of not meeting MDG targets.

The **primary audience** for this study is policy makers in countries eligible to participate in the Fast Track Initiative and their partners in donor agencies. However, the study's exploration of issues related to the use (and misuse) of ICTs in education should be of great interest to a broader audience: in developing countries currently on-track to meet EFA goals but pursuing large scale investments in ICTs in their educational systems, as well as within donor agencies and in the broader ICT and development communities.

The format and usability of this Handbook are of critical importance. The analysis and recommendations contained in this Handbook must be presented in a manner that allows busy policymakers and donor staff to make informed policy decisions on specific issues related to the suitability of a variety of ICTs to help address a variety of pressing policy concerns. Handbook content should not be limited to descriptions of issues and discussions of potential ways to approach these issues – any such discussions must be directly relevant to this topic and lead to actionable advice. The Handbook should be easy to use divided into separate themed modules, as appropriate.

This Handbook is one in a series of publications for policymakers commissioned by *infoDev* focusing on issues related to the appropriate use of ICTs in education to help countries meet the Millennium Development Goals. Handbooks in this *ICTs to Benefit EFA & Education-Related MDGs* series will explore issues related to Monitoring and Evaluation, Professional Development of Teachers (this study), Enabling Environments, Total Cost of Ownership, Impact of ICTs on Access to Education and Education Management Information Systems (EMIS).

Consultant qualifications

The consultants are expected to be a consortium of firms/experts, consisting of personnel with a minimum of 8 years of experience in educational research, with a particular emphasis on the impact of information and communication technologies (ICT) on educational practices and outcomes.

Deliverables

1. Preliminary workplan – 10 days after signature of grant agreement with infoDev (“effective date”)
2. First draft of study – ~2.5 months from effective date
3. Final version of study – ~3.5 months from effective date

The consultants will also be expected to participate in a review workshop in Washington, DC (or in a regional hub, if *infoDev* and the consultants jointly agree that an alternative venue is preferable) to receive expert reactions to the draft study shortly after the submission of the draft.

Tentative Timeline

Publication of the EOIs	March 16, 2005
Deadline for submission of EOIs	April 3, 2005
Preparation of shortlist	April 6, 2005
Request technical and financial proposal	April 7, 2005
Invite to negotiate the contract	April 22, 2005
Announcement of Winning Application	April 25, 2005
Preliminary Workplan due to <i>infoDev</i>	May 6, 2005
First draft of study completed and submitted	June 30, 2005
Final version submitted to <i>infoDev</i>	August 4, 2005

Indicative budget envelope

\$85,000 maximum for all costs (fees, travel, expenses, etc.), based on the following general assumptions:

- Total number of days: ~ 80 (Research/drafting: 65; Review/consolidations: 15)
- Daily rate: ~ US\$800/day (including expenses)
- Consultant Travel: ~ US\$20,000

About *infoDev*

The Information for Development Program (*infoDev*) is an international consortium of official bilateral and multilateral development agencies and other key partners, facilitated by an expert Secretariat housed at the World Bank. Its mission is to help developing countries and their partners in the international community use information and communication technologies (ICT) effectively and strategically as tools to combat poverty, promote sustainable economic growth, and empower individuals and communities to participate more fully and creatively in their societies and economies. *infoDev* pursues this mission through an integrated set of programs financed by its consortium members and administered by the *infoDev* Secretariat in active cooperation with all members and other key strategic partners, public and private. Its work is rooted in the conviction that information and communication are indispensable elements of effective and responsive institutions (including governments), markets and societies. Web Site: <http://www.infodev.org>

Contact Information:

M. J. Trucano, *infoDev*
2121 Pennsylvania Ave., NW
Washington, DC 20433 USA
E-mail: mtrucano@worldbank.org