Schools as Centers of Community:

A CITIZEN'S GUIDE FOR PLANNING AND DESIGN

NATIONAL CLEARINGHOUSE FOR EDUCATIONAL FACILITIES
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COUNCIL OF EDUCATIONAL FACILITY PLANNERS, INTERNATIONAL
COALITION FOR COMMUNITY SCHOOLS

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A CITIZEN'S GUIDE FOR PLANNING AND DESIGN

Steven Bingler • Linda Quinn• Kevin Sullivan

National Clearinghouse for Educational Facilities• KnowledgeWorks Foundation
Council of Educational Facility Planners, International • Building Educational Success Together• Coalition for Community Schools

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The Coalition for Community Schools is an alliance of more than 160 national, state, and local organizations representing community building, education, family support, government, health and mental health, philanthropy, policy advocacy, school facilities planning, youth development, and national, state, and local community school networks. The mission of the coalition is to create a united movement for community schools. http://www.communityschools.org

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PART ONE

The Challenge

As the twenty-first century begins, America faces a daunting challenge: The "baby boom echo" is ready for school. The children of World War Two's baby boomers, millions of youngsters are crowding into schools across the nation. Thousands of new schools will be needed to accommodate them. This demand for educational facilities is unprecedented in American history.

Demographic evidence of the coming demand has been mounting for some time. From 1977 to 1990, the number of children born to baby boomers increased by 25 percent, reaching a peak of 4.1 million births in 1990. In the following decade, public high school enrollment increased 19 percent and elementary school enrollment increased 12 percent. By the year 2000, public and private school enrollment, kindergarten through grade 12, had reached a record 53.2 million students. After stabilizing somewhat between 2000 and 2010, enrollment increases are expected to resume. Between 2010 and 2020, the number of children aged five to seventeen will increase by 6 percent. By 2030, total school enrollment is projected to be 60 million (U.S. Department of Education, Office of Public Affairs 2000).

Challenging as the situation appears, there is a brighter side.
The pressing need to renovate, replace, and create
so many new educational facilities at once
presents a compelling opportunity to evaluate existing research about
what constitutes an optimum school learning environment.

Crowding, Disrepair, and Recession

Many existing school buildings are wearing out. Today, the average American school is almost 50 years old; overuse and deferred maintenance have taken their toll (National Center for Education Statistics 1999).

Why have overuse and deferred maintenance occurred? The recession of the early 1990s—which slowed capital expenditures and impeded maintenance programs—caught many school districts off guard. Although explosive enrollment rates continued during those years, the recessionary economy forced school officials to delay adequate responses to enrollment pressures. By 1998, the condition of America's schools was so critical that the American Society of Civil Engineers felt compelled to assign school facilities a grade of "F" in its annual infrastructure report. Five years later, in 2003, ASCE had only upgraded conditions to "D minus."

The backlogged cost of replacing, repairing, and updating America's schools is now enormous. Some 3.5 million students attend schools that need extensive repair or replacement; an estimated $127 billion is needed to bring America's existing schools into good overall condition (National Center for Educational Statistics 2000).

Moreover, this estimated backlog covers only the maintenance and repairs necessary to meet the functional requirements of existing instructional programs. It does not include the funds necessary for accommodating new technologies and teaching methods. According to a survey conducted by the National Education Association in 2000, the bill for renovating old schools and building new ones exceeds $250 billion (National Education Association 2000).

Challenge Affords Opportunity

Challenging as the situation appears, there is a brighter side. The pressing need to renovate, replace, and create so many new educational facilities nationwide presents a compelling opportunity to evaluate existing research about what constitutes an optimum school learning environment and to identify those factors that can enhance student achievement (Schneider 2002).

Such research can be illuminating. It suggests, for instance, that student

Some 3.5 million students attend schools that need extensive repair or replacement. An estimated $127 billion is needed to bring America's existing schools into good overall condition. Photo: Photodisc.

achievement is directly related to smaller, more personalized environments (Cotton 1996, Lawrence et al. 2002). Research also suggests that a wide variety of classroom configurations is required to facilitate best practices in education. Such practices include collaborative problem solving, technology integration, and personalization (Stevenson 2002). Educational research calls for removing some of the traditional barriers between school and nonschool life, and between school and community. Students achieve better in environments where lifelong learning is a community value, where everyone is a learner, and where school is central to the life and learning of the community, accessible beyond traditional school hours. In short, the demand has never been greater for schools that address a broad range of educational needs.

In response to this demand, innovative and practical learning environments—developed through educator-architect-planner collaborations—are being implemented around the country (Kennedy 2001). Some are variations on the traditional school site, designed to create more effective spaces for contemporary teaching and learning. Others expand the functions of the school to encompass community needs. Still others expand the whole notion of school by creating learning environments in such nontraditional settings as museums, shopping malls, and zoos, thus optimizing opportunities for learning while minimizing the investment of human, financial, and environmental resources.

Schools as Centers of Community

All of these creative solutions share one common theme: **Schools as centers of community.**

Schools achieve this status in either of two ways: They more effectively integrate with the community, or they extend the learning environment to use the community's full range of resources. Indeed, the most successfully integrated schools are able to serve residents in numerous ways.

For instance, later or longer hours may permit senior citizens to use the gym and health facilities during nonschool hours, or immigrants to take evening English classes after work. With millions of baby boomers nearing retirement age, the case is growing for creating schools that can be used by people of all ages. As Joe Perkins, past president of the AARP, has said, "Schools should be a point of unity, not division, between and among generations" (Sullivan 2000).

If the school of the future needs to be designed as a learning center for the entire community, its development must begin with a planning and design process that includes community members and reflects their needs. The idea of citizen participation reflects John Dewey's assertion that we not only need education in democracy, but democracy in education.

By engaging students, parents, educators, and a wide variety of citizens in planning and designing schools as centers of community, the best aims of a democratic society are served by both process and product.

