

HAT DOES LANDSCAPE architecture have to offer mothers trying to free their children from a life of garbage picking in Guatemala City? These families' lives and relationships are fractured by constant stress, their communities offer little support, and their environments are disconnected from nature.

For more than a decade I have been trying

Landscape architecture students design and build a garden for the poorest of the poor. By Daniel Winterbottom, ASLA

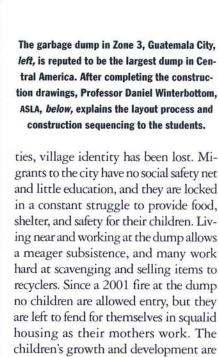
Teaching assistant Kari Stiles, Student ASLA, leads a group of students as they mix a batch of concrete by hand. Students in the background are inspecting the forms prior to the pour.

to answer questions like this one. As both a professional and a teacher with a service learning ethic and therapeutic design goals, I've designed and built projects for communities that are not benefiting from landscape architecture. War-ravaged communities, orphanages, AIDS facilities, garbage dumps, and prisons (see "Working in the Margins," Landscape Architecture, December) are the environments where I've taught and practiced landscape architecture. These places and people have a profound need for beneficial design. The University of Washington landscape architecture design/build studio that I teach tries to meet this need. Our solutions use low-tech, cost-effective, and sustainable materials and methods. This allows our students to learn about local and culturally expressive materials and building traditions.

Our academic design/build studio has partnered with more than 14 nonprofit institutions and nongovernmental organizations (NGOs) to build projects for marginalized communities. As our completed projects become widely known, contacts are made, opening intriguing opportunities, most recently in Bali and Bosnia. We weigh engaging these new projects against continuing partnerships with NGOs and communities we've served. We can effect greater change by further developing these longterm relationships.

In 2004 a challenging project emerged when Malcolm Dole, a graduate of our BLA program, inquired if

our studio would be interested in designing and building a park in Guatemala. He had been introduced to Safe Passage, an NGO that helps the most impoverished children in Guatemala City break the cycle of poverty through education. Safe Passage was expanding its programs to a site close to its client families, who live near and work in the city garbage dump.



The garbage dump in Zone 3, Guatemala City, left, is reputed to be the largest dump in Central America. After completing the construction drawings, Professor Daniel Winterbottom, ASLA, below, explains the layout process and construction sequencing to the students.

With great interest I traveled to Guatemala to evaluate the project. After meeting with the director and visiting the site, I was impressed by the organization and its vision of the landscape as an integral therapeutic component of its program. I agreed to develop a studio around the project.

The Children's Gardens of Hope was conceived by Han-

LANDSCAPES

ley Denning, founder and former executive director of Safe Passage, during a field trip with the children in her Safe Passage school to Antigua, a small colonial city west of Guatemala City, set in a lush valley surrounded by volcanic hills. Denning observed a dra-

matic change as the children rolled in the grass and climbed trees. Children typically withdrawn and lacking motivation displayed unusual curiosity while searching for bugs in the safety and quiet of the gardens. When a donor offered a 1.2-acre site to Safe Passage in 2005, Denning decided the preschool and vocational facility that she was planning would have a parklike setting so the children could play and learn surrounded by nature. Never mind that the site was on top of the former dump (the dump has since moved down the ravine). The surrounding area, also a part of the dump but also decommissioned, is home to squatters, many of whom work in the dump as garbage pickers.

The majority of the families served by Safe Passage fled the highlands of Guatemala in the late 1980s to escape the civil war. Because of their displacement from traditional Mayan villages to urban squatter communi-

grants to the city have no social safety net and little education, and they are locked in a constant struggle to provide food, shelter, and safety for their children. Living near and working at the dump allows a meager subsistence, and many work hard at scavenging and selling items to recyclers. Since a 2001 fire at the dump no children are allowed entry, but they are left to fend for themselves in squalid housing as their mothers work. The children's growth and development are impaired by poor nutrition, water, and air quality as well as inadequate sanitation. Threats to the children include

gang recruitment, robbery, and sex and drug abuse. Corruption at the municipal and national levels ensures that few educational or health care services are reliably provided. Born into this cycle of poverty, children drop out of school and follow their parents' pat-

tern of salvage work at the Guatemala City dump.

The site was on top of the former dump.

N THE SUMMER of 2006 our design/build team—myself, two teaching assistants, and 12 students—left for Guatemala, settling into home stays in Antigua. Over six weeks, we commuted daily like all Safe Passage volunteers to Guatemala City.



WINTERBOTTOM, ASLA, TOP, JUSTIN MARTIN, BOTT

By Elizabeth Umbanhowar, Associate ASLA

rawing details for a seating wall in Auto-CAD is not the same as swinging a pickax to build footings. Nor is rendering a spotless planting plan the same as crouching in wet soil on hands and knees planting avocado trees. Exploring abstract forms for a classroom

exercise is not the same as meeting the needs of the poor and disenfranchised. That may be self-evident, but not necessarily to the novice student.

Prior to coming back to school, I worked as an administrator in the nonprofit arts and environmental education community. My return to school, and specifically to landscape architecture, was rooted in my desire to merge my studies with my experience in applied design activism founded on knowledge of art, ecology, and community. I had just completed my second year of landscape architecture. Now I was to join my classmates in designing and building an entry garden for a newly constructed elementary school.

