

Where in the world is RTI



INTERNATIONAL DEVELOPMENT

BIMONTHLY AUGUST/SEPTEMBER 2009

Starting Up

Mitigating the Risk of HIV Infection and the Effects of HIV in Zimbabwe's Orphans and Vulnerable Children

In Zimbabwe, rapid economic decline, political crisis, and a generalized HIV/AIDS epidemic have contributed to the growth of a particularly disadvantaged population: orphans and vulnerable children (OVC).

Adolescent female OVC are more likely than non-OVC to engage in high-risk—and often transactional or intergenerational—sex. They have fewer educational and economic opportunities and are twice as likely as their male counterparts to be infected with HIV.

RTI, in collaboration with the Zimbabwe AIDS Prevention Programme, the Pangaea Global AIDS Foundation, and the HIV/AIDS clinic at Chitungwiza Hospital, will expand an existing intervention study aimed at reducing high-risk

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Searching for the People's Water Solution

While most people in the developed world have clean water piped into their homes, many families in low-income countries spend a significant amount of time, labor, and money to collect potentially contaminated water from wells, springs, and lakes.

The Ripple Effect project, implemented by the Acumen Fund and IDEO (a design firm) with funding from the Bill & Melinda Gates Foundation, aims to identify and develop commercial water transport and storage solutions whose designs are based on the needs, aspirations, and behaviors of the poor. Using its experience in impact evaluation of water



Water delivery truck in Andhra Pradesh [Photo: Christine Poulos]

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Help for the Vulnerable: Learning Interventions for Orphans in South Africa

Like in Zimbabwe, South Africa faces a rising population of orphans and vulnerable children (OVC) as a result of the HIV/AIDS epidemic and is home to approximately 3.8 million HIV orphans. Two studies on OVC in South Africa have shown that orphans lag behind their non-orphaned peers in school performance, on average falling behind by one-third of a grade. They demonstrate higher failure rates and are more likely to drop out of school. While these circumstances are well-documented, the factors related to the lower school performance of OVC have not been investigated.



The Education Support to OVC in South Africa project will study the impact vulnerability has on OVC learning in Umzimkhulu and other selected municipalities. [Photo: Melinda Taylor]

Under the USAID-funded, two-year Education Support to OVC in South Africa project, RTI International and its subcontractors, JET Education Services and Media in Education Trust, will conduct a baseline classroom and household study on the impact vulnerability has on learning, and identify factors related to school performance among OVC. The findings will guide the design of learning-support interventions in Umzimkhulu Municipality, as well as other selected municipalities within Sisonke District of KwaZulu Natal Province, a predominantly rural area with some of the highest poverty and unemployment rates in the country.

Working closely with the KwaZulu Natal Department of Education (KZNDoe), RTI will pilot learning-support interventions in 40 schools. Responding to strategies in South Africa's 2001 *White Paper on Inclusive Education*, the

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Harnessing the Power of Technology for Learning

A math instructor in Bangladesh stands in her classroom struggling to teach her students fractions. “How would another teacher approach this lesson?” she asks herself.

The mayor of a rural Moroccan town sits at his desk with a thick manual of new public procurement laws before him. “What do these laws mean for my job?” he wonders.

Around the world, teachers, mayors, and people of all ages and occupations daily encounter information gaps that interrupt their learning and slow their productivity. To help span these gaps, RTI International has evaluated, designed, and implemented sustainable information and communication technology (ICT) interventions.

“Because access to technology is growing everywhere, ICT is a tool that we can leverage to address development challenges even in the most remote areas of the poorest countries,” said Carmen Strigel, ICT for education and training team leader at RTI.

ICT Enhances Training and Learning

ICT can increase access to training by overcoming geographic, social, or security barriers. It can be the sole conduit for content delivery, as in “eLearning,” whereby the student receives training materials and support in electronic form. Or it can enhance the delivery of face-to-face training, drawing on video technology, mobile phones, or the Internet to incorporate distance learning elements into a curriculum.

Under a contract with the Asian Development Bank, RTI studied a blended approach to continuous professional development for teachers in Bangladesh. RTI equipped trainers and high school math and language teachers with smartphones that had video, speakerphone, and three-way calling capabilities to supplement six-week distance learning with self-guided print study materials. Meanwhile, a control group received the same content from the same trainers but in a two-week face-to-face format. Pre- and post-tests revealed equally satisfactory content knowledge gains by both the distance-mode and face-to-face trainees.