This publication outlines a systematic planning approach that can result in the successful development of schools as centers of community. Its chapters provide basic principles for designing such schools, case studies of successful projects, and a step-by-step methodology—complete with action checklists—for developing a facilities master plan.

Schools Make a Difference When They Serve as Centers of Community

Schools that serve as centers of community are making notable improvements in four areas (Blank et al. 2003):

- **Student learning.** Students demonstrate significant gains in academic achievement and in essential areas of nonacademic development.
- **School effectiveness.** Parent-teacher relationships are stronger and teacher satisfaction is higher. There is a more positive school environment and broader community support.
- **Family engagement.** Families show greater stability. Parents communicate more often with teachers, are more involved in school activities, and demonstrate a greater sense of responsibility for their children's learning success.
- **Community vitality**. Surrounding neighborhoods enjoy increased security, heightened community pride, and better rapport among students and residents. The schools themselves are more intensively used.

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PART TWO

Six Design Principles

In June 1998, a group of educators, facilities planners, architects, government leaders, and interested citizens were invited by the U.S. Department of Education to discuss ways of planning and designing schools to best meet the needs of students and their communities. From that meeting came a set of six principles for designing better learning environments.

The six principles were affirmed at the Department of Education's National Symposium on School Design in October 1998 and endorsed by the American Institute of Architects; the American Association of School Administrators; the Council of Educational Facility Planners, International; and the Construction Managers Association of America.

The principles are predicated on three generally accepted conditions: **learning is a lifelong process, design is always evolving,** and **resources are limited.**

The principles are simple and straightforward. To meet the nation's needs for the twenty-first century, school learning environments should (1) enhance teaching and learning and accommodate the needs of all learners; (2) serve as a center of the community; (3) result from a planning and design process that involves all community interests; (4) provide for health, safety, and security; (5) make effective use of available resources; and (6) be flexible and adaptable.

The principles are predicated on three generally accepted conditions: learning is a lifelong process, design is always evolving, and resources are limited.

DESIGN PRINCIPLE 1

The learning environment should enhance teaching and learning, and accommodate the needs of all learners.

Educational research makes it clear that the physical environment affects learning. School design can enhance—or hinder—academic achievement.

Most of the nation's 94,000 public schools were designed for an educational model characterized by large-group, teacher-oriented instruction taking place in individual classrooms. However, current research and practice emphasize new educational models that are characterized by active student participation rather than passive listening and watching. New models include such strategies as cooperative, project-

based, and interdisciplinary learning. They require that students move about, work in groups of various sizes, and be active. The models place increased emphasis on learning styles and the special needs of each student.

Recent research also recognizes additional factors that affect learning. These include indoor air quality, occupant comfort, lighting, and classroom acoustics (Schneider 2002). For example, one well-known study indicates that students with high levels of classroom daylighting show improved math and reading test scores (Heschong Mahone Group 2002). Multiple studies indicate that physical comfort correlates positively to the ability to concentrate, student attendance rates, and teacher retention (Lackney 1999).

Educational studies indicate that school design can enhance—or hinder—learning. New educational models require that students move about, work in groups of various sizes, and be active. The models place increased emphasis on learning styles and the special needs of each student. Photos: (opposite page) Neil Alexander/ Neilphoto.com, courtesy of Concordia LLC; (left) photo illustration based on photo provided courtesy of LCOR Incorporated; (below) Photodisc.

Tomorrow's educational facilities must be designed to be more open and serve a variety of community needs. They need not be costly, but they should add a sense of beauty, interest, and permanence to the community. Photo: Joe Wolford, courtesy of Concordia LLC.

DESIGN PRINCIPLE 2

The learning environment should serve as a center of the community.

Successful schools strengthen a community's sense of identity and coherence. Like a new version of the old town square, a school can serve as a community hub that teaches its occupants about collaboration and the common good.

In the past, most schools were built as stand-alone instructional facilities that restricted—rather than encouraged—community access. Their auditoriums, sports facilities, food service facilities, libraries, media centers, computer labs, and other specialized spaces were typically available to the community on only a limited basis. Tomorrow's educational facilities must be designed to be more open and serve a variety of community needs.

At their best, schools that serve as centers of community should:

- Help meet a community's leisure, recreational, and wellness needs
- Be accessible to people of all ages
- Encourage more active parental involvement in school activities. Establishing a school parent resource center, for example, sends a powerful message that parents are welcome and encouraged to take part in their children's learning.
- Support relationships with local businesses that are productive to students and supportive of the local economy
- Promote participation by members of the community in a variety of ways, including mentorships, apprenticeships, and other learning opportunities based on work and service
- Contain shared public spaces that are accessible year round
- Be places where creative space configurations expand school use, where learning occurs after school, at night, and on weekends, and where school-to-school partnerships, links with businesses, and collaborations with higher education are encouraged and supported.

In fulfilling these roles, schools should manifest the high standard of design appropriate to public buildings. They need not be costly, but they should add a sense of beauty, interest, and permanence to the community. By capturing the noble character of public architecture, they should serve as a visible symbol of community pride.

DESIGN PRINCIPLE 3

The learning environment should result from a planning and design process that involves all community interests.

Faith in the effectiveness of collective problem solving lies at the very heart of this nation's democratic system, which holds not only that people have a right to participate in making decisions that affect them, but that such participation actually improves the outcome of the decision-making process. Thus schools should be planned by the many people who will use them—including educators, parents, students, senior citizens, and members of civic and business organizations.

Widespread community participation enables consideration of community diversity. Communities by their very nature are diverse, reflecting such differences as age, culture, ethnicity, gender, socio-economic class, aspirations, and abilities. Varying viewpoints enrich the design process because they broaden the range of ideas and solutions considered.

