Financial self-sufficiency for an orphanage in Uganda that houses 75 children. A performing-arts summer camp in Nigeria for 43 talented but underprivileged girls. More than 5,000 bed nets distributed to households in rural Sierra Leone to protect against malaria infection. Vertical planters that enable residents of a Nairobi slum to grow their own food. These examples, a handful chosen from many, demonstrate the outcomes of Harvard undergraduates’ projects in developing countries. Youthful idealism is nothing new, but among the generation of students in college today, a desire to change the world combines with facility in traveling abroad and a can-do attitude. The result: no problem is too big, too persistent, or too far from home to confront.

At Harvard, courses and programs have sprung up to provide the academic scaffolding to support students’ bold ideas. One of these, the social-engagement initiative in the department of African and African American studies, will graduate its first seniors this year. Students in this program undertake a service project as an alternative thesis (read about Oluwadara Johnson’s and Sangu Delle’s projects below, and see the sidebar at harvardmag.com/studentsinafrica). Department chair Evelyn Brooks Higginbotham says the initiative embodies the idea that there need not be a strict division between knowledge gathering and knowledge application—that applied learning through service or entrepreneurship can feed back into the classroom. “There is no reason,” she says, “why academic
In Busia, Uganda, a dusty, gritty, border town of 50,000, the main drag is lined with hotels that cater to truckers. At many of these, more than lodging is provided. The HIV infection rate is significantly higher here than elsewhere in Uganda. This is where, in 2002, a former children’s social worker named Ken Mulago opened an orphanage. Dubbed New Hope, it quickly met and surpassed its capacity, doubling up its charges in their narrow bunks. There were children of commercial sex workers, children abandoned or abused by their parents, and children whose parents—sick with HIV or addicted to drugs or drink—were simply unable to care for them.

In 2007, Christopher Higgins ’10 arrived to find New Hope on the precipice. Mulago was able to keep the children fed, clothed, and in school, but just barely. He didn’t take a salary; in bad months, his wife or another relative would bail out the orphanage.

Higgins, a social-studies concentrator and ROTC cadet in Winthrop House, came for what he thought was a one-time visit. (Seduced by friends’ gap-year stories, he’d decided to take a year off from Harvard to travel.) He found New Hope by stumbling on its website; it was, he says, “a leap of faith.” For Mulago, it was the answer to a prayer. “I don’t want to be pessimistic,” he says, “but I think we would have closed if he had not come. The situation was so bad, so bad, so bad.”

Despite the challenges, Higgins found himself charmed by the children and impressed with the way Mulago ran the orphanage, how he taught the children to care for each other and pitch in with chores. Though Higgins continued his trip, spending the first half of 2008 traveling mostly overland from Indonesia to Turkey, his heart was in Busia. In between writing grant proposals, soliciting donations, building a new website, and recruiting volunteers (contacting friends and family from Internet cafés across Asia), Higgins pondered how to set up the orphanage and do good, and cultural expertise—and to potential funders.

As director of the Idea Translation Lab at Harvard—an incubator founded by Edwards and affiliated with the course—W. Hugo Van Vuuren ’07 supports students’ hunch that they can have an impact even before getting their college diplomas. In fact, he advocates a shift from regarding such projects as add-ons to an undergraduate education to viewing them as core components. “Thinking Harvard is just in 02138 undervalues what Harvard can be,” says Van Vuuren, a onetime student in the Idea Translation course. “The truly exciting thing to me is how Harvard people engage with the world. ...And if you agree with the assumption that you learn more by doing, then we should encourage students to act more, to do more, to experience more.”

Harvard College dean Evelynn M. Hammonds is sympathetic to the idea that such international ventures don’t distract but rather enhance a student’s education here in Cambridge. As she reads reports written by students who received Harvard funding to go abroad, she says, “What I’m seeing is the students being very good at taking what they’re learning at Harvard, applying it in a new context, and coming back with different kinds of questions that they will then explore here.”
Age so it wouldn't require external support to stay afloat. In the two years since, he has returned twice and worked with Mulago and the other three orphanage staffers, along with American volunteers (he has recruited more than 20, including several Harvard students), to implement projects that include opening an Internet café (which earns money and serves as a computer school for the orphans); buying a pickup truck that neighbors can rent for a fee; constructing buildings on the orphanage grounds to house pigs and chickens, bred for food and for sale; and planting a sweet-potato crop that, by itself, should fetch a price equal to New Hope’s annual operating costs. In fact, the orphanage expects to have enough income to cover university tuition for its inhabitants as they reach the enrollment age.

