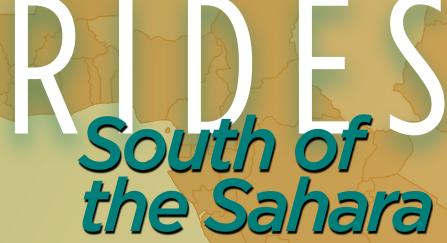
# MAKING





In sub-Saharan Africa, three major needs—
to improve awareness of HIV/AIDS,
increase access to distance learning, and develop
better teacher education—are high priorities.
Many universities, corporations, and
organizations from abroad are stepping in
to help the region address these challenges.

BY DANA WILKIE

CCORDING TO THE STATISTICS provided to Kathy Hageman years ago, one of every three junior high school students whom she was teaching in a remote Botswana village back in 1994 would someday contract the HIV virus—a fact so sobering that the Iowa-born Peace Corps volunteer introduced an unconventional element into her English instruction: she began assigning essays on AIDS.

Who knows if this impressed her young charges with the importance of safe sex? All Hageman knows is that when she returned in 2002 for a visit, she learned that not one of her former students had died. Yet.

"As teens, they were too young to understand the severity of the epidemic or realize that they ... were at risk," says Hageman. "Now, they understood that they and their friends were fighting a battle to stay alive."

This brutal introduction to the AIDS epidemic in sub-Saharan Africa is the reason Hageman is now with the Rwanda Zambia HIV Research Group, where she and her colleagues are gaining new insights into prevention strategies while working with the longest-standing and largest heterosexual HIV-discordant couples cohorts in the world.

Hageman's work—which will help her finish her dissertation research at Emory University—would not be possible without a two-year National Institutes of Mental Health grant. In fact, the entire research group would not be making the strides it is without more than 20 years of funding from such organizations as the National Institutes of Health(NIH), the International AIDS Vaccine Initiative and the U.S. Centers for Disease Control.

ALAMY

Whether it's money from governments, private corporations or religious organizations, foreign investment in higher education programs in sub-Saharan Africa is critical to tackling a host of challenges—from AIDS transmission rates to preparing college graduates to compete in a global economy.

According to some, however, such investment has faltered in recent years.

"We need a lot more," says Peter McPherson, president of the National Association of State Universities and Land-Grant Colleges, a more than 100-year-old organization of 215 universities—largely the nation's biggest public schools that have worked extensively on building universities in developing countries. "If you've got a university of 20,000 students and 2,000 faculty, you need 3,000 faculty. If you need 3,000 well-trained faculty, what's the 10-year plan to get that done? Who's going to do it? Where will the resources come from? It requires the government and the university to put in more resources. Outside money from a U.S. university can be a key part of the mix, but the outside help isn't going to change the whole thing."

to commit significant public money to higher education—thanks to more immediate pressures such as low economic growth, high unemployment and poverty rates and rampant disease.

#### **Challenges in the Region**

In sub-Saharan Africa—the only region in the world where poverty and hunger are expected to increase in the next two decades without major new investments—40 percent of the region's 743 million people still live on less than one U.S. dollar a day, and many live on less than 50 cents a day.

As a result, many observers consider higher education institutions as vital to developing an economy that can sustain itself. And there is a widely accepted understanding that this economic development cannot happen without universities that churn out well-educated African leaders who can address critical local, national, and regional problems.

On the one hand, there has been a rapid expansion in higher education opportunities in African countries, thanks to a large crop of college-aged natives who've earned secondary-level diplomas and to an increasing number of families able to afford a postsecondary education.

Africa's public universities are growing quickly. The higher education student numbers in the last 15-year period went up almost four times in sub-Saharan Africa,

with the expectation that these figures will double again in the next five years. With the introduction of fee-free primary and secondary education in some parts, for instance, school enrollments have mushroomed in the past five years, leading to predictions that Kenya, for example, will need 40,000 additional university places before the end of the decade.