Community participation creates a shared sense of purpose. When community members are given opportunities to take part in meaningful planning activities, their sense of commitment is strengthened. When they see themselves as visionaries, creators, and owners, they are more willing to work together to set goals, solve problems, and provide their schools with the ongoing support and financing necessary to make the schools succeed.

It is essential to set aside adequate time and resources to ensure widespread and fully informed participation in the planning process. It should take place either before or concurrently with the development of a facilities master plan, educational specifications, technology plan, and architectural plans.

Authenticity of involvement is perhaps the most important ingredient in the planning process. Too often the community perceives that it can only rubber stamp decisions already made by administrators, board members, or planners and architects. The old-style public hearing process—one or two public presentations of already-developed plans—can lead to frustration and apathy on the part of citizens who want to be involved. But authentic community engagement can result in a more extensive and creative set of ideas, more trust in public officials and government, a broader base of support and funding as the project moves forward, and a stronger sense of community for everyone involved.

When community members see themselves as visionaries, creators, and owners, they are more willing to work together to set goals, solve problems, and provide their schools with the ongoing support and financing necessary to make the schools succeed. Photo: Courtesy of Concordia LLC.

DESIGN PRINCIPLE 4

The learning environment should provide for health, safety, and security.

Health and safety have always been top school priorities. During the past decade concern has intensified about a number of health and safety issues, including indoor air quality, campus crime, youth violence, substance abuse, and—more recently—terrorism.

At the most basic level, school designers must address environmental safeguards and meet applicable health and safety codes. Children—because of their smaller, developing bodies—are more sensitive to pollutants than are adults. For this reason, schools must pay special attention to air quality and the potential for children's exposure to harmful substances that may occur in building materials, finishes, furnishings, and equipment.

To help ensure the highest reasonable standards of safety, school planning and design should incorporate the three concepts embodied in Crime Prevention Through Environmental Design, or CPTED: natural surveillance, natural access control, and territoriality.

The origins of CPTED are found in Jane Jacobs' landmark work, *The Death and Life of Great American Cities* (Jacobs 1961), a book that enabled a whole generation of planners to understand the importance of porch-sitters, shopkeepers, walkers, and others who "look out" for one another in the community setting.

CPTED concepts for educational facilities are fully described in *Safe School Design, A Handbook for Educational Leaders: Applying the Principles of Crime*

Children—because of their smaller, developing bodies—are more sensitive to pollutants than are adults. For this reason, schools must pay special attention to air quality and the potential for children's exposure to harmful substances that may occur in finishes, furnishings, and equipment. Photo: Digital Vision.

To help ensure the highest reasonable standards of safety, school design should incorporate the three concepts embodied in Crime Prevention Through Environmental Design, or CPTED: natural surveillance, natural access control, and territoriality. CPTED works particularly well for neighborhood schools, where people know each other by name, or where school use by outside organizations expands adult participation—and therefore supervision—at many levels. By strategically locating windows, entry access, and gathering places, school designers can foster safety and security by facilitating natural rather than electronic surveillance. Photo: Joe Wolford, courtesy of Concordia LLC.

Prevention Through Environmental Design (Schneider et al. 2000). [1]

CPTED works particularly well for neighborhood schools, where people know each other by name, or where school use by outside organizations expands adult participation—and therefore supervision—at many levels. By strategically locating windows, entry access, and gathering places, school designers can foster safety and security by facilitating natural rather than electronic surveillance.

Of course, school safety and security require a change in behavioral norms and attitudes as well. A growing body of evidence suggests that behavior can be significantly influenced by the quality of the learning environment. Attractive, well-designed, and well-maintained facilities communicate respect for the people and activities housed within them and contribute to a positive school climate, good discipline, and productive learning (Schneider 2002).

The size of the student population and scale of school buildings also have a substantial effect on school safety. When schools and classrooms are small enough to allow teachers and students to form personal relationships, a sense of community is established that promotes a safe environment. By limiting the population of an individual school—or by providing spaces for smaller schools within larger ones—school designers can help maximize supervision and encourage healthy social interactions among students, teachers, administrators, and community users.

Schools that provide space for after-school programs can be safer schools, too. Since most student violence occurs between the hours of three and six p.m., after-school programs have become key components of violence prevention plans. Youth activities such as academic enrichment, sports programs, and arts and crafts provide healthy options for filling time and increasing the connection between students and their school.

[1] In the early 1970s, C. Ray Jeffery coined the term "crime prevention through environmental design" in his book of the same name (Jeffery 1971). Oscar Newman elaborated on the concept in his widely acclaimed *Defensible Space* (Newman 1972). CPTED received renewed attention in Timothy Crowe's 1991 book, *Crime Prevention Through Environmental Design: Applications of Architectural Design and Space Management Concepts* (Crowe 2000), which led to creation of the International CPTED Association in 1996.

DESIGN PRINCIPLE 5

The learning environment should make effective use of available resources.

Schools should be designed to take advantage of the fact that the physical environment can have a positive effect on the learning experience. One effective way to do this is to make the most of available resources.

For instance, schools that make optimal use of computers and current communications technology can most readily facilitate new methods of instruction—letting teachers become guides and coaches; allowing students to analyze, evaluate, and manipulate information; and permitting curriculums to be individualized.

Where possible, schools should allow specialized spaces—such as kitchens, mechanical rooms, and maintenance areas—to become three dimensional textbooks, showcasing educational content and offering lessons in physics, mathematics, geometry, art, history, and science.

To help students understand the connection between the classroom and the workplace, resources outside the school can be used for extended learning. By partnering with community organizations, school boards can enlist such community resources as libraries, museums, zoos, parks, hospitals, and government buildings for extended learning.