New Hope has left reciprocal impressions on Higgins. He plans a senior thesis on trade and foreign-policy links between China and Africa. He picked up some practical skills—figuring out how to buy a load of pigs in Kampala, to take just one example. And there is his relationship with Mulago, whom he calls “incredibly humble, generous, and inspirational”—a friendship based on deep respect for what one man, armed with passion and principles, prepared to work hard, can accomplish.

Finding Sunshine in the Slum

It’s important to be fleet of foot in Kibera. Traversing trash piles, bobbing and weaving along the edges of open sewers, one must take care to step on dry ground whenever possible. Kibera, a section of Nairobi reputed to be Africa’s largest slum—no one really knows, as population estimates range from 300,000 to 1.3 million—is a place even many Kenyans fear to go. Elizabeth Nowak ’10 isn’t entirely sure why. Visiting Kibera last summer to test VertiGrow—a planter designed to take advantage of vertical space so “you don’t have to have a lot of land in order to grow food”—she found the residents friendly and welcoming. Despite the lack of street signs, or even streets, she learned her way around within a few days, hopping nimbly back and forth through the lanes, the sun flashing off her blond hair.

Nowak designed VertiGrow with her classmates Windsor Hanger and Yongtian Tina Tan in the “Idea Translation” course. In Nairobi’s Kibera slum last August, Elizabeth Nowak ’10 worked with residents to build prototypes of VertiGrow, a vertical planter she designed with classmates in a Harvard course.
The course also connected them to Rye Barcott, M.B.A.-M.P.A. ’09, who during his own undergraduate days at the University of North Carolina had founded Carolina for Kibera (CFK), a non-governmental organization (NGO) whose credo is, in his words, “The poor have the solutions to the problems they face.” Barcott agreed to connect Nowak with CFK social workers who could translate for her and make introductions in the community; with funding from the Harvard Initiative for Global Health, she was on her way.

Nowak, a pre-med African studies concentrator in Pforzheimer House who is writing a thesis on technology in the developing world, initially planned to conduct surveys, gathering information for a follow-up visit in January. As she traveled from home to home in the slum’s Gatwekera section, she told people about the planter idea. One day, two women showed up at the Gatwekera clinic looking for her. They said they wanted to get started.

Not wanting to squander this enthusiasm, Nowak hastily reworked her plan. Remembering Barcott’s words, she let the women of Gatwekera decide which materials to use and which seeds to plant. The VertiGrow team still plans a January trip, but now the goal is to follow up on the three planters Nowak left behind with seeds already sprouting. Meanwhile, in Cambridge, they are mulling production and distribution models to determine whether VertiGrow makes more sense as a set of instructions for a product constructed where it will be used, or as a finished product constructed elsewhere and then bought by or donated to people in developing countries.

Nowak was never sure what she would find each day when she arrived at the designated construction sites for the planters in Kibera. But she says her approach of letting the residents take the lead resulted in a product that merges the undergraduates’ ideas with local preferences and customs in a way that something designed wholly in a Harvard classroom never could.

“It’s kind of cool to come in with an idea and see that they’re already doing that, or they have a better idea,” she said one August morning, looking around and surveying the women. One stood cracking rocks with a sledgehammer, hacking them down to a suitable size for use in a planter. Another was extricating garbage from a large pile of dirt that would be used for planting; the garbage would be burned to heat a knife for cutting water-runoff holes in the tough plastic of the planting tubs. In the resourceful fashion typical of Kibera, nothing would go to waste. Said Nowak: “They come up with things I never would have thought of.”

Destination Nollywood

Films are big business in Nigeria. The country’s motion-picture industry ranks third in the world in size, behind only the United States and India. As in India, the industry has earned a play-on-words nickname: Nollywood. So, too, have Nigerian children come to idolize film stars—and Oluwadara Johnson ’10 seeks to channel this idol worship into zeal for education.

