The infrastructure of cities is frozen policy: the undeniable physical trace of political decisions about investment and disinvestment. Nowhere is this more obvious in America than in the physical and pedagogical condition of public schools in poor, urban neighborhoods—particularly in communities of color. Whether measured by physical disrepair (antiquated buildings, unsafe playgrounds, short-ages of equipment and technology), or educational disappointments (low test scores, high dropout rates, poor preparation for a postindustrial economy), these schools often fall far short of democratic ideals for learning and community life, and are consequently condemned as “failed” institutions.

Current efforts at urban school reform focus relentlessly on standardized testing and the struggle to build new facilities. However, money is lacking for both efforts: the former is mandated by the underfunded federal 2002 “No Child Left Behind” legislation; the latter must rely on cash-strapped local and state governments. Both strategies are also missing a crucial dimension: the potential to build working relationships among schools and the concentric rings of resources around them—not only within their immediate communities, but within a broader surrounding infrastructure of museums, parks, libraries, cultural centers, schools of higher education, and mentoring and employment opportunities.

Architects, urban designers, and urban planners have a critical role to play in the reconstruction of urban public education. However, they must reframe the task to reach beyond the individual “failed” school building. An evolving proposal for school design, educational reform, and community development in a low-income African-American neighborhood in Washington, D.C., may serve as a promising model.

As an example, the University of Michigan’s New American School Design Project developed an expansive concept for a comprehensive pre-K through postsecondary educational campus fully integrated with its community and firmly anchored to the District’s rich institutional resources. In this model, public schools become crossing points in a web of community and institutional connections, strengthening the larger context for learning, and allowing the schools to serve as catalysts for urban revitalization and place-making.

A Project’s Evolution

The original target of NASDP’s inquiry was the Phelps Vocational High School, a once-venerable institution whose status had receded as its shops, equipment and training had become increasingly obsolescent. For the last decade, NASDP has worked with schools and school systems across the country developing a number of programs and design concepts that reflect “small school,” “career academy,” and “neighborhood for learning” initiatives—as well as constructivist pedagogy derived from ongoing cognitive research and learning theory. Out of this synthesis has emerged its “City of Learning” strategy.

The City of Learning looks within the school for curricular and physical change, but also beyond the school to the larger contexts of the cities in which they are located. Educators from John Dewey to Howard Gardner have identified such an approach as critical to educational success. City of Learning stretches the effective boundaries of the schoolyard to include active engagement with the immediate neighborhood and important institutions citywide, with significant implications for the programming and physical form of both schools and their surroundings.

DCPS was initially very hospitable to the City of Learning conversation about both site and pedagogy at Phelps. Although a set of educational specifications and space needs had already been developed by an architecture firm as a basis for rebuilding its traditional vocational programs, the facilities director at DCPS saw an opportunity for a new mode of thinking that went beyond the building’s footprint. The director of the district’s Office of Career and Technical Education and School-to-Career program also saw the potential to demonstrate a new educational prototype—one that might break down hidebound distinctions between “manual” and “intellectual” tracks, incorporate effective hands-on learning for all students, and initiate “career pathways” from the earliest grades. Rechristened the “Hilltop” as the City of Learning analysis unfolded, Phelps’ larger site and its boundaries were eventually renegotiated, as the potential for coordinating capital projects, comprehensive curriculum development, and institutional and cross-agency relationships became apparent.

NASDP found the physical outlines of such an ambitious project already inscribed in the landscape. Phelps is one of an ensemble of four public schools built between 1930 and 1950 at the intersection of Benning Road (one of Washington’s major east-west connectors) and 26th Street (a cross-street connecting blocks of row houses and garden apartments to the site’s north and south). From
26th Street, the neo-Georgian school buildings form a dramatic colonnaded cluster across the hillside that suggests a unified campus—even if Phelps and the elementary, junior high, and senior academic high schools are all currently administered separately.

Unfortunately, the condition of all the buildings was typical of long-term disinvestment. They were badly ventilated, unevenly lit, and susceptible to falling plaster. Their equipment was obsolete; computer access was rationed; and their sparse outdoor play space was empty after school. Moreover, all the schools turn their backs to nearby residential areas. Neighbors are instead greeted by a steam-plant smokestack, an abandoned greenhouse with a tree growing through its shattered roof, and corrugated-iron truck-bay doors riddled with bullet holes. Lastly, each individual school is fenced off from the others, creating disconnected zones of un- or underutilized space punctuated by parking lots.