"Effective use of available resources" also means efficient energy consumption. Schools are among the largest public consumers of energy in both their construction and operation and should be designed to make the most of existing natural resources. The U.S. Department of Energy estimates that at least $1.5 billion per year can be saved through modest energy conservation modifications in new and existing schools (EnergySmart Schools 2003). "High performance schools"— those built with durable, environment-friendly materials and designed on the basis of life-cycle costs, rather than first cost—help reduce the use of nonrenewable resources. In addition, they are more productive places for teaching and learning, and save substantial amounts of money over the long run (Sustainable Buildings Industry Council 2001).

Schools that make optimal use of computers and current communications technology can most readily facilitate new methods of instruction. Photo: Joe Wolford, courtesy of Concordia LLC.

Schools can actively teach stewardship of environmental resources. A school that embodies stewardship through careful and conscious management of land, air, water, energy, and building materials teaches children that taking care of their community is important and that their actions have an impact on the world in which they live.

In addition, schools should be designed using the latest concepts of city planning and community design. The principles of smart growth call for neighborhood schools rather than large facilities on the edge of town that exacerbate sprawl and require extensive busing. More concentrated, pedestrian communities lead to more livable towns and cities.

Proper planning can magnify the potency and impact of a host of community resources. For example, co-locating health-care programs in schools can significantly increase the quantity and frequency of medical care for children and adults alike. School facilities can be used for cultural enrichment at a fraction of what it would cost to duplicate the same types of spaces elsewhere. Such cultural events might include ethnic and community festivals, theater performances, art shows, and other activities that support, celebrate, and enhance a community's cultural assets.

Existing schools should be renovated and preserved whenever possible, especially in cases where reuse preserves natural resources or valuable historic and cultural assets. Building reuse helps children and adults alike to embrace the social and cultural heritage of their community.

DESIGN PRINCIPLE 6

The learning environment should be flexible and adaptable.

Change is a constant, and school facilities must be flexible enough to adapt. As community needs evolve, as new educational programs and strategies are developed, and as new technologies are incorporated into the teaching and learning process, the demands on schools are changing at an unprecedented rate.

The best school designs allow for spatial flexibility. Designers and decision makers cannot lock too firmly onto any single notion of "school" or to become wed to a fixed idea of what classrooms should be. Flexible, open structural systems that allow spaces to be reconfigured over time will best accommodate change (Brubaker et al. 1998). By evaluating and updating master plans and educational specifications at least once every five years, school districts can help ensure that their facilities will meet the needs of a changing world.

Change is a constant, and school facilities must be flexible enough to adapt. Photo: Robert E. Daemmrich/Getty Images.

PS 5, The Ellen Lurie School. Photo: Chuck Choi Photography, courtesy of Gruzen Samton LLP.

PART THREE

Design Principles in Action

Armed with research about how children learn—and with a strong commitment to include the community in the planning process—a growing number of schools are creating successful new learning environments that contain the seeds of promise for teaching and learning in the twenty-first century.

The following thirteen schools are examples of such creative educational projects. Together, they illustrate the six principles for designing effective learning environments:

- Enhance teaching and learning, and accommodate the needs of all learners.
- Serve as a center of the community.
- Result from a planning and design process that involves all interested parties.
- Provide for health, safety, and security.
- Make effective use of available resources.
- Allow for flexibility and adaptability to changing needs.

New schools are about more than just bricks and mortar;
they are about Los Angeles' vision for its neighborhoods,
communities, and our region. . . . Schools shouldn't be just schools;
they should be centers that spawn the civic fabric
and provide ideas and places for people to meet.
They should become village centers.

And the problems that everybody in a particular neighborhood sees
will drive the design of that particular school.

—Connie Rice, The Advancement Project, Los Angeles, California

CASE STUDY 1

Gaylord High School

GAYLORD, MICHIGAN

Built in 1996 with the community in mind, Gaylord High School serves 1,200 students in grades 9 through 12 and houses senior activities, daycare, performing arts programs, community healthcare clinics, and higher education classes.

Until this school was built, the City of Gaylord lacked an auditorium for concerts, recitals, and other functions. While planning the new school, a special auditorium committee—composed of educators and community members—identified both school and community needs, studied theater design, and considered the merits of a shared facility.

The school's resulting performing arts center serves the entire community. Its 600-seat auditorium contains a generous stage area, an orchestra pit, ample storage space, a lighting catwalk, and a sound control booth. Adjunct spaces include a music suite with space for band, chorus, and ensemble practice; and instrument storage. Energy efficiency and indoor air quality were a primary concern, ensuring economical and healthful operation over the life of the facility.

The performing arts complex is located in the public area of the school and includes a large multifunction common space that particularly suits the variety of events held there. A large public entrance serves not only the performing arts center, but the school gymnasium, administrative offices, and dining areas. Academic areas can be secured from the public area during evening, weekend, and summer activities.

Classrooms at Gaylord High School are designed to accommodate community use too. By creating departmental offices with secure staff storage, the barriers to making classrooms open and accessible after regular school hours were largely eliminated.

School officials believe that community involvement in this project enabled passage of the school bond referendum; two previous referendums had failed. The positive results of the community engagement have extended far beyond construction. Gaylord High School's activities have increased school and community interaction, communication, volunteerism, funding, and general support for students and their education. The entire Gaylord community has developed a strong vested interest in its school, and students interact daily with a broad range of community members.

Contact Information:
Gaylord High School
90 Livingston
Gaylord, Michigan 49735
989-731-0969
http://www.gaylordhighschool.org

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CASE STUDY 2

PS 5, The Ellen Lurie School

NEW YORK, NEW YORK

The Ellen Lurie School, known as PS 5, is a large prekindergarten through grade 5 urban elementary school that opened in 1993. Located in the northern Manhattan neighborhood of Washington Heights, the school serves a community comprised primarily of newly arrived immigrants from the Dominican Republic.

PS 5 operates in partnership with the Children's Aid Society of New York, which offers health and family social services that are intended to remove barriers to learning (Quinn 2003).