I arrived at the Guatemala City airport past midnight, disoriented, exhausted, and not knowing what to expect in the next two months. Many of

us had never traveled to Central America, much less participated in a project of this nature and scope. No academic exercise could have prepared us for what lay ahead.

Our preliminary investigations of our "site" were a heartbreaking introduction to the brutal environment of a neighborhood adjacent to the municipal landfill in Guatemala City. Most of the residents—our clients—were indigenous Mayans who had fled the countryside during the war in the 1980s. They make their living from picking trash. At regular intervals throughout the day, small mountains of refuse exit the landfill gates balanced on the backs or shoulders of workers barely visible beneath their loads.

Outside the high walls of the project compound, streets were lined with shacks patched together with corrugated metal, cardboard, and other salvaged materials. Inside these hovels, social workers introduced us to malnourished children and adults old before their time huddled in dark, windowless rooms with dirt floors, rickety tables, filthy beds shared by multiple relatives, and skeletal chickens pecking at fleas and bedbugs.

These were the site conditions and this was our classroom. We had one week to design the garden and five weeks to complete construction. But how to begin? Certainly, our process could be informed by previous course work in materials and methods, grading and drainage, and large-scale construction. But this wasn't a

Elizabeth Umbanhowar,
Associate ASLA, works at the project site.

mere abstraction for a letter grade. This was real. How could we address the needs of real people struggling to survive?

Through translators, we spoke with mothers and children about the garden. Preconceptions rooted in our nascent design aesthetic had to be laid aside; we were surprised by their pride. humor, and hope. We sat at child-sized picnic tables at the school, drawing frantically, tearing through rolls of trace, confronted by moments of hysterical laughter and pensive silence, late evenings and early mornings, and excruciating waits for a single bathroom. At the end of our first week, four groups presented proposals to Safe Passage's board and staff. The reviewers ultimately chose elements from each submission, including a brick plaza, a vegetated arbor with porch swings, seating walls, planting beds, a discovery play space, and a formal threshold to the extant soccer field.

In a single weekend, we drew up our con-

struction document set, delivered the plans Monday morning, and returned to the job site, poised to start the construction phase.

When the physical work finally began, it was backbreaking—we worked long days with blistered hands and fierce sunburn. Tying rebar, transporting 80-pound bags of cement, hauling wheelbarrows full of sand and gravel, and mixing and shoveling wet concrete strained even the hardiest. With shovels and pickaxes we dug footings for arbor columns and graded, excavating

through hardpan and into the "archaeological" layers of garbage in this now inactive portion of the dump where medical, chemical, and sewage waste alike were strewn. We became inured to the stench of garbage, the acrid smoke of burning plastics, and the mysterious oozings uncovered by our excavations, as well as the circling of ever-present vultures in the skies overhead.

Often the materials we specified in our construction documents were not those that we received. Lumber was sized incorrectly, too green, too warped, and always treated with palpable arsenic. Faulty hardware twisted and broke in the wood members like melting chocolate. The handles of shovels and pickaxes split inexplicably. Paint washed away in the rain. Seemingly on a whim, our clients changed their minds about the color, the size, or the materials of a bench, a gate, an ornamental element. We

quickly learned the value of flexibility, resourcefulness, and common sense. Cuts and bruises, insect bites and rashes, stomach ailments, and minor arguments were part of our regular diet, along with a daily serving of tamales, guacamole, beans, and rice.

It was a bittersweet moment when the children finally entered the completed project. Their squeals of delight attested to the fact that we had created something worthwhile. But would our work make a difference in the lives of these children? We couldn't answer. But we did know that the gap between purely academic learning and hands-on service learning had been bridged. The connections between thinking and doing, between abstraction and reality, between design and site, between "community" as a catchword and community as real people, were rendered transparent. Such an experience could not help but affect the rest of our education and the professional choices that lie ahead of us.

LANDSCAPES OF COMPASSION

Arriving at the walled, decommissioned dump site, we found the preschool for 150 children was nearly complete. Construction had begun on facilities for bread making, carpentry, and ornamental iron work for the older vocational students. Our group would design and build the site entry, the area linking the two buildings and the children's gardens.

Social workers guided us on home visits to families of children in Safe Passage programs. We saw houses made of pallets, tin, and tarps with no electricity or plumbing. We learned how a revolving team of Safe Passage volunteers kept each child on track in school with tutoring and material support (which can include school uniforms, books, lunch, clothes for those who need them, and food and compensation for the family for the lost income from their children). In Antigua, we looked at churches, public buildings, and gardens to take in the vernacular use of materials, design, and spatial relationships.

On day three we held a design workshop in the neighborhood with parents, children, teachers, and care providers and gave an overview of the play garden concept. We developed discussion points for three focus groups with the adults and one with the children. Children were encouraged to draw and find pictures in their favorite books to stimulate ideas. The mothers were enthusiastic. Their experience of playgrounds was limited to crumbling concrete and asphalt pads with monkey bars and a tetherball. Many of the mothers

came from rural villages lush with plants, and they saw in the play garden a chance to recapture these experiences and share them with their children.