Seen in another light, however, the schools and their grounds constitute a spectacular, but otherwise unoccupied, 45-acre site on a major commercial corridor, overlooking a rolling public golf course and D.C.’s “other” river, the Anacostia. Furthermore, the NASDP team discovered in the course of interviewing teachers, administrators, students and neighbors that ideas for academic and programmatic coordination among the four schools were not new—although little progress had ever been made toward implementation. Nor was the idea of a physically defined campus new, even if its primary design aim had so far largely been cast as a matter of defensible space. Indeed, the first suggestion from a local District of Columbia Board of Education member was to ring the site with a wrought-iron fence to help carve a safe zone out of the area’s problematic streets.

Considering such views, it soon became clear that NASDP’s biggest challenge would not be to expand the bounds of the site beyond Phelps, but to enlarge what could be imagined there by all the Hilltop’s constituents, and then give form to that vision.

Community and Institutional Contexts

As research continued, it became increasingly evident just how strategic a position the Hilltop occupies. In addition to its access to Benning Road, it is surrounded by such destinations as Robert F. Kennedy Stadium, current home for the city’s baseball and soccer teams; the National Arboretum, a federal research facility with lush grounds open to the public (but whose nearby entrance is blocked by concrete barriers); and the Langston Golf Course, a National Park Service property whose clubhouse serves as a formal and informal community meeting space. Hilltop also sits in a marginal space between two zones of social and economic transition. It lies east of the rapidly gentrifying Capitol Hill neighborhood, and west (across the river) from the Anacostia community. The latter has long been considered D.C.’s most “hard-core” ghetto neighborhood, but it has recently begun to show glimmers of rediscovery by the broader real estate market. In addition, a ring of prospective developments encircles Hilltop. The Anacostia Waterfront Initiative aims to revive both the river and adjacent public spaces. The renovation of Langston Dwellings, an historic WPA-era public housing project, is being planned. Improvements are already underway at the golf course. And the H Street Corridor initiative is now promoting commercial and institutional development along an important thoroughfare connecting Northeast Washington to Capitol Hill. The virtual “hole” in a development “doughnut,” Hilltop could be an active crossroads for converging public and private investments. Yet Hilltop schools remained formally isolated from the planning for these ongoing or contemplated nearby projects.

As part of the planning process, children were asked to envision the outcome of a rebuilding campaign for the Hilltop’s schools.
Bureaucratic barricades usually separate urban public school design and planning from other conversations about neighborhood revitalization. But this isolation has been exacerbated at Hilltop by a tangle of institutional control involving the federal government, the District of Columbia, and DCPS. This contentious political and fiscal environment has made a long-term comprehensive project for Hilltop both more difficult and more necessary. Among other things, the discrepancy between needs, plans, and funding available through the District or DCPS capital budgets also intensified NASDP’s search for synergistic partnerships and pooled resources. But this would require new relationships between public agencies and other entities. And these entities might have limited prior experience of collaboration and be more accustomed to competition or unilateral action.

The Hilltop Concept

NASDP’s concept for Hilltop attempts to capitalize on the site’s local and citywide potential, revitalize and integrate its educational programs, and reflect the concerns of project stakeholders.

Early in the planning process conversations across Hilltop constituencies revealed a rich, complex, and sometimes competing set of ambitions and concerns, whose mediation became one of NASDP’s primary goals. The constituencies included students who wanted to be educationally challenged in a resource-rich environment; teachers and administrators who wanted to create a new full-service network of opportunity for students and their families within an academically integrated campus; and neighbors conscious of the history of urban renewal as “Negro removal” (in D.C., as in other American cities) and wary of how changes at Hilltop might bring displacement and gentrification.

In response, NASDP was careful to link educational and design visions for Hilltop and to clarify several key points: 1) that teaching, learning, and community services were drivers for Hilltop’s development; and 2) that learning opportunities and services would be accessible to all community members, from children to elders, from “the bruthas in the street” to “the folks around the way.”

The educational model that NASDP proposed for Hilltop represented a synthesis of recent trends and practices as well as site-specific innovations—discrete elements that would work together to produce an ensemble effect. To begin, Phelps and its neighboring academic high school would be merged, allowing cognitive distinctions between vocational and academic learning to be broken down. The new objective would be to graduate all students as “dual completers”—that is, with both employment-ready skills and the fundamental academic proficiencies needed to continue to postsecondary education. Next, a community college or other satellite postsecondary program would be established on the site. This would provide students with more specialized certifications, and also serve the community at large by offering high-quality adult-education and job-training “bridge” programs.

A design-centered pedagogy would also put the entire campus under a “design umbrella,” as a common intellectual and practice-based pursuit at age-appropriate levels. And strong “adoptive” institutional linkages would tie all of Hilltop’s schools and programs to specific local and District resources.