The school's exterior is decorated in primary colors, and passersby often refer to PS 5 as "the Lego school." Its cheerful interior offers a stimulating environment rich with examples of student work. There are special classrooms with separate entrances and playgrounds for the school's early childhood programs. A centrally located family room provides parents and other family members with a place to meet, socialize, and participate in workshops. Although the school principal is employed by the New York City Department of Education, and the community school director is employed by the Children's Aid Society, the two have adjoining offices. This arrangement reinforces the formal and informal connections between the two organizations.

PS 5's strong emphasis on early literacy

is apparent in its physical environment. Brightly lit hallways are lined with bulletin boards; glass showcases display students' short stories, vocabulary lessons, and other exercises. The after-school program—planned jointly by the principal and the community school director—enriches the school's core instructional program by combining engaging literary activities with art, drama, journal writing, and role playing. Each semester, hundreds of parents participate in the school-sponsored family night, which showcases and celebrates students' after-school work.

PS 5 considers parents and families major assets to their children's education. The Children's Aid Society has obtained funding for the Early Head Start and Head Start programs, which serve children up to age five. Because the programs emphasize active parent involvement, the school builds a cadre of parents who move into PTA and other leadership positions as their children progress from early childhood through elementary school.

Grade transitions are eased by the comprehensive nature of the program at PS 5 and by the school's design. With kindergarten classrooms just down the hall from the Head Start rooms, students become familiar with the building and its staff at an early age.

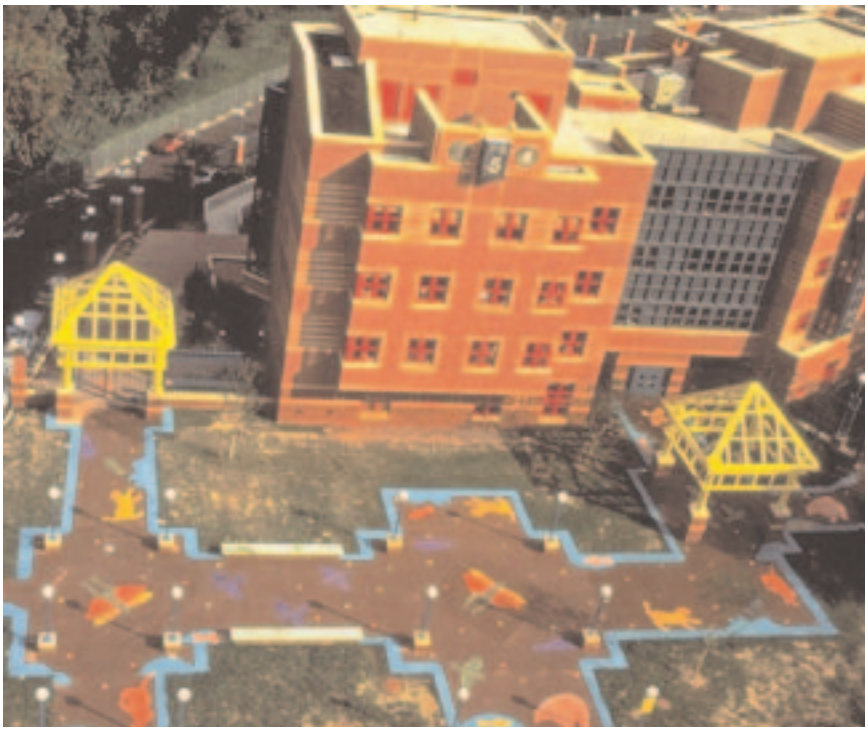
The school's family room helps make PS 5 a friendly and welcoming place for parents and the community. Operated by school and Children's Aid Society staff, parents, and volunteers, the family room provides a space for parents to learn about the range of school activities and programs available to them and their children. These include such adult education classes as GED, ESL, and computer use; and classes on such parenting topics as adolescent sexuality, behavior management, and how to support learning at home. The family room also helps parents learn how they can obtain such key support services as emergency assistance, food, housing, legal aid, employment assistance; and help with benefits, tenant rights, and immigration questions. Apart from this, the family room serves as a meeting place for parents to socialize and network.

The Children's Aid Society, in partnership with Mt. Sinai Hospital, operates a full-service medical, dental, and mental health clinic. Emphasizing preventive healthcare, the clinic provides annual checkups and screenings and acute care for sick children.

The integration of school activities and services is the result of extensive cooperation among staff and administrators. The Children's Aid Society's community school director is part of the school leadership team and the principal's cabinet. Children's Aid Society staff—the assistant director, social workers, and medical personnel—meet monthly with the director and participate regularly in meetings of the school's pupil personnel committee.

Contact Information:
PS 5, The Ellen Lurie School
37-03 Tenth Avenue
New York, New York 10034
212-927-0278

http://www.childrensaidsociety.org/media/general/cas-PS_5.pdf



Known locally as "the Lego school," PS 5 operates in partnership with the Children's Aid Society of New York. It serves a community made up largely of newly arrived immigrants from the Dominican Republic. The school's strong emphasis on family services enables these parents to support student learning at home and offers them educational opportunities as well.

The children's after-school program combines engaging literary activities with art, drama, and journal writing. Each semester, hundreds of parents participate in the school-sponsored family night, which showcases and celebrates students' after-school work. Photos: Chuck Choi Photography, courtesy of Gruzen Samton LLP.

CASE STUDY 3

Center for Applied Technology and Career Exploration

ROCKY MOUNT, VIRGINIA

The mission of the Center for Applied Technology and Career Exploration in Rocky Mount, Virginia, is to prepare eighth- and ninth-grade students for the workforce of the twenty-first century. The center brings together curriculum development; state-of-the-art hardware and software; parent and industry involvement; and a new building designed to help instill technology in learning.