RTI provided high school teachers in Bangladesh with smartphones (as pictured) to study how it enhanced their professional development and peer learning. [Photo: RTI study team]

“Feedback after the training demonstrated that teachers strongly prefer the distance mode because it allows them to immediately apply the concepts they’ve learned in the classroom and it doesn’t disrupt their family lives,” said Sarah Pouezevara, RTI eLearning specialist. “The main value of the phones was the person-to-person communication that it allowed between trainer and teacher and between fellow teachers to foster a culture of peer learning and to overcome the sense of isolation that often causes self-guided learners to fail.”

ICT Enhances Communication and Planning

In Morocco, RTI adapted concepts from eLearning to help the Ministry of Interior improve communications with civil servants through “micro-learning.”

“Micro-learning is an informal way of consuming little chunks of information while you go about your daily business,” said Pouezevara. The Moroccan Ministry’s usual practice was to update counterparts around the country on relevant local government policies by mailing out thick manuals full of jargon that proved difficult for everyone to digest.

So, under the U.S. Agency for International Development’s (USAID’s) Local Governance Project (LGP), RTI customized an open-source content-authoring tool to help the Ministry create short multimedia “communication objects” that it could disseminate via CD-ROM and Internet to support official, printed documentation. RTI trained Ministry personnel in using the content-authoring tool to create some of these new products. For example, the Ministry developed a jargon-free multimedia slideshow on the new local finance regulations to illustrate key concepts that local government officials need to know. The slideshow included audio clips for illiterate users.

But with the aid of ICT, data can flow from the ground up, as well. In Indonesia, RTI is leading a pilot promoting quality data management by schools and districts to strengthen the national Education Management Information System under the USAID Decentralized Basic Education 1 project. The activity uses smartphones for school administrators to log

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Technology for Learning (continued)

data—such as numbers of teachers and students, or condition of classrooms and chairs—and transmit it instantly over the mobile phone network to district education offices, which compile data from across the district to inform planning and policy making.



Moroccan Ministry of Interior personnel learn to use an open-source tool for making simple multimedia presentations to communicate new policy updates to staff across the country. [Photo: LGP staff]

Sustainable ICT

Because technology brings a new set of responsibilities, RTI builds sustainability into every ICT project. This may include adapting royalty-free open-source software, helping governments plan for and assume the total cost of ownership (including responsible disposal or recycling of obsolete equipment), or brokering partnerships with local service providers.

In Egypt, RTI is providing an equipment package—computers for teacher training and for school administrators' use, and shared laptops and projectors for classroom instruction—to about 140 schools under the USAID Girls' Improved Learning Outcomes (GILO) project. The computers will be loaded with Arabic language software for teacher training and student literacy and numeracy learning, which RTI sourced from within the regional software market. In addition, GILO is working with the school boards of trustees to put together technology plans for managing access to the equipment and budgeting for the recurrent costs of technical support and maintenance.

"In most of these schools, there is a dependence on outside actors for maintaining the computer equipment, which is a big break in the sustainability chain," Strigel said. So, GILO is helping the schools and the boards of trustees plan for the long-term upkeep of their school's technology by leveraging community resources, such as technical support from local

Internet cafés; or by making plans for training school and community representatives in basic troubleshooting.

"If we can promote the sustainable use of technology to enrich and facilitate learning, then we're helping people succeed in school, perform on the job, and elevate their standard of living," Strigel said.

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Water Solutions (continued)

and sanitation projects in India and across South Asia, RTI will document The Ripple Effect's approach with a process map and conduct an evaluation to examine whether it helps develop sustainable enterprises and gives the poor greater access to safe water.

Acumen and IDEO will assist local entrepreneurs and nongovernmental organizations (NGOs) in India and East Africa to gain a deeper understanding of their target consumers' water access needs before they develop and market prototype products and services. These prototypes may include delivery services to increase households' access to safe water, or storage vessels that improve the safety of in-home water handling. A competitive grants process will award selected prototypes with start-up money and further coaching from Acumen/IDEO to take their solution to market. The project's goal is to reach 500,000 consumers with improved options for accessing safe drinking water in three to five years.

"An important goal of The Ripple Effect is to attract further private investment to growing socially conscious businesses that target the poorest consumers," said Jennifer Van Kirk, RTI project director. "RTI's evaluation will document the approach and analyze its potential to create sustainable and scalable commercial enterprises."

