



Information for Development Program

Request for Expressions of Interest

“How should we measure the impact of ICT use in education?”

A Handbook to Assess and Guide the Monitoring and Evaluation of the Impact of Educational Initiatives Utilizing ICTs to Achieve 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: 1245

Publication Date: 9 March 2005

Deadline: 27 March 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 *How Should We Measure the Impact of ICT Use in Education? A Handbook to Assess and Guide the Monitoring and Evaluation of the Impact of Educational Initiatives Utilizing ICTs to Achieve Education For All*.

The main objective of this assignment is to develop a Handbook for policymakers and donor staff working in the education sector in developing countries to recommend best practices for conducting monitoring and evaluation studies of the impact on student achievement of educational initiatives that utilize ICTs.

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 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> as a Microsoft Word or PDF file. Deadline for submission: March 27, 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.

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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 (MDGs).

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 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 reliable and comparable hard and soft data about the impact (positive, negative and inconclusive) of ICT use in education in developing countries and, while a few notable international comparative studies have been done, all such studies cite (and lament) the lack of rigorous attention to this area. The vast majority of studies that claim positive impact on educational outcomes from ICT in education interventions suffer from a basic methodological problem – the absence of appropriate control groups – and, because they often rely to a great extent on self-reporting (among other reasons), they may be subject to important *biases*. While best practices exist in educational assessment in general, there is a great need for a handbook outlining best practices, guidelines and issues related to impact evaluation of ICT use in education, especially in the context of Education For All (EFA) and the education-related MDGs, and *specifically relevant to the particular resource constraints and challenges faced by countries at most risk of not meeting MDG targets by 2015*.

There is a particular need for guidance explicitly relevant and useful to policymakers and donor staff in countries eligible to participate in the *Fast Track Initiative*, many if not most of which (a) suffer from a lack of qualified and quality personnel able to conduct rigorous and independent impact assessments; (b) are ill-equipped to evaluate claims made by vendors of ICT-related products and services targeted at the education sector; (c) have little funding for such activities; and (d) lack supporting institutions and information channels to help enable the work of such evaluation activities. Issues related to cost and cost effectiveness of ICT in education initiatives, as well as of educational assessments of this nature in general, are particularly acute in these countries. There is also a pressing need for additional work related to performance indicators to monitor the use and effects of ICTs.

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 *How Should We Measure the Impact of ICT Use in Education? A Handbook to Help Assess and Guide the Monitoring and Evaluation of the Impact of Educational Initiatives Utilizing ICTs to Achieve Education For All*.

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

- What is the impact on student achievement of introducing ICTs in an educational setting in developing countries?
- How does this compare with other types of interventions?
- How should this impact be measured, and what are the related issues, especially as they relate to Education For All and other Millennium Development Goals?
- How should monitoring and evaluation studies of the impact of ICTs in education in LDCS be conducted?

More specifically, this Handbook should explore:

- (1) synthesized guidelines and best practices for policymakers for conducting monitoring and evaluation studies of the impact on student achievement of educational initiatives that utilize ICTs, including recommendations related to the selection of appropriate control groups, self-reporting, sampling and bias;
- (2) a critical analysis of leading comparative international studies and selected pilot projects utilizing ICTs to benefit education;
- (3) a set of ‘core indicators’ that can be shared across countries, both quantitative and qualitative, including discussion of the usefulness of such data and issues related to their collection;
- (4) local evaluation capacity and coordination mechanisms and issues;
- (5) issues related to the effective use of ICTs in the evaluation process, and their related costs;
- (6) the pros and cons of existing testing and evaluation schemes to gauge impact of ICT use on educational outcomes, including standardized testing;
- (7) planning and budgeting for monitoring and evaluation work of this sort, including the establishment and maintenance of feedback loops into planning processes from evaluation results; and
- (8) 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, gender issues, disadvantaged and marginalized groups; outreach to geographically remote areas; HIV/AIDS; EFA and MDG reporting requirements and issues; language and translation issues; cultural and political issues; cost and human resource capacity; infrastructure; and appropriate and relevant assessment models.

It should be noted that there is a vast existing literature related to educational assessment, as well as a few prominent studies of the impact of ICT use in education (in OECD and developing countries) and impact evaluation studies of individual ICT in education pilot projects in developing countries, that could serve as important inputs into the development of this Handbook. The Handbook

should include the promotion of a useful set of ‘core’ indicators that could be used across countries, building on significant work already done in this area.

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 Handbook is policy makers in countries eligible to participate in the Fast Track Initiative and their partners in donor agencies. However, the Handbook’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. It 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 studies 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. Publications in this *ICTs to Benefit EFA & Education-Related MDGs* series will explore issues related to Monitoring and Evaluation and Impact Evaluation (this Handbook), Professional Development of Teachers, 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 first draft.

Tentative Timeline

Publication of the EOIs	March 9, 2005
Deadline for submission of EOIs	March 27, 2005
Preparation of shortlist	March 30, 2005
Request technical and financial proposal	March 31, 2005
Invite to negotiate the contract	April 15, 2005
Announcement of Winning Application	April 18, 2005
Preliminary Workplan due to <i>infoDev</i>	April 29, 2005
First draft of study completed and submitted	June 23, 2005
Final version submitted to <i>infoDev</i>	July 22, 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>

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