The discussions helped the team to es-

PROJECT SELECTION AND DEVELOP-

MENT: Project selection takes one to two years, and the first step is building a partnership with a community in need and identifying a primary point person with a clear, shared vision of the project and with the tenacity to see it through. We establish a general scope, a time frame for decision making, and a budget. With international partners

we meet with the university's Office of International Studies to review the project in light of their guidelines for medical requirements, accommodations, supervision, and budget. Students are recruited using posters, brochures, and Internet postings sent to all the landscape architecture departments in North

America as well as selected architecture and fine art programs. Candidates submit an application with proof of insurance, and in a competitive process, 12 to 14 students are selected.

FUNDING: In our academic projects we ask the nonprofit partner to cover the cost of materials and the students' transportation to the job site in the country. The program fees paid by the students cover teacher and assistant salaries, room and board for the teaching assistants and some of the teachers, and educational field trips. Students pay travel costs to and from the project city or country. If my design is professional pro bono, the partner also covers room and board and transportation for the whole team and compensates the team for construction labor, which is much lower than what a contractor would charge. The Guatemala project cost \$60,000.

Grant sources include small foundations, which support international and domestic humanitarian aid projects. Rotary International and Catholic Charities, for example, offer modest grants for social justice, child welfare, and health-focused projects. NAFTA provided funding for an earlier project built in Mexico, and we worked with our nonprofit partner to obtain this large grant (see "Building to Learn," Landscape Architecture, April 2003).

Donations from local design firms and from University of Washington alumni and parents of alumni and students currently participating in the project provide a significant portion of funding for our academic international projects. This reflects

strong support for the design/build pedagogy and its ecological and humanitarian goals. We follow up with donors and other supporters via newsletters and post-project presentations to acknowledge and request support.

Nonprofit partnerships can share the responsibility for raising funds. This relationship allows partners to tailor their proposals to their expert-

Guidelines

For Working

With Marginal

Communities

ise, reducing the amount each must raise. Nonprofits have their own donor bases, and we often support their fund-raising campaigns with project presentations.

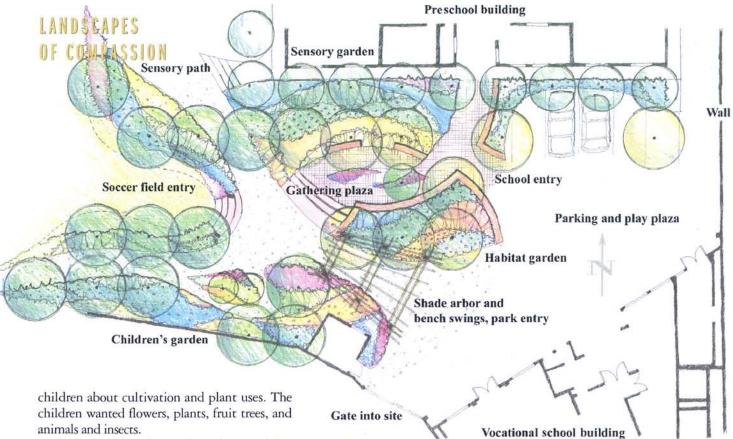
BUDGET, SCHEDULE, COMMU-**NICATIONS:** The nonprofit partner is

asked to set up a project oversight committee, establish a point person for timely decision making, designate a community liaison and a project treasurer, establish and maintain site security, and if possible, hire a local contractor as an adviser. Prior to our arrival we assess sources and delivery of materials to the project site. Working in marginalized environments with modest resources, short time lines, uncertain regulatory procedures, and erratic suppliers and subcontractors, we need to locate multiple sources of materials, labor, and specialty service suppliers as backups. We establish a trustworthy network of local individuals who can assist in solving unexpected issues, navigate the local politics, and facilitate business transactions. In the highlands of central Mexico, the nonprofit partner neglected to tell the local mayor that the project was about to begin. The mayor believed he was entitled to a financial share of the funding, and he put a stop to the project until the situation could be resolved. A week and a half of the nine-week schedule was lost and had to be made up with 12-hour workdays.

LONG-TERM COMMITMENT: After years of committing to single-phase projects, I look for opportunities offering multiple phases with a longterm commitment from the nonprofit partner. Every additional phase is an amortization of time spent in project development. Long-term commitment builds deeper bonds with both the partnering organizations and the local community.

tablish programmatic goals. Similar to all school communities, parents, teachers, and children wanted safety and security, a variety of play elements, and places to gather. But access to nature, so profoundly missing

in their lives, was what they most valued. Mothers wanted abundant vegetation, shady places to sit, lots of colorful flowers and butterflies, and familiar plants. They wanted places to raise food and teach their



By the end of the first week we developed five distinct designs that we presented to the design advisory committee and synthesized into the final site plan. It featured two main components: an oval paved plaza at the entrance to the preschool, enclosed by curved seat walls, and mounded sensory and habitat gardens with shade trees and

An illustrative final plan shows the entry garden, above. Professor Winterbottom, rear center, works with students to frame the shade arbor, below, which will support a variety of flowering vines.