Through interviews and direct observation of the prototyping, design coaching, and business coaching, RTI will collect qualitative data from the project team and the enterprises on how the intervention influences their way of doing business. RTI will also conduct a quantitative household survey of potential consumers of the new offerings before and after their market debut.

"The household survey will look at the consumers' purchasing decisions and the expected impact of the new offering on household resources and activities," said Christine Poulos, RTI economist. "For example, reducing travel and waiting times associated with water collection doesn't directly indicate a public health impact, but it is associated with a greater likelihood of households consuming sufficient amounts of water."

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Health of Zimbabwe's Children (continued)

sexual behavior in adolescent female OVC (16-19 years) to prevent the contraction of HIV and other sexually transmitted infections (STIs), as well as unintended pregnancy. With funding from the U.S. National Institute of Child Health and Human Development, the study will now enroll HIV-infected participants to investigate whether the intervention has the potential to improve access to care and treatment, and to reduce secondary transmission of HIV.

In 2000, RTI's Women's Global Health Imperative (a program of the University of California, San Francisco at that time) began phase I of the intervention, Shaping the Health of Adolescents in Zimbabwe (SHAZ!). SHAZ! seeks to address factors associated with high-risk sex—such as poverty and gender inequities—by improving participants' economic opportunities and linking them to life-skills-based HIV education.



SHAZ! participants in Zimbabwe attend a life-skills-based HIV prevention session. SHAZ! seeks to address factors associated with high-risk sex by improving participants' economic opportunities and linking them to HIV education. [Photo: SHAZ! staff]

“Traditional HIV education does not address risks that these young women face due to poverty, gender inequities, and other social factors that limit their power to negotiate the terms of their relationships,” said Megan Dunbar, Principal Investigator of the SHAZ! study. “SHAZ! focuses on mitigating these factors to make HIV prevention more effective.”

Findings from the team's phase II intervention trial of SHAZ!, which enrolled 315 non-HIV/STI infected female

orphans who were not currently pregnant, showed that participation reduced gender-based violence and unintended pregnancy and improved young women's power to negotiate the terms of their relationships—important findings for HIV prevention.

However, many OVC are already infected with HIV. They need access to care and treatment, and support to reduce further disease transmission. The expansion will fund SHAZ! Plus, which will add 650 HIV-infected young women to the program, link them to clinical care, then randomly assign them to the combined economic and life skills intervention or the life skills intervention alone.

“Our goal is to find a formula that helps these young women control their disease, reduce the chance they'll infect others, and move toward economic independence—and that can inform programs and policies throughout Africa,” Dunbar said.

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Learning Interventions for Orphans in South Africa (continued)

interventions will enhance OVC retention and performance. Piloted interventions may include classroom activities and programs grounded in community support, such as peer tutoring, pairing of siblings in homework, learnership programs, life-skills programs, school transport, training of teachers in special pedagogic techniques, and/or income-generating programs.

The interventions will establish strong linkages between the community and schools, which will help to create ongoing dialogue with the KZNDoe and other stakeholders supporting OVC about real learning challenges of OVC, and government strategies to address them. The successful interventions will serve as models that can be replicated throughout the country.

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Where in the World Is RTI is a bimonthly publication intended to inform clients and partner organizations about RTI's global activities and research areas. RTI is dedicated to improving the human condition in developing and emerging countries. RTI has worked for over 40 years in 140 countries around the world.

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Selected Publications

Brinkerhoff, Derick W., Ronald W. Johnson, and Richard Hill.

(2009). *Guide to Rebuilding Governance in Stability Operations: A Role for the Military?* PKSOI Papers Series. Published by the U.S. Peacekeeping and Stability Operations Institute (PKSOI) and the Strategic Studies Institute (SSI) of the U.S. Army War College. Carlisle, Pennsylvania: SSI. Abstract and full report: <http://www.strategicstudiesinstitute.army.mil/pubs/display.cfm?PubID=925>

Gove, Amber. (2009). “Panel: The Early Grade Reading Assessment (EGRA).” Speaker remarks at symposium March 30, 2009, Carnegie Institute for International Peace, Washington, DC. In William G. Brozo and Elizabeth G. Sturtevant (Eds.), *Beyond Access: Effective Reading for All* (pp. 13-14). Washington, DC: International Reading Association. Full report: http://www.reading.org/Libraries/Association_documents/GlobalPerspectivesReport2009.sflb.ashx