These institutional relationships would become more specialized at the
high school level, when an array of academies (for tenth through twelfth grades) would offer a range of topics and “majors” directly related to the urban lifecycle, while engaging students in real planning and design projects in Northeast Washington. For example, students at the Construction & Development Academy might work with the District of Columbia Housing Authority as well as the building trade unions on a prospective redesign and renovation of Langston Homes. Others studying horticulture and landscaping might collaborate with the Langston Golf Course, the National Arboretum, or the Anacostia Waterfront Development Corporation.

Having been exposed to urban field research and smaller-scale neighborhood projects as younger Hilltop students, all high school freshmen would also enroll in an introductory studio class. Here they would not only learn the techniques and vocabulary of design, but also exercise their skills in critical thinking, problem-solving, institutional analysis, presentation, and conflict management—all needed in the contemporary workplace, where multidisciplinary groups must confront complex tasks. Equally important would be students’ preparation for being effective participants and change agents in the urban environment and in their own immediate communities.

In terms of physical planning and design, NASDP proposed that Hilltop’s grounds become a platform, or stage, for constructivist learning by filling the gaps between the site’s schools with a grid of indoor and outdoor learning spaces, and by making Hilltop’s educational functions visible through architecturally transparent building renovations and additions. Here young people engaged in learning and related activities would be accommodated and displayed—mounting their work in galleries along the street, operating neighborhood shops and services reflecting their entrepreneurial interests, cultivating and maintaining community gardens and street landscapes, and performing in theater spaces they help manage.

In other words, Hilltop’s curricular and extracurricular functions would be used to create points of interest, diversion, and social activity in an overall plan to create a “neighborhood for learning.” To this neighborhood would also include new parks, public spaces, housing, and community-oriented commercial facilities similar to ones Hilltop students imagined in their sketch exercises with NASDP. (These generally recall attractive, lively and safe neighborhoods they associate with more affluent areas of the Washington metro area—where they know the best public schools to be.) Finally, the Hilltop neighborhood would welcome a broad cross-section of Northeast Washington residents by including childcare, housing and services for elders, and postsecondary educational facilities for adults.

To support this kind of development, NASDP proposed a set of Hilltop program and design guidelines addressing such issues as coordinating curriculum across the site’s schools; providing “wrap-around” social services for students, families...
and neighbors; mixing educational, recreational, residential, community and commercial uses across the site; and tying Hilltop to the rest of Washington with improved transit links.

Urban design guidelines further sought to capture and reveal the site’s beauty by opening access and views into it as well as to the Anacostia; mitigating its isolation and making it safer by breaking its super block into smaller, easier to traverse blocks; integrating it with adjacent resources such as the Langston Golf Course, National Arboretum, and Anacostia Waterfront Initiative through strategically located site gateways; and distributing age-appropriate outdoor and indoor recreation and social spaces across the site to encourage informal intergenerational relationships and the casual monitoring of public space.

With these principles, NASDP generated four Hilltop site concepts for discussion and review by stakeholders. Their variety helped illustrate the elasticity of NASDP’s program and design principles. They also clarified how the community design and building process was open-ended—an important concern to area residents anxious to be part of the decision-making.

In one concept, a cluster of pre-K to postsecondary schools in a park is traversed by winding roads and edged by low-density housing. In another, a compact core of academic buildings is demarcated by streets featuring community services. In a third scheme, academic campuses of “lower” and “upper” schools are located to either side of a park open to students and neighbors. The fourth option introduces a relatively dense urban grid where learning spaces are dispersed into various building types, including residential and commercial.

All the scenarios featured renovation and/or expansion of Hilltop’s existing schools; redeployment of school programs to capture site advantages (e.g., moving the elementary school program closer to the residential blocks where younger children live); public spaces edged by mixed-use activities to help promote safety through informal monitoring; employment and commercial spaces at a variety of scales to help support local economic development; and implementation strategies that include training students and neighborhood residents to help plan and build the project as part of a community capacity-building effort.

Ongoing Efforts

Currently, the Hilltop project is under review by a new DCPS superintendent as he develops an educational master plan for the entire system. As important as any specific build-out of the NASDP concept, however, are the project’s implications for linking school planning and design with the surrounding community and a wider network of institutions in the District. Hilltop may be a unique site with extraordinary features, but concentric rings of opportunity exist around all public schools in Washington, making the project a potential District-wide model.

Then, too, there are the project’s wider implications for “failed” public schools in other American cities,
Making is central to learning. Is central to place-making, and place-making is central to learning. Both deeply within, and well beyond, the school facility, they can build in new symbiotic institutional relationships with benefits for students, communities, and cities—where learning is central to place-making, and place-making is central to learning.