On a typical school day, students spend half of their time at their "home" school and the other half at the center. There they have an opportunity to investigate eight career tracks: arts, engineering and architectural design, environmental and natural resources, finance, health and human services, legal science, aerospace, and media. As part of their learning experience, students are immersed in solving real-world problems. Instructors act as facilitators, guiding students toward practical solutions. Through these experiences, students learn how to address problems effectively in diverse and collaborative groups; how to apply problem-solving skills using appropriate technology; and how to develop strategies that will help them adapt to change.

The center's exterior looks more like a

corporate headquarters than a school building, consistent with its goal of exposing students in this rural Virginia community to the "outside world." The center also serves as a community and business resource. It is available for community meetings, video-conferencing, and distance learning—thereby affording continued learning opportunities for people throughout the community and across age groups.

The center is part of a 60-acre campus that includes a YMCA and other community facilities. Its location provides students and faculty with access to an indoor competition-quality swimming pool, two gymnasiums, aerobic exercise rooms, a community meeting room, and an indoor jogging track.

The project is distinguished by its breadth of community participation, which has included civic leaders, business and industry representatives, personnel from local colleges and universities, parents and teachers—all of whom have worked together to develop the center and its curriculum.

Contact Information:
The Center for Applied Technology and Career Exploration
150 Technology Drive
Rocky Mount, Virginia 24151
540-483-5446
http://www.frco.k12.va.us/school/catce/index.htm

This school looks like a corporate headquarters, which is appropriate to its goal of preparing students for the workforce. Eighth- and ninth-grade students explore eight career tracks during half of their school day. The building is also open for community meetings, video-conferencing, and adult distance learning. Photos: Rick Alexander & Associates, Inc., courtesy of Hayes, Seay, Mattern and Mattern.

CASE STUDY 4

City Heights K–16 Educational Collaborative

SAN DIEGO, CALIFORNIA

City Heights K–16 Educational Collaborative began in 1998 as pilot project targeting improvements at three San Diego schools: Rosa Parks Elementary, Monroe Clark Middle School, and Hoover High School.

The educational collaborative is part of the City Heights Initiative, a redevelopment project that is revitalizing an economically challenged section of the city. In this densely populated area, 72,000 residents speak more than 30 languages and scores of dialects. The diverse community has high rates of crime and unemployment. Nearly 60 percent of residents earn less than $25,000 a year; 30 percent live below the poverty line.

The City Heights Initiative is seeking to create an integrated "urban village" by providing a strong urban core of facilities and services. The project spans seven square blocks and covers nearly 30 acres. In addition to the three schools, the urban village has residential housing, a continuing education center, a Head Start facility, a state-of-the-art library, a swimming pool, tennis courts, a performance annex, a community service center, recreational fields, and a police station. The complex also includes office space for a local organization—funded by the City Heights Initiative—that is intended to give residents a greater voice in the community revitalization process.

Meager academic achievement has long characterized City Heights' schools. Problems have included overcrowded classrooms, inadequate resources, and student and faculty transience. There is a high student dropout rate; only four in ten adult residents are high school graduates.

The goal of the educational collaborative is to enhance school programs, create better academic outcomes, and thus build a stronger future for the community. To do so, it has assembled an abundance of people, programs, curriculums, and community-centered opportunities for students. As one example, Rosa Parks Elementary School offers "School in the Park," a program designed to use the unique educational opportunities of San Diego's cultural institutions in Balboa Park (Price Charities 2003). It enables third, fourth, and fifth graders to spend up to nine weeks there, participating in week-long, hands-on education programs at 11 institutions.

Visits to museums and cultural institutions bring meaning to the students' reading studies while engaging them in real-world affairs and concerns. Teachers, students, and museum educators are excited about this program and the added dimension it lends to learning. Students are reaping the rewards and posting 35-percent reading score increases, compared to a 12-percent increase for students outside the program.

Among the accomplishments of the City Heights Educational Collaborative:

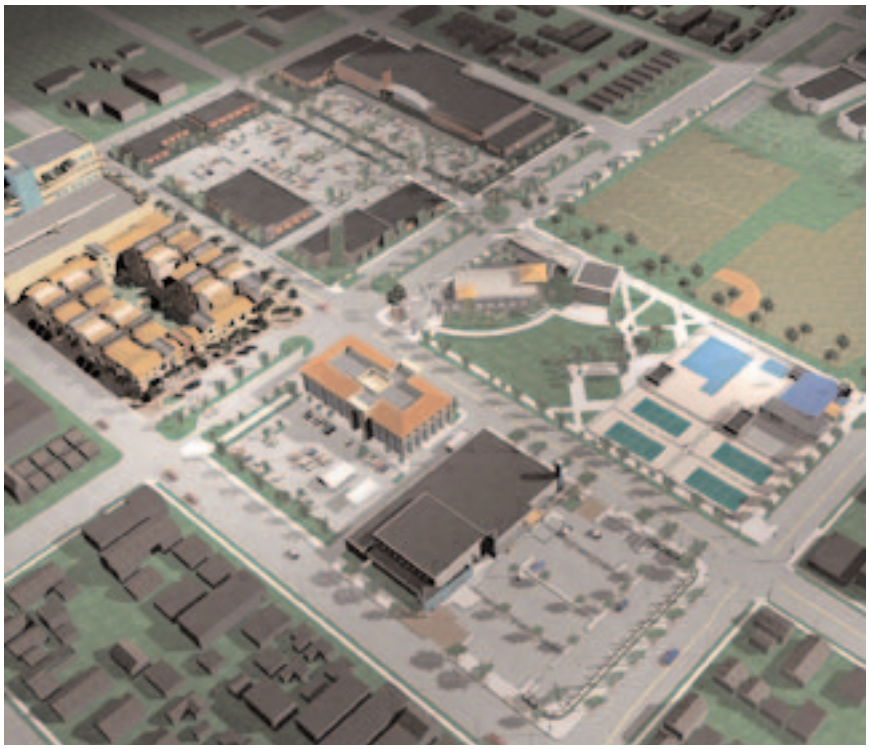
- Attendance at all three elementary schools averaged more than 95 percent during the 1999–2000 school year.
- Between 1998 and 2001, more than 75 teachers were awarded a Masters of Education degree from San Diego State University, and approximately 175 student teachers completed an on-site teacher credential program.
- Collaborative schools have averaged 90-percent teacher retention since the effort commenced, compared to 65 percent in similar schools.
- Parent volunteers logged approximately 30,000 hours through adult education classes, community service, and school governance meetings.
- In addition to Price Charities' support, more than $5.5 million has been secured by the collaborative's grant development team to support activities such as the seventh-grade early college outreach program, extended-day programs, community and student health services, and summer academic camps.
- More than 25 journal publications, ten book chapters, and 17 conference presentations were generated from the City Heights Educational Collaborative experience in the first three years.
- Forty-two five-year scholarships of $5,000 per year have been awarded to Hoover High School graduates to enable them to pursue college educations at San Diego State University.