Part-time graduate programs, such as executive MBA programs, are the rage. Some universities have started subsidizing tuition for those who otherwise could not attend, while others are raising faculty salaries. Private universities—once not as accepted as public ones—are offering high-demand degrees in business and information technology.

At the same time, the quality of education remains relatively poor in much of Africa. This can be attributed in large part to a single problem: lack of money. Student and faculty strikes are frequent; overcrowding is rampant; dorms designed to sleep one or two students sometimes house a dozen; students must arrive at lectures hours early to secure seats; scholars fight over scarce library books. There are significant faculty shortages and the need for increased advanced degree education. The region's universities suffer from a flight of highly educated Africans, which has, in the words of one intellectual, "devoured the intellectual soul of African nations."

Educators in "professional subjects—such as medicine, engineering, and law—are in short supply, largely because of the unattractive pay, living and working conditions of institutions vis-à-vis the greener pastures either locally, regionally, or overseas," says Damtew Teferra, director for Africa and the Middle East at the New York-based Ford Foundation International Fellowships Program and the founder and director of the International Network for Higher Education in Africa.

There is also too little communication between African universities and national research institutions, a disconnect between what universities are teaching and what employers need, too little research, too little technology development, not enough emphasis on programs that address local, national, regional, or global concerns and a paucity of training in advocacy, marketing or fundraising.

Because it's been hard for most African countries to commit significant public money to higher education—thanks to more immediate pressures such as low economic growth, high unemployment and poverty rates and rampant disease—funding remains the chief challenge to expanding and revitalizing higher education in the region. Yet during the past two decades, foreign investment in sub-Saharan higher education has declined significantly as donors have focused education funding overwhelmingly on primary and basic education.



Kathy Hageman shown with a team of counselors who helped with focus groups in Lusaka, Zambia.

"Major international development partners that in the past were simply absent from, or even critical of, higher education development in Africa, are moving forward to help build higher education institutions on the continent," says Teferra, a native Ethiopian who is considered one of the leading experts in higher education in Africa. "Whereas the alliance of these institutions to invigorate higher education institutions is commendable, their commitment is yet to be followed by commensurate financial resources."

The current economic downturn in the United States hasn't helped matters. "When an economic downturn hits, it affects the earnings from investments/endowments, making available less resources for new and ongoing programs and activities," Teferra says.

McPherson's organization is part of the Africa-U.S. Higher Education Collaboration Initiative, a new venture with the U.S. Agency for International Development (USAID) to build up African universities.

USAID is providing the initiative with \$1 million for 20 grants of \$50,000 for African and U.S. institutions that partner to provide instruction in: environment and natural resources; engineering; science and technology; health, education and teacher training; and business, management, and economics. The Bill & Melinda Gates Foundation has also given McPherson's organization \$100,000 to build the grant-making framework for the new initiative. Other partners in the collaboration include the Partnership to Cut Hunger and Poverty in Africa, the Forum for Agricultural Research in Africa (FARA), Higher Education for Development (HED) and the American Distance Education Consortium (ADEC).

While McPherson acknowledges that 20 grants at \$50,000 apiece "isn't money to do a lot of work," he notes it may be enough to convince several U.S. and African schools to collaborate on sharing resources for many years to come. Still critical, he notes, is the follow-up money necessary to sustain such efforts after the foreign investment has dried up.

PHOTO COURTESY OF KATHY HAGEMAN

"We're in the process of working to find such money," he said. "It's been my experience that when you have concrete plans, it's easier to find money."

#### **Teacher Education**

McPherson anticipates that some of the programs winning the new grant money will involve training teachers and professors to work in primary education—a clear need in a region where primary and secondary education suffer from the inability of African higher education institutions to produce high-quality teachers, education leaders, supervisors and curriculum specialists. While foreign investors are sinking much money into primary education in the region, it tends to be invested in building schools, not in the people needed to teach in those schools.

"Teaching is not an attractive profession anymore and it is not the first line of career students pick," Teferra says. "It has low social capital and financial capital. If you are talking about health teachers—and that means staff in the medical faculty—there is a serious shortage. The most pressing needs include financial and material resources, possibilities for upgrading skills, and commensurate and meaningful income."

The England-Africa Partnerships (EAP), a program funded by the UK Department for Innovation Universities and Skills (DIUS), is investing in work similar to McPherson's. During the past two years, the program has funded 32 collaborations between English institutions and 11 in South Africa and 21 throughout the rest of Sub-Saharan Africa. The projects focus on diverse themes—health, climate change, agriculture—but they all share the goal to build up African institutions and address key needs in African higher education. To date, England's Department for Education and Skills has invested \$1 million pounds in the partnerships.

One such collaboration between the University of Nottingham and the University of KawZulu-Natal in South Africa aims to reduce poverty by building KawZulu-Natal's capacity for teacher training. Another between York St. John University and three Kenyan universities—Kabarak, Egerton and Moi—is aimed at turning out top-notch educators for higher education.

A third between the University of Bristol and Cameroon's University of Buea will beef up doctoral programs and create courses that teach research methods. A final one between the University of East Anglia and the University of Buea will develop a nurse education program that can be incorporated in other Cameroon schools.

In Germany public funds contribute significantly to educating students and researchers from developing countries, including sub-Saharan Africa.

The Deutscher Akademischer Austausch Dienst (DAAD), or German Academic Exchange Service, provides scholarships to professionals in sub-Saharan Africa in a wide range of subjects—including teacher training and distance learning—in hopes of helping developing regions create more effective higher education structures. The program, called "Postgraduate Courses with Relevance to Developing Countries," is supported by public funds from the Federal Ministry for Economic Cooperation and Development, said Anke Stahl, a program administrator in Bonn. The budget was about €250,000 in 1987—enough to finance five courses. Today the program offers 42 courses, has an annual budget of €85 million and has over the past

two decades awarded some 4,500 scholarships. About 40 percent of these went to students in sub-Saharan Africa.

Coordinated through the service's regional office in Nairobi, the program targets Ethiopia, Kenya, Naimbia, South Africa, Sudan, Tanzania, and Uganda. The upper age limit for most of the courses is 36, the applicant needs a bachelors' degree with at least two years professional experience, and the service pays a flat-rate travel allowance, a monthly stipend, and health insurance coverage.

Among the programs offered are "Vocational Education and Personnel Capacity Building" through the Institution Technische Universität in Dresden, the capital of Saxony. The courses focus on the theory, practice and history of vocational education, the psychology of learning, basic business, and personnel management and computer-integrated education, among other things. Students are also required to take courses designed to enhance their teaching skills in subjects ranging from civil, chemical, electrical, and mechanical engineering and domestic science and home economics.

The battle to stem the HIV/AIDS
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investment in higher education.

Other funding organizations that focus on higher education in developing regions such as sub-Saharan Africa include: the Alexander von Humboldt Foundation, a non-profit foundation created by the Federal Republic of Germany to promote international research that helps non-German scholars spend time in the country to conduct research; the Georg Forster Research Fellowships, which are given to researchers from developing countries to conduct research projects designed to transfer knowledge about German technologies to development policy in the scholar's home country; and the Catholic Academic Exchange Service, an arm of the German Catholic Church that provides scholarships to post-graduate students and scientists from developing countries.

#### **HIV/AIDS**

The battle to stem the HIV/AIDS epidemic in the region—where nearly one in five people is HIV-positive—is getting perhaps the most attention in terms of foreign investment in higher education.

One of the more high-profile efforts underway is at the President's Emergency Plan for AIDS Relief, or PEPFAR, which is part of the U.S. State Department. The new PEPFAR authorization legislation that recently passed the House of Representatives directs funds toward training people in African universities with the assistance of U.S. universities. The bill—now passed by the Senate and signed by President Bush—is the reauthorization for the President's Emergency Plan for AIDS Relief, or PEPFAR. It calls for training 140,000 people in African universities as part of the overall PEPFAR effort, but it does not allocate specific money for that task. Instead, the overall PEPFAR reauthorization legislation is for \$48 billion for five years.

The England-Africa Partnerships also targets AIDS. The University of London is partnering with several African schools—the University of Johannesburg, University of Limpopo, Nelson Mandela Metropolitan University and the University of the Free State—on a research project to create quality programs for HIV prevention, treatment and care in South Africa.

One innovative program is the Rwanda Zambia HIV Research Group where Hageman works. The project operates on the premise that the epidemic in many African countries is being driven—not by prostitutes or truck drivers—but by heterosexual partners transmitting the virus to a spouse or live-in lover because of pre-marital or extramarital sex. Not knowing they are what researchers call "serodiscordant couples," they typically fail to use condoms. Each year, it is estimated that 20 percent to 25 percent of those who do not know their "discordant" HIV status transmit the virus to the negative partner.

In fact, one June article by Kristin L. Dunkle and colleagues of the Rollins School of Public Health at Emory University estimates that 55 to 92 percent of new heterosexually acquired HIV infections among adults in urban



Kathy Hageman, a doctoral student at Emory University who is completing her dissertation with The Rwanda Zambia HIV Research Group, with Susan Allen, research director with The Rwanda Zambia HIV Research Group.



Kathy Hageman with a research nurse in Lusaka, Zambia.

Zambia and Rwanda happened within serodiscordant marital or cohabitating relationships.

The Rwanda Zambia HIV Research Group estimates that married couples in sub-Saharan Africa who participate in joint HIV counseling and testing could curb the spread of sexually transmitted HIV in the region by up to 60 percent. The research group offers outpatient medical care and voluntary testing and counseling for couples.

"Most infections in Africa are acquired from spouses," says Susan Allen, the research director who just won a \$750,000 grant from the U.S. Centers for Disease Control and Prevention (CDC) to test serodiscordant couples in public health settings in Zambia. "The only way to prevent this is to test and counsel the husband and wife. We're trying to get that service made available not just in research clinics like ours, but in hospitals, health centers, NGOs. Anyplace that offers HIV testing should always offer couples counseling whenever they can."

Allen's "Couples Voluntary Counseling and Testing" program has been funded primarily by NIH for the past 20 years and now is principally paid for by the International AIDS Vaccine Initiative.

Hageman found in her English classes in Botswana that it proved fruitful to incorporate information about how the virus was transmitted, how relationships are affected by the discovery of an infected partner, and how to make informed choices about health care.

"When the country is experiencing one-third of the population being infected, they were very open to any information (or) help that people were able to give," Hageman says of her novel essay assignments to junior high schoolers. "The stigma regarding sex that has occurred in the United States isn't present or relevant in their culture."

Jacquee Bunnell, a 23-year-old Atlanta native earning her master's of public health at Emory University, worked last year with Allen as a graduate research assistant. This summer, she spent three months in Zambia with the Zambia Emory HIV Research Project, a part of Al-

PHOTOS COURTESY OF KATHY HAGEMAN

len's program, to gather information for her thesis. Her work entailed investigating the expansion of the couples' counseling.

Every weekend, she left Lusaka to go to Mazabuka—a medium sized town about a two-hour drive from Lusaka. One day while in Mazabuka, she was sitting in the lab while technicians calibrated the results of recent HIV tests from 20 couples that had participated in the program.

"With every test, I would get my hopes up that it would be negative, and every time I saw that line (indicating a positive test), my heart sunk a little," Bunnell said. "You think about the individual, their partner, their children. Most couples come in with a son or daughter. It's hard to look at a newborn baby, knowing their parents both have HIV."

The one time during her research abroad that she found herself angry was the day a Zambian man came in for counseling with his two wives.

"I have no opinions on polygamy—it's not my place to judge cultural practices—but I did get [angry] when I saw the results and the man was positive and both women were negative," she said. "All I could think was, 'two is not enough for you?' "

The M·A·C AIDS Fund, the philanthropic arm of Estée Lauderowned M·A·C Cosmetics, last year launched a \$1.4 million, one-year training program to help South Africa's most promising innovators in HIV prevention.

In collaboration with the HIV Center for Clinical and Behavioral Studies at Columbia University and the UCLA Program in Global Health at the University of California at Los Angeles, the "Leadership Initiative" is supported entirely through the sale of M·A·C Cosmetics' line of Viva Glam lipsticks and lip glosses. Each fellow received about \$30,000—a percentage of which is seed funding for the fellow to launch his or her prevention program.

During a two-month training period at Columbia's New York City campus, the fellows design an HIV/AIDS prevention plan and get instruction in grassroots organization, fundraising and HIV prevention and program administration. Through UCLA's Johannesburg-based team, the fellows are paired with mentors who help them shape programs that they then take to South Africa. Once there, the fellows stay in touch with program leaders via e-mail.

The first dozen fellows involved in the initiative focused on such cutting-edge issues as: using microfinance strategies to empower impoverished women; intervening with children who have been trafficked as part of the sex trade; and challenging practices such as rape and polygamy that contribute to HIV transmission. Their plans included using mobile phones to disseminate HIV prevention messages, promoting female condoms and microbicides, working with religious communities to challenge stigma, and misinformation and using the arts to reach incarcerated youths. A new crop of fellows will start their training this fall.

"The idea that we are putting the very best of training in the hands of the very best of leaders is not necessarily new, but making that investment in local leaders is," said Columbia University's Anke Ehrhardtl, a 25-year AIDS research veteran and co-director of the program.

PHOTOS COURTESY OF MANTOMBI NALA-PREUSKER

One of this year's fellows was Mantombi Nala-Preusker, a school principal in Durban whose program tries to combat the gender inequality that continues to drive the AIDS epidemic.

Nala-Preusker notes that key problems contributing to HIV transmission are teen sex, sexual coercion and violence, lack of information on sexuality issues and HIV/AIDS, taboos surrounding discussing sex, re-



Mantombi Nala-Preusker ia school principal in Durban, South Africa, who works to combat the gender inequality that continues to drive the AIDS epidemic.

sorting to sex as a matter of survival, limited access to female contraception, poor negotiation skills, and uninvolved parents. Moreover, schools are often ill-prepared to handle sex education, and some parents—especially fathers—resist change.

"Girls are powerless, especially if the partner is older, which is often due to submissiveness or economical dependence coupled with fear of rejection," she says. "I hope to ... empower parents with information and skills on how to talk with their children on sexuality issues."

Her M-A-C AIDS Fund project teaches girls to protect themselves by regular school attendance, avoiding relationships

with older men, avoiding early sexual activity, reducing teen pregnancy, and reducing sexual partners. They are encouraged to negotiate condom use. The importance of condoms is discussed in a mixed group of boys and girls.

Researchers such as Nala-Preusker and Allen are keenly aware that their projects must train native Africans to continue their work after the foreign researchers and aide have left.

"In the past 20 years, we've trained 34 Rwandan physicians in epidemiology," says Allen. "The earliest (trainees) are now the directors of our field projects. "We have a steady pipeline of physicians being trained in research methods either in the United States or through distance learning at the London School of Hygiene Tropical Medicine."

Nala-Preusker has already trained 18 parents who are now training others about HIV/AIDS sexuality education.

"Our goal is that—over time—we will build a community of local leaders in HIV prevention within South Africa," said Nancy Mahon, executive director of the M·A·C AIDS Fund. "The sole focus of the... initiative is to build local capacity among promising leaders in South Africa. In the end, it is South Africans themselves who have insight into the local context and culture and who can best help us understand how lessons learned in HIV prevention in other countries can be applied locally."

#### **Distance Learning**

Convincing those who study abroad to return and put their education to good use in their home countries can be challenging. Those who have studied in the United States, for instance, discover for the first time that they have academic freedom—the ability to choose a major, to select which courses they want to take, to design their own independent studies, and to call their own shots.

Over the past decade, the number of sub-Saharan African students in the United States has more than doubled, to 32,800 in 2005–2006, making up six percent of the foreign students here and rising faster than any other region. Political pressure compounds the problem, pushing scholars out of their countries, especially in Eritrea and Zimbabwe.

Those who do return home discover this can have its own challenges.

"There are always some issues of re-integration after foreign studies, especially when one returns to the same institution where he or she worked before he or she left," Teferra says. "Colleagues consider the newly minted graduates as neophytes, whereas returnees expect to be treated as equals. Of course, there are other human elements, not unique to Africans or the field. The notion of "Western" influence via "Western education" seems to have ebbed with the resurgence of globalization."

For those academics who want to take advantage of foreign investment in higher education, but wish to stay close to home, the unprecedented development in information and communication technology has opened up many opportunities. While Africa remains the least wired region in the world, the strides that have been made have contributed considerably to teaching, research, and publishing in the region's institutions.

While "brain drain" in the region's universities is a cause for concern, new communication modes have made it possible for intellectuals who may have left Africa to participate in the academic and scholarly initiatives of their home countries. Access to e-mail, Internet and e-journals has alleviate the chronic problem of isolation the African intelligentsia tends to face. Communication among fellow scholars and researchers has been dramatically boosted. Internet labs and cafes, the products of private enterprise, are springing up and helping aspiring scholars.

African universities tend to be well versed in e-learning projects. The University of South Africa—probably the most highly recognized African-based distance education provider—is now leveraging its distance-learning capacities in other countries.

The tremendous interest that the continent has in Webbased learning was evident last May when more than 1,500 people—the vast majority of them Africans—convened in Accra, Ghana, for a conference on African e-learning. About a third of the participants were from educational and government institutions, and they discussed topics ranging from "Introducing eLearning into the School System" to "eLearning in Medical Education and the Fight Against HIV and AIDS."

"Distance education has been in the increase," Teferra says. "Both public and now increasingly private institutions are actively engaged in distance education."

But low bandwidth, the high cost of service, erratic and unreliable power supply, poor technical support and the short life span of software and hardware pose challenges for distance learning.

The England-Africa Partnerships have tried to address some of these challenges with grants, including one that teams the University of Oxford with South Africa's Community and Individual Development Association (CIDA)¹ City Campus to create an online study course that would reach more students in rural areas. In Tanzania several nursing colleges are partnering with the University of Central Lancashire to improve midwifery education through distance education in hopes of reducing maternal and neonatal morbidity and mortality.

Another such effort is InWEnt, which is short for Internationale Weiterbildung und Entwicklung. A joint undertaking of the German federal government and industry groups, InWEnt offers online courses for specialists, executives and decision-makers who work in developing regions such as sub-Saharan Africa.

The African Virtual University, launched in Washington 11

years ago as a World Bank project, uses distance and e-Learning in African institutions. The program has headquarters in Nairobi, Kenya, a regional office in Dakar, Senegal, and partner institutions in Francophone and Anglophone West Africa.

#### **Looking Forward**

With challenges as daunting as fighting HIV/AIDS, training future teachers and implementing distance learning with a dated technological infrastructure, the future of sub-Saharan Africa can seem bleak. But there is hope. Unique programs and partnerships from other parts of the world have helped the region make great strides in improving educational opportunities to prevent the spread of HIV/AIDS, to train teachers for African students, and connect students to the world through distance learning. Sub-Saharan Africa is living proof that intercultural cooperation through education can make a difference. **IE** 

**DANA WILKIE** is a freelance writer in Washington, D.C. Her last article for *IE* was "Bridging the Divide" in the January/February 2008 issue, which covered promoting peace and understanding in higher education in South Africa since the end of apartheid.

#### Notes

<sup>1</sup>CIDA is an acronym that stands for "Community and Individual Development Association"—an NGO created in 1973 to teach transcendental meditation to students in townships with the belief this could contribute to the holistic development of students, many of whom suffer some kind of emotional hardship due to poverty. The City College is a CIDA venture.



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