Notes
1. Opponents argue that, with its mandatory annual high-stakes testing, the NCLB law authorizes a punitive and inflexible approach to education improvement. This demands higher performance (with the threat of serious sanctions) without offering sufficient additional funds. Particularly in poor, urban communities of color, this will only reinforce the tendency “to correlate poverty, not the quality of resources, with poor achievement.” See American Youth Policy Forum (AYPF), “The Supports Students Need to Meet High Academic Standards: A Town Hall Meeting,” cosponsored with a local Washington, D.C., citizen’s education-reform collaborative, DC VOICE, Jan. 24, 2001. Forum brief posted on AYPF website, http://64.226.111.21/forumbriefs/2001/ fb012401.htm.

2. In the case of local and state governments, even when promised or mandated, physical improvements are often illusory. Recently, in New Jersey a $9 billion court-ordered program to rebuild urban public schools was stalled by a recalcitrant legislature and then eviscerated by incompetent planning and graft. See David W. Chen, “Trenton Agency Says It Has Enough Money for Only 59 of 420 School Building Projects,” New York Times, July 28, 2005, p. B4.

3. NASDP is a university-based design and research project that works with public schools and public school systems in integrating curriculum, school facility, and community planning and design. It is housed at the A. Alfred Taubman College of Architecture and Planning at the University of Michigan, Ann Arbor. The NASDP team for Hilltop consisted of Roy Strickland, Project Director; Jean Riesman and LaTonya Green, Research Investigators; and graduate architecture and planning students Bolkar Accikol, Jae Hyung Bae, Lauren Bostic, Eun Ee Chung, Mindala Marie Commis, Barry Fisher, Sarah Lillian Gorwalveski, Garrett Harbachian, Clavin Huang, Katherine Kozarek, Nicole Lashbrook, Ana-Li Lee, Hyeyun Lee, Sung Hyuan Lee, Libra Lindke, Priya Mehendale, Yung Sup Park, Derek John Roberts, Maria Gracia Rodriguez Romor, Michael B. Siporin, Hillary R. Taylor, Shih-Wen Wang, Hoi-Fung Paul J. Wong, and Heebum Yang.

4. Phelps’ more recent graduates have lacked core competencies, relegating them to the low-wage workforce or driving them from the employment pool altogether. Many students in the school’s automotive, cosmetology, carpentry, and shoe-repair programs were one step from dropping out of the system entirely, and graduates often did not have the hours or the certifications they needed to be licensed or otherwise credentialed in their fields—a district-wide problem. Few active institutional networks connected students to real-world exposure while in school or real-world opportunities when they graduated. See, for example, Martin S. Dworkin, ed., Dewey on Education (New York: Teachers College Press, 1959); and Howard Gardner, Multiple Intelligences: The Theory and Practice (New York: Basic Books, 1993).

5. It is more than a historical note that Phelps was built as part of a cluster of public structures dating from the early 1930s, when the federal government embarked on assembling a working-class neighborhood for black families along Benning Road in Northeast Washington. While founded on a mandate of racial exclusion, this New Deal-era enterprise included Langston Dwellings as the District’s first public housing development (designed by the Washington-born and Bauhaus-trained African-American architect Hilyard Robinson), as well as the municipal Langston Golf Course—an ensemble conceived as a progressive statement about the “New Negro” who was striving for a better future. Reconstituting the context of education, housing, and recreation at and around the Hilltop, in fact, returns the site to its origins as part of an intentional community—development strategy, without the confines of segregationist and reductivist public-sector assumptions.

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7. For example, the project–area map for the Anacostia Waterfront Initiative literally stops at the DCPS property line west of the Langston Golf Course, and its five exhortative themes for riverfront redevelopment (“restore, connect, play, celebrate, live”) do not include “learn”—even though the river, reconnected to existing institutions and flanked by new facilities, is potentially a key educational resource, not only for the Hilltop, but District-wide (Anacostia Waterfront Initiative Framework Plan, November 2003).

8. School and broader governance issues have plagued the District persistently; for example, DCPS is now on its fourth superintendent since NASDP’s work there began. A constellation of political and fiscal conditions has also conspired to make the District an “orphaned capital”; abandoned by both commercial and residential out-migration, not enough child support from its federal guardian, and no state-level extended family to turn to while it struggles to finance a K-12 system as well as the University of the District of Columbia (UDC) (O’Clereacain: 1997).

9. Postsecondary training and certification has become a standard requirement for career advancement, especially in those fields reliant on computer technology. Students unprepared to continue their professional development after high school risk being stuck at the low-wage end of the employment pool.

10. In Ready to Learn: A Mandate for the Nation (Princeton: The Carnegie Foundation for the Advancement of Learning, 1991), Ernest Boyer described a “neighborhood for learning” as containing resources such as community facilities, preschools, and parks proximate to schools and other institutions such as museums, libraries and zoos.

All images courtesy of the New American School Design Project.