Collaborative partners include Price Charities, San Diego State University, San Diego Education Association, San Diego Unified School District, and the administrators, teachers, students, and parents of the three City Heights schools. Funding comes from the San Diego City School District, an annual $4.5 million

research and development grant from Price Charities, in-kind partner contributions, and an aggressive grant development effort.

Contact Information:
Price Charities
4305 University Avenue,
Suite 600
San Diego, CA 92105
619-795-2000
http://www.pricecharities.com/CHI_education.shtml

The City Heights Initiative is a 30-acre "urban village" that includes three schools, housing, a community service center, a police station, and a library among other services. Photos: Joseph Martinez, courtesy of Martinez+Cutri Architects.



CASE STUDY 5

Tenderloin Community School

SAN FRANCISCO, CALIFORNIA

The Tenderloin Community School—serving 540 students prekindergarten through grade 5—incorporates a family resource center, a health center, counseling rooms, an adult education center, a parking garage, and preschool child development center.

Many of the resident families it serves are recent immigrants from Southeast Asia, and Central and South America. Two-thirds of the student population is classified as "limited-English-proficient," with native home languages including Cantonese, Spanish, Vietnamese, Tagalog, and Russian, as well as English.

The school's opening in 1998 ended a long period during which the Tenderloin was the only neighborhood in San Francisco without a grade school. Prior to that time, the area's elementary school students had ridden buses to 47 different schools throughout San Francisco.

The Bay Area Women's and Children's Center (BAWCC), a community organization in the heart of the Tenderloin, was instrumental in solving this problem. BAWCC brought together a collection of organizations and individuals to convince the San Francisco Unified School District that a neighborhood school was needed.

BAWCC insisted that the school should be a locus of education and community activity, with space for community activities incorporated into the building. BAWCC continues its strong partnership with the school and funds programs, equipment, and services that include a librarian, computers and an instructor for the computer lab, dental clinic staff, a garden coordinator, additional pay for teachers who staff after-school clubs, and club materials and equipment.

The Tenderloin's new neighborhood school enables parents to participate in their children's education, particularly since the families of most of the students live within walking distance. Its downtown proximity provides opportunities for partnerships with the American Automobile Association, the McKesson Corporation, the St. Anthony Foundation, Hastings Law College, the California Department of Fair Housing and Employment, the University of San Francisco, and the agencies located in the Philip Burton Federal Building.

Students participate in visual and performing arts activities, and the school is part of the Adventures in Music program, which brings ensemble groups from the San Francisco Symphony and Ballet. To provide

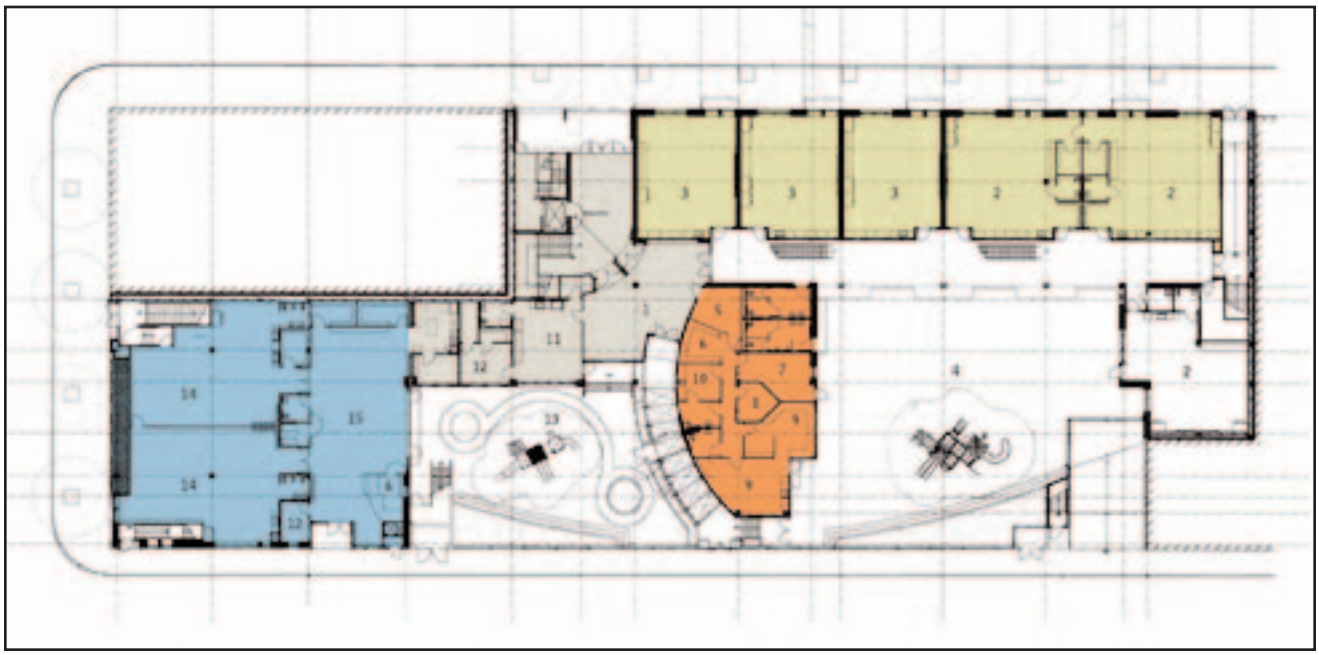
the many facilities needed on the school's compact urban site, the school roof is used for play areas, sitting terraces, and a community garden.