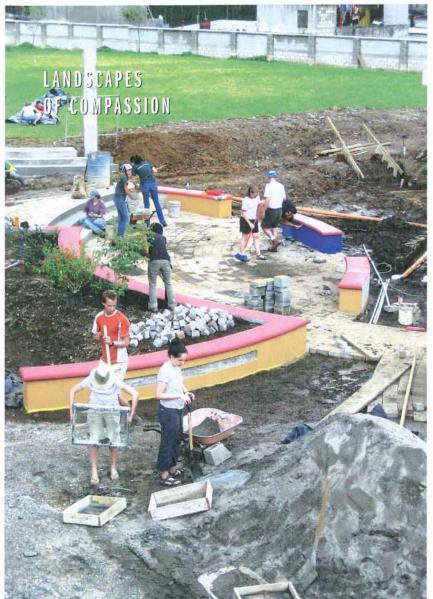
flowering shrubs that attract hummingbirds, butterflies, and other insects. The plaza, a place for mothers to socialize while waiting for their children, functions as an outdoor classroom and as a collection point mediating the transition of activities between the preschool and the rest of the

> park. It accommodates school celebrations and recreation such as tricycling, court sports, and jump rope.

> A long, broad arbor leads visitors from the security gate at the street into the park. Planted with flowering vines, the arbor supports family-sized swing benches. The colonnade form, with its sense of procession, recalls traditional Spanish-style courtyards. Embedded tiles on the concrete columns depict creatures found in the gardens and are labeled in both Spanish and English for use in science and language classes. North of the arbor lies a small children's exploratory garden featuring paths, climbing rocks, a wiggle bridge, and an interactive sound wall. A gateway and garden aligned with the main arbor create a formal entry into the soccer field.

We drew the construction documents a layout, grading and planting plans, and three sheets of details—in just four days.





The plaza, a place for mothers to socialize while waiting for their children, functions as an outdoor classroom.

well, sharing vernacular building techniques and donating labor during large concrete pours and when torrential downpours threatened.

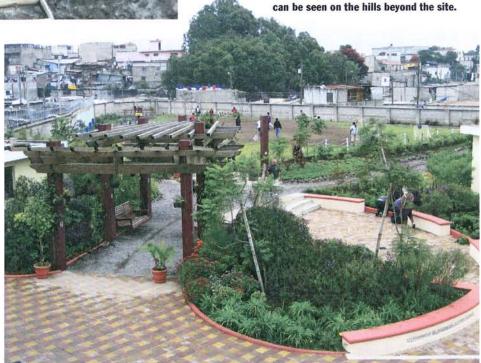
We did virtually everything by hand. We had a concrete mixer on site, but it broke after half an hour; it took two days to get the bolts to repair it but it broke again two hours later, at which point we abandoned it and went back to our tried and true method of hand mixing. Excavation was arduous, and even though the site was supposed to be capped we often turned up plastic bags and pockets of unknown fluids. We hand mixed all our concrete in large piles and poured it into our forms from wheelbarrows or buckets.

Those students with construction experience (about half) were distributed among eight building teams. The more advanced students and I taught the inexperienced students. They picked up the skills quickly, and all participated fully in all phases of the construction. Many took on tasks such as tiling after a demonstration I gave.

Students sift sand to complete the paving of the gathering plaza, left. In the completed gardens a year later, below, children can be seen playing on the soccer field beyond the shade arbor. Some of the squatter housing

We didn't write specifications because the project didn't go out to bid, and many of the materials we were familiar with in the United States are not available in Guatemala anyway.

With just four and a half weeks to build, we needed to be efficient with our time and with getting materials. We formed an invaluable partnership with a local contractor. He was building the preschool and vocational school and had a crew of about 10. He shared expertise in vernacular building techniques and recommended reliable subcontractors who located and delivered most of the building materials, consulted on drainage systems and installed them, and taught the students and worked with them to complete the concrete finishing. Some of the contractor's men worked with our team as



LANDSCAPES OF COMPASSION





The contractor also worked with several of the teams to demonstrate techniques. I'd have to say that by the end of the studio, all had a greater understanding of the construction process through their participation than they would have during a quarter of classroom lectures.

Two-thirds of the studio participants were female, and it quickly became evident that

University of Washington student Justin Martin works with Safe Passage children to build a bench swing, above left. Children gather on the newly installed bench swing, above right, one of the most popular elements in the gardens. The motion of the swing tends to calm children, and UW uses

it as a calming element in almost all of its therapeutic garden projects.

the male construction crew at work on the vocational school was not used to women on the job site. After some staring and catcalls in Spanish, we explained our project to them and asked them to show us their craft. Over time we broke down the barriers, culminating with joint soccer matches and the establishment of mutual respect.

The wall team learned that curved seat

walls are easy and elegant to draw, but tricky to build. They designed their forms of plywood and two-by-fours to be reused in successive pours. The longest seat wall was 40 feet long. The team detailed a bullnose cap using half rounds of four-inch-diameter PVC pipe. Knockouts were placed in the walls for embedding artisan tiles. Local maestros showed us their troweling techniques to get a fine and smooth final skim coat. The team used cut soda bottles and plastic tape to finish the bullnose. Excavation, forming, pouring, and stripping the forms took two weeks. After curing, the cap was painted red and the wall painted yellow with tiles in blue and white.

Teams of children enrolled in Safe Passage programs helped take apart the forms after the concrete pours and moved soil to create the topography as a part of their vocational program. In the last three days the site was dramatically transformed when four truckloads of compost were brought in to amend the existing soil and we planted more than 700 perennials, shrubs, and trees.

Design to solve community needs, not to express yourself. We try not to let our personal expression take over the project. We also avoid extravagant use of materials and

resources. For those living in marginal conditions, high project expenditures could mean less can be built and fewer people can be served. At the same time, well-crafted materials are highly valued, and the project's durability will ensure both good

stewardship and confidence in the nonprofit partner.

Take advantage of low-tech systems and green technologies. These are appropriate for impoverished communities because they require fewer resources and are easily understood and maintained. Remember that the design needs to stay responsive to changes in availability of materials, equipment, and conditions as they unfold on site. Incorporate participation and build stewardship. In our work with marginalized communities, the participatory design

process provides a forum where the needs of the community are expressed through an open dialogue. Multiple sessions may be needed to achieve a level of comfort and pro-

Tips for Student

Teams Working

With Impoverished

Communities

ductivity with the community, and the nonprofit partner is critical to this process, as it has already established trust and acceptance with the community. The use of observation, quick sketches, models, and mocking up the project in

the field can be used to overcome language limitations.

 Clearly articulate and agree on the roles and responsibilities of the clients, the community, and the design team prior to beginning the project. Many of our clients have little experience in design or construction and are not used to a schedule defined by an academic calendar. The schedule ranges from nine weeks during the academic quarter to five or six weeks during the summer quarter, and decision-related delays can adversely affect the schedule.

LANDSCAPES OF COMPASSION

T THE DEDICATION, we watched 40 of the local and Safe Passage children testdrive the final product. They rushed into their new park, piled onto the porch swings, danced across the wiggle walk, and ran across the new soccer field to roll down its sloping sides. Mothers saw their children playing and reached out to our students to express their deep gratitude. For the exhausted students, it validated their efforts. For me, this project reinforced my commitment to the design/build process as a significant service learning model.

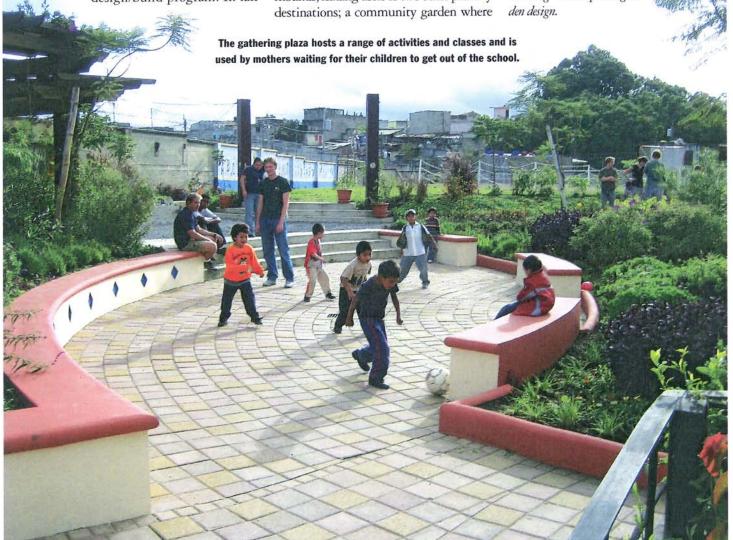
This project represents the first of five phases of partnership between Safe Passage and the University of Washington design/build program. In fall

For me, this project reinforced my commitment to the design/build process as a significant service learning model.

2007 we returned to design and build an adventure play area located behind the preschool. Small gardens, trees, and water will be integrated into the play area, which will offer a place for creative exploration. Additional phases will include an exploratory path that will weave its way around the field and through gardens, trees, and climbing mounds, leading users to two other primary mothers can socialize while cultivating fresh produce to increase the nutritional value of their diets; and an outdoor classroom where the schoolchildren can come and learn while immersed in nature. Passive play elements including a gathering pavilion and ethnobotanical gardens will facilitate learning.

The Children's Gardens of Hope represent a small part of an effort to solve a complex situation. Though small, the park is an important component of a broader holistic approach, where change through education can break the dependence on garbage picking and college becomes an option for some in the next generation.

Daniel Winterbottom, ASLA, is an associate professor at the University of Washington and principal in Winterbottom Design Inc., a landscape architecture and planning firm specializing in therapeutic garden design.





A nontraditional approach to the practice of landscape architecture creates a muchneeded playground in a women's prison.

By Daniel Winterbottom, ASLA

EOPLE LIVING in marginal conditions who are desperate for financial, political, educational, and medical support need strong, determined advocates to be heard in the greater social arena. Designing spaces and natural systems that help these communities can be a compelling opportunity for landscape architects. As both a professional and a teacher with a service-learning ethic and therapeutic design goals, I've designed and built projects for communities with a focus on the transforming potential of community landscapes.

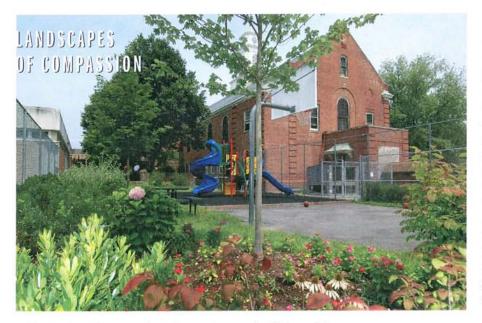
I've taught and practiced landscape architecture in war-ravaged communities, prisons, orphanages, AIDS facilities, and garbage dumps. Despite difficulties with planning and implemen-

tation, the results are effective and meaningful. Two projects, a mother/child garden situated in a maximum security state prison and a park built upon a reclaimed garbage dump (appearing in next month's Landscape Architecture), are particularly instructive.



from the patio, top, shows the play structure, above, for

the older children, serpentine perennial border, shade trees, and picnic tables.

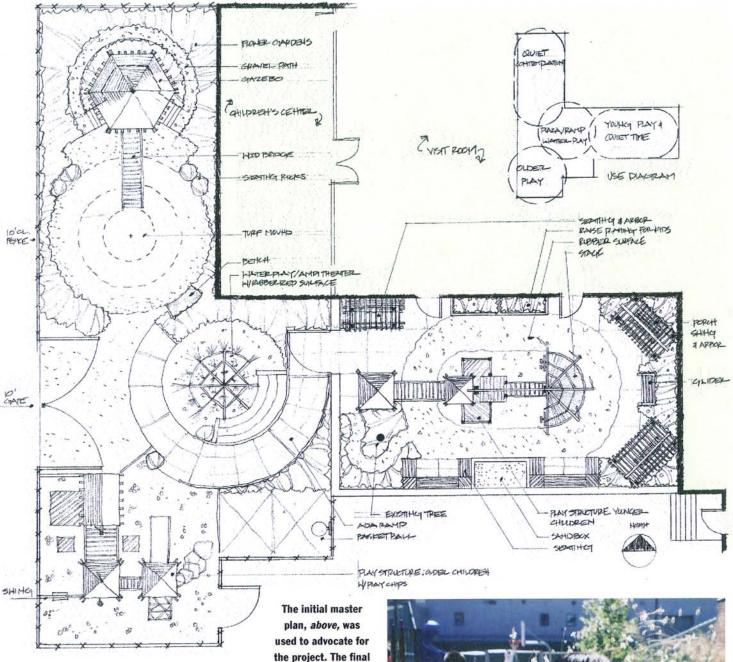


In its service-learning aspect, the University of Washington landscape architecture design/build studio, which I teach, partners with other service organizations: neighborhood and community groups and nongovernmental organizations. For models we look to Peace Corps and Earth Corps projects, where volunteers immerse themselves in a community to understand its needs and work together to find solutions that use low-tech, cost-effective, and sustainable materials and methods. This allows students to learn about local and culturally expressive materials and building traditions. When our students are immersed in a new culture, they are invigorated to think outside the box and be more open and creative in their design ideas.

In both, the clients are largely mothers and children. The prison project involves incarcerated mothers in a mother/child program within a state correctional facility. Their lives and relationships are fractured by constant stress, their communities offer little support, and their environments are disconnected from nature.

The vegetated perennial border, above, and shade trees offer mothers a place to relax in the shade surrounded by flowers as their children play on the basket-ball court or play structure. Lush plantings such as oak leaf hydrangea and Japanese anemone surround structures. Mothers can cuddle and relax with their children on the porch swings suspended from the arbors, below, or watch their younger children play on the small play structure centered in the space.





design was an edited

version. A mother

and child use the

garden, right.

Students who sign up for design/build service-learning projects value the direct experience of another culture and want their work to make a difference in people's lives. They see applied learning as a

concrete and meaningful expression of their compassion for marginal communities. Some nearing graduation hope the experience will help open up career opportunities in developing countries.

Service learning is a growing teaching model used in many schools and colleges throughout the country. Devised so that students learn as they offer service to their community, many of the beneficiaries include those at the margins of the community. Examples include residents of senior centers and nursing homes, those suffering from AIDS/HIV, youth at risk, and



LANDSCAPES OF COMPASSION

immigrants struggling to learn English. Many schools now offer international service-learning programs through which students work with impoverished communities abroad to improve the water quality, restore native habitats, increase ecological lit-

eracy among the youth, and improve

health conditions.

A Student's Experience

BY AMY LINDEMUTH, ASSOCIATE ASLA

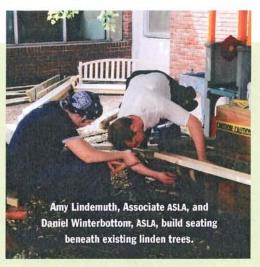
S A STUDENT VOLUNTEER for Daniel Winterbottom's design/build project at Bedford Hills Correctional Facility (BHCF), I used my experience on the project as a case study for my master's thesis. I had started my thesis design work with a correctional facility in Washington state for mentally ill male offenders. Administrative staff were interested in developing a garden with therapeutic elements for use by staff and inmates, yet they had not seen any examples of existing gardens in correctional facilities. They were understandably reluctant to support elements commonly associated with gardens (such as plants larger than 24 inches, hoses, structures, and meandering paths) in an environment focused on surveillance, security, and control. The BHCF Children's Garden would provide one example of how a garden can contain these features and be properly managed within a security setting.

The hamlet of Bedford Hills is tucked into lush, hilly terrain off the Saw Mill Parkway and features old-time diners, hardware stores, and ice cream shops along its commercial streets. BHCF feels equally tucked away a few miles outside town. The complex comes into view at a bend in the road, the first sight being a vast parking lot for staff and visitors with two 10foot chain-link fences topped with razor wire beyond and brick prison buildings climbing a small knoll. I had spent time in several Washington state facilities during the previous four months, so I was familiar with admittance procedures and had some idea of what I might see inside. Yet the tenor of each correctional facility is different depending on its history and the disposition of the current administration. In hindsight, I realize that while the procedures and culture of the prison became familiar, if disconcerting, my interactions with those working and living in corrections environments often surprised me and challenged my expectations.

Project Case Study: Mother/Child Garden At a Correctional Facility

Our work designing and building therapeutic gardens at Incarnation Children's Center (ICC) (see "Building to Learn, Part II," Landscape Architecture, April 2003) for children with HIV/AIDS launched our prison project at Bedford Hills Correctional Facility in Bedford Hills, New York. We had our choice of a homeless

> shelter for men battling substance abuse, a foster home for teenagers, and



Originally, our design/build group was scheduled to work with inmates who work as staff at the Children's Center to review and revise our design for the Children's Garden. We had hoped that the prison's horticulture program, also staffed by inmates, would be interested and involved in our project. In reality, the "community involvement" portion of our project would not be this straightforward. As in other communities, internal politics, historical precedents, and local personalities affect what will and will not occur within a prison. In the end, we did not coordinate our work with the horticulture program, which appeared to show little interest in our project. While we were able to discuss the garden design and materials with a few inmate staffers from the Children's Center, we received little input other than a desire to use wood rather than concrete, a ubiquitous material in corrections settings.

Instead, we learned about the day-to-day experience at BHCF in other, unanticipated ways. Our project was located in a courtyard adjacent to the visitors' room, a large space reminiscent of a school cafeteria with vending machines and an officer's station at one end and a children's playroom at the other. Visiting hours began each day around 9:00 AM and ended at 3:30 PM, with most visitors making the twoplus hour trip from New York's boroughs on Saturdays. We set to work building arbors, planting beds, and swings, trying not to gape at the small heartbreaks happening a few feet from our project site throughout the day. Couples sat by the windows all day, embracing, engrossed in each other, occasionally watching our work. Mothers brought children to the windows to watch our progress. For these few hours each day, we were engaged in the intimate moments of strangers' lives, realizing this room encapsulated all the time and space they shared with one another. Our project site would be the only view of nature they would ever share together during the inmate's incarceration.

On the second-to-last day, we filled our planting beds with newly arrived trees, flowering shrubs, grasses, and herbs. For me, the plants transformed the site, and this feeling was validated when officers filtered out of the visitors' room to enjoy the view from the arbor swings. While all acknowledged the garden's importance for inmates' children, several officers expressed concerns during our work that we were providing an undeserved amenity for inmates and additional work for them in monitoring hiding places for contraband. Yet I hoped they would eventually appreciate the garden and see that it provided a space for more good than harm.

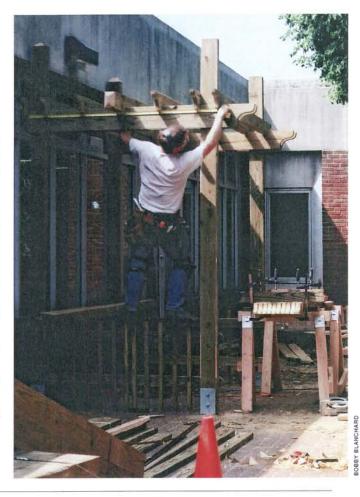
Two years have passed. Although I still believe working for marginalized populations is one of the most important tasks we can perform as landscape architects, projects like the Children's Garden are difficult commitments for full-time designers. Those most in need have little to no funding for our services. Designers must volunteer their time to work on these projects unless their firm provides pro bono services for one or two projects a year. Volunteering is a commitment that is difficult for most, but when the time and resources can be committed, these projects can be great opportunities for developing the skills and potential of young designers and also remind us about the potential our profession has to deeply and positively affect the lives of others.

LANDSCAPES OF COMPASSION

the children's program at Bedford Hills Correctional Facility. The mother/child garden was the most compelling of the three projects because of the unique chance to work in a maximum security prison environment and particularly with an innovative program to reestablish relationships between incarcerated mothers and their children. Funds were already being raised to convert a paved patio adjoining the visitors' room into a garden/play area for the mother/child program. I made a presentation on our design/build studio to the inmates, the correctional officers, and the superintendent. Our talks established the compatibility of our missions, the superintendent's commitment to a therapeutic garden, and the eagerness of the inmates to participate. Their trust in the quality of our design/build

projects and in our willingness to listen and respond to diverse viewpoints moved the project forward.

The Children's Center is one of the most innovative prison programs in the U.S. correctional system. The Summer Program, one of many offered through the center, allows children to be hosted for two weeks by families near Bedford Hills and spend most of their days at the correctional facility visiting their Constructing the space was the job of the design/build team. Student Zachary Thomas framed the arbor, right. **Author Daniel Winter**bottom, ASLA, worked on assembling the arbor, opposite.





A focus group was held, and about 10 women discussed how they used the space and what they wanted to see in the garden.

mothers and joining in group activities. Their outdoor venue was an enclosed brick courtyard with three large linden trees and a 4,000square-foot lawn, the entire site visually open to the visitors' center. It was a very hard space, all paved with no seating. The trees didn't allow any sun to enter.

After months of negotiating for students to work in a secure facility and advertising for the studio, I had to cancel due to inadequate enrollment. Bear in mind that students must commit to either a quarter (10 weeks) or, in the summer, a truncated quarter of 6 to 7 weeks and have the physical stamina and the interest level necessary.

The disappointment at Bedford Hills, particularly of the inmates whose lives are marked by failures of commitment, weighed so heavily that I took the project design pro bono during the summer and formed a team consisting of one alumnus and three students. The team members did not get any academic credit, but they did get paid. Bedford Hills funds would compensate travel, lodging, and two weeks of our construction labor. One of the students, Amy Lindemuth, Associate ASLA, volunteered since her thesis was focused on a prison project (see "A Student's Experience," page 42).

LANDSCAPES OF COMPASSION

We traveled to New York in July 2005. Our usual participatory design process was truncated to two meetings, one with the Children's Center inmate mothers, many of whom showed up for the initial presentation on our work. Then a focus group was held, and about 10 women discussed how they used the space and what they wanted to see in the garden. Staff and administrators added their ideas, concerns, and needs. It was affirming to see the level of compassion among the staff and hear the officers' enthusiasm for the project. A few of the officers felt that the facility was an inappropriate environment for the children to visit the parents and disapproved of providing any "amenities" like the garden. But the administrators and most of the correctional officers appreciated the garden for its calming qualities, for the relief of boredom among the inmates, and

as a place of healthy exchange between mothers and their children. The following requests emerged:

- Vegetation to define and soften the
 - Support for physical play activities
 - Lots of seating in shaded spots
- A place for mothers to spend private time with their children
- · A sense of seasonal change, lots of flowers, and color
 - Swings with a gentle movement
 - Ways to attract birds
 - Clear site lines throughout
 - No places to hide drugs or weapons

Although we were unable to meet the children, we used our experience with distressed children at ICC to inform our design, particularly in the balance of public and private spaces and in the use of butterfly gardens and bench swings. (At ICC and other projects we had learned that gentle rocking is a strategy for calming anxious or hyperactive children.)

I returned to Seattle and did the design. I sent PDFs to the staff at the prison for input. The students/alum gave some input into the final design and the construction

The design was reviewed at a second meeting by the participants, warden, and head correctional officer, and minor modifications were made. With completed design and construction documents, our team traveled to Bedford Hills in the summer of 2005 for the two weeks of implementation. We were unable to include the inmates in the construction process because shortly before our arrival, all vocational programs were cut.

In building a garden within a maximum security prison, I anticipated more impediments than I found. The waits at the entry gate varied day to day depending on unexpected situations on the inside, the particular officer on duty, and shift breaks. Some days the truck was thoroughly searched and other days only the hood was lifted. Once we understood the rules and shift changes and the officers got to know us, we were able to enter and work within a reasonably reliable schedule. Managing the project required exactitude to move within the facility and account for tools, and we minimized runs to the hardware store and coffee shop. Working near the visitors' room brought us daily insights into the pain, frustration, and sorrow that define so much of incarceration.

The rectangular site was expanded to the west and refenced to incorporate an open lawn area with serpentine beds of perennials and ornamental grasses. The users are surrounded by plantings on three sides. At a further distance from the commotion of the visitors' center, families can relax and explore the sights, sounds, and smells of the garden. Several picnic tables are placed within plantings of flowering shrubs in the shade of sugar maples. For the older children, a larger play structure and a youth basketball court were installed. An 8-by-10-foot planter with large grasses marks the passage from patio to open space and enhances the depth of field on this relatively small site. The garden offers a lot of value in a small space,

The correctional officers noted how much they liked it and felt it was good for the inmates, and the mothers in the program raved about it.

giving parent and child a choice of places to visit and ways to comfort each other outside the harsh environment of the institution.

The feedback is that the kids absolutely love it and spend much more time outside since the garden was built. Keep in mind that there was very little for them to do prior to this transformation! The correctional officers noted how much they liked it and felt it was good for the inmates, and the mothers in the program raved about it and want to know when I'll come back to do another one.

The ability to complete this project was firmly based in advocacy, persistence, and the building of constituencies and partnerships. The mutual support of the director of the Children's Center, the chief and deputy

superintendents, and the head corrections officer was pivotal to the state board of corrections permitting all the logistics of implementation. During the one and a half years that this project was planned and carried out, all the original participants held their positions, which is unusual in a state prison and was critical to the realization of the project. Opportunities for project evaluation are limited due to restricted access. A visit for observation and discussion of an additional project in the facility was held in the summer of 2007.

Daniel Winterbottom, ASLA, is an associate professor at the University of Washington and principal in Winterbottom Design Inc., a landscape architecture and planning firm specializing in therapeutic garden design.