An international consortium based at MIT helps educators from developing countries learn how to make higher education more accessible to their fast-growing college-age populations.

By Eric Bender

FOUAD EL-HARAZIN PUTS IT BLUNTLY: in Gaza, education is at a standstill. University students in the occupied territory often can't even reach their campuses. "Literally thousands of students are crying out for the help that would enable them to continue their study," says El-Harazin, a physics professor and president of the Gaza International Foundation for Peace on Earth. "We want to create a flexible infrastructure that will make e-learning available to all Palestinians."

The MIT auditorium, filled with an international audience of educators, falls silent. Then several Israeli educators stand up and express a willingness to help.

"Some in the audience had tears in their eyes," recalls Richard Larson '65, EE '67, SM '67, PhD '69, founder and director of MIT's Learning International Networks Consortium (LINC), which attracted educators from about two dozen countries to its spring symposium on distance learning. Larson
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took four Israeli and seven Arab educators to dinner that night. "They all signed a piece of paper that they would get together and do some electronic learning to cut across the boundaries," he says. Two Gaza International Foundation officials who also attended the symposium said they would try to secure grant money to fund the endeavor.

This is just one example of the potential influence of LINC, a startup consortium of individuals and institutions, managed at MIT and dedicated to bringing educators together to share their ideas, resources, and experiences with distance learning. Delivering lessons via the Internet, television, videotape, CDs, or radio has gained popularity in the U.S. in recent years, but in many developing countries, especially those with large populations of college-age students and acute shortages of teachers, the idea is just taking root. LINC intends to help educators in those countries make college-level education available to the greatest number of people possible by providing them an international forum where they can meet and brainstorm with experts who are already having success with distance learning.

Larson is an MIT professor of civil and environmental engineering and a longtime proponent of distance learning. He came up with the idea for LINC after realizing that in a single year of giving presentations on MIT's distance-learning initiatives, he had met with people from about 50 countries, all eager to find answers to their questions and share their own ideas. The first annual LINC symposium, held in 2003, drew more than 60 enthusiastic attendees. Last spring's meeting brought together a larger group of educators who shared their experiences in organized sessions followed by question-and-answer periods and in informal gatherings.

Both meetings made it evident that some Third World countries have already made great strides in distance learning. For instance, Mexico, which Larson says is 10 or more years ahead of some other countries, proved to be an inspiring example at the spring meeting. Drawing on its long history of distance learning via satellite TV, Monterrey Tech's Virtual University has leveraged a relatively small number of talented faculty members to become a powerhouse in online learning, says director Patricio Lopez del Puerto. The university reaches college students in more than 18 countries and also has more than 500 community learning centers that use online course material to help rural residents acquire secondary education.

Other examples offered at the spring meeting were from countries still very much in the early stages of distance education. The Syrian Virtual University was launched in 2002 and now serves more than 1,000 students. But about 135,000 students graduate from high schools in Syria each year, and existing colleges can handle only 80,000 of them, says the university's provost Milad Fares Sebaaly. In Pakistan the story is much the same. The country's conventional colleges cater to only 2.5 percent of the college-age population. The Virtual University of Pakistan now serves nearly 3,000 students at more than 150 learning centers, according to rector Naveed Malik. Both virtual universities would like to reach many more unserved students and hope to find ways to do so through LINC.

One of the biggest obstacles to distance education in developing nations is acquiring the technology to make it more accessible. Although many universities have well-developed internal computer networks, some have yet to acquire high-speed Internet access, which limits their ability to adopt technologies supplied by their LINC colleagues.

"The solutions that will work in developing countries are completely different than what they are here," says Cliff Missen, director of the WiderNet project at the University of Iowa and a LINC participant. WiderNet, whose work Missen described at the spring conference, has used the existing internal networks at universities in developing countries to tackle one of their obvious problems: the quality and quantity of their libraries. WiderNet has created eGranary, an electronic alternative to conventional libraries, which is stocked with donated digital content and delivered on portable hard drives to African universities to augment existing resources.

Whatever the constraints or challenges, Larson says, LINC is dedicated to finding appropriate solutions for everyone. To that end, he says, LINC will complement its annual meeting with a journal, online demonstration projects, and other resources. This year Larson is on sabbatical, examining learning around the world to gain insights he might bring to bear on LINC programs. "Our best weapon against unrest and [war] is education, particularly higher education," he says. LINC aims to supply that weapon to developing countries around the world.