Jennifer Devlin, one of the architects who helped design the project, recalls attending early planning meetings. "The school district told us about the number of classrooms needed and the square footage required," Devlin said. "But it was the neighbors—with help from translators—who told us about the value of children being able to walk to school, the parents' desire to be more involved with their children's education, the need for access to social services like healthcare and daycare in the same building, the benefits of a community garden on the roof, and the wish for a place that felt like home" (Devlin 2003).

The Tenderloin Community School, with its welcoming design, its diverse programs, its ongoing partnership with BAWCC—and its widespread community support—opens its doors to the innovation and learning happening within.

Contact Information:
Tenderloin Community School
627 Turk Street
San Francisco, CA 94102
415-749-3567
http://portal.sfusd.edu/template/default.cfm?page=about.aboutwebsite

Serving many families that have recently immigrated from Southeast Asia, this school was planned to provide easy access to services like healthcare and daycare. Because many of the students live within walking distance of the school, parents can more easily become involved. Photos: (opposite page) Ethan Kaplan; (left) Mark C. Darley. Courtesy of EHDD Architecture.



CASE STUDY 6

J.F. Oyster Bilingual Elementary School

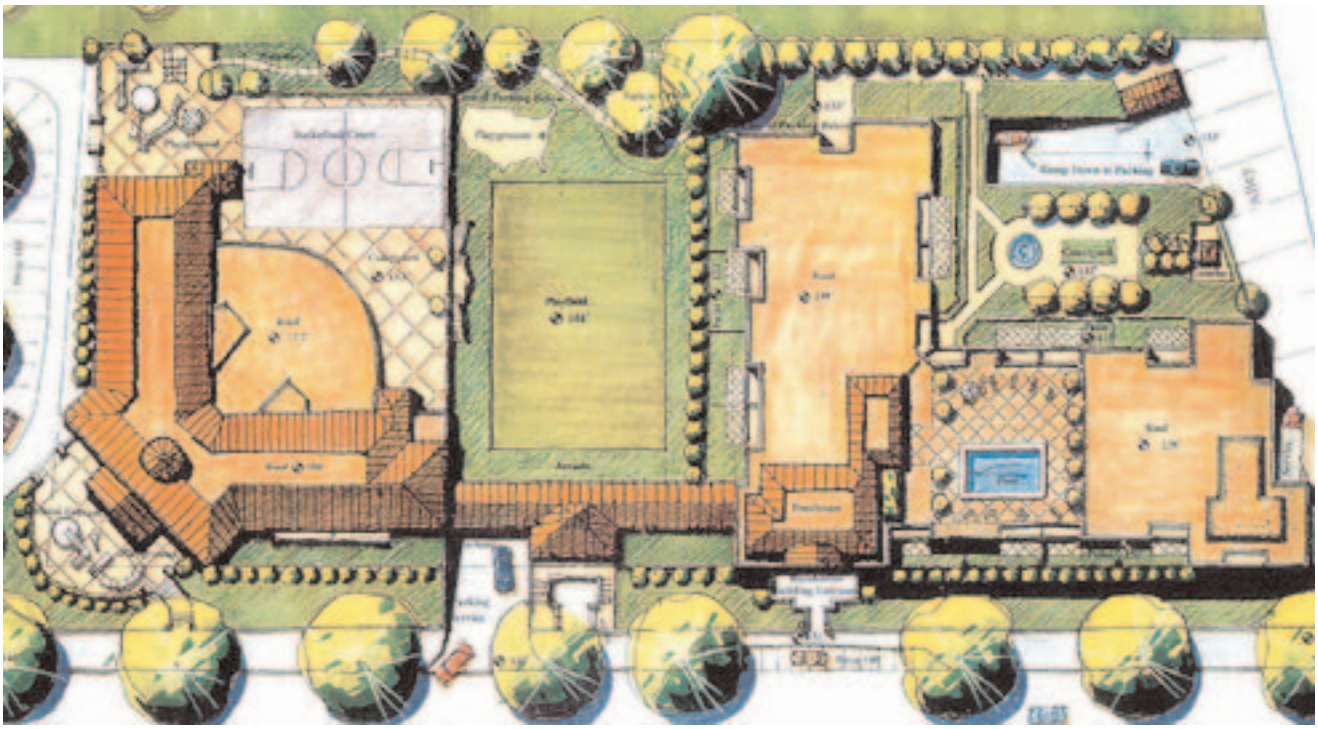
WASHINGTON, D.C.

By the early 1990s, it was clear that the overcrowded and deteriorated J.F. Oyster Bilingual Public Elementary School building in Washington, D.C., was not adequately supporting the school's nationally acclaimed English-Spanish immersion program. Built in 1926, the school lacked appropriate space for instruction in science, physical education, special education, art, and music, and it did not comply with accessibility standards. Offices for after-school programs were squeezed into converted closet space, and neighborhood organizations had no access to the school for meetings, recreation, and other community uses.

The situation was dire. Because the city had no master or capital plan that could promise the needed building improvements, the Oyster School was placed on a list of proposed school closings. But parental concern coalesced into a determined effort to save and improve the school. An organizing group of parents and school personnel documented facility problems and presented them to the city, requesting specific repairs. When the reply came that nothing could be done, the parent group asked if the city would support a plan for replacing the school at