Troubled by her country’s social inequalities, Johnson set out to craft a meaningful community-service project. The result was a performing-arts-themed camp for disadvantaged girls, held last summer in her native city, Ibadan. An African American studies concentrator in Quincy House who has produced plays and a student fashion show at Harvard, Johnson chose this approach for its ability to get youths excited about learning. Through play-reading and -writing, the students explored concepts such as plot, character development, and symbolism (while building their facility in reading and writing). Performing prepares them for public speaking; staging a play together gives a chance to practice teamwork.

Johnson had spent the first half of the summer working in asset management for Goldman Sachs. With her savings from that job and a donation from the school where the camp was held (and where her mother is the director), Johnson was able to cover the camp’s $15,000 cost. To select the participants—43 in all, ages 9 to 16—she worked with teachers in public schools to identify girls who excelled academically but were nevertheless in danger of dropping out due to their families’ economic circumstances.
The camp itself lasted just one week; preceding it was a four-week preparatory period in which the girls met twice a week with camp staff for full-day sessions, but went home to sleep. During this time, there were some performing-arts activities, as well as lessons in hygiene and etiquette. Johnson says the preparatory period was necessary to minimize the culture shock of the sleepaway-camp week, which was full of new experiences: many of the girls had never before seen a computer, had never tasted ice cream. Many did not own shoes or know their shoe size. Before buying shoes (the program provided clothing and school supplies), the camp staff had to measure the girls' feet.

With the start of school in September, the teachers and volunteers who had led the camp launched an after-school program, meeting with the girls twice a month. Johnson herself will lead a retreat in December, when she goes home for winter break. She foresees a similar rhythm for her life after graduation: she has already accepted a job offer from Goldman Sachs, and has already made plans to use her vacation time to run the camp next summer.

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David Sengeh ’10 has decided that the most important asset in development work is not experience. Nor is it training in economics, public administration, or medicine. What’s most important for development workers, he says, is humility.

Sengeh spent last summer in his native Sierra Leone, distributing bed nets to prevent malaria, a drain on adult productivity and economic growth as well as on children’s educational achievement. Through GMin, an NGO Sengeh and a high-school friend founded in 2006, he and 10 other young men—four Harvard students or recent graduates among them—distributed 4,000 nets to more than 1,000 households, nearly 9,000 people in all. During the course of the summer, Sengeh estimates that each of them walked 120 miles.

Their results thus far are heartening: a follow-up study of the households that received nets in 2007 found that 93 percent were using them, compared to rates below 50 percent for distribution campaigns by major humanitarian organizations. (Before-and-after numbers for malaria prevalence aren’t yet available.)

How did college students operating on a shoestring—GMin has spent less than $40,000 to date, raised almost entirely through charitable contributions from individuals—figure out how to improve on the models of those with far more experience and deeper pockets? Sengeh believes that those organizations failed to recognize that their strategies weren’t working. Following a UNICEF edict that pregnant women and children under the age of 5 were the most vulnerable groups, programs distributed only enough bed nets for those constituencies, meaning a household of 10 might get just one or two nets.

But in Sierra Leone, respect comes with age, so the best food and nicest sleeping spaces are reserved for adults. The nets were designed to go over beds, but children typically sleep on mats on the floor—meaning the nets were being used to protect parents instead. Sengeh says he heard relief-organization workers berate Sierra Leoneans for relegating their children to the floor. But cultural factors are difficult to change, so GMin’s approach skirted the issue by distributing bed nets to cover every sleeping space in each household, even if that meant reaching fewer households in all.

Sengeh, a biomedical sciences and engineering concentrator in Currier House, is glad to have taken courses that informed his startup projects, which also include distributing and testing microbial fuel cells in South Africa and Namibia, and an advisory role in the Sierra Leone youth center on which Elizabeth Nowak worked. (Sengeh took the Idea Translation course, and considers David Edwards a pivotal mentor.) But he says his work on the ground has been just as pivotal as any classroom experience: “I don’t consider it an extracurricular. It’s a class that’s situated in the world… If you want to learn about global health challenges, you go into the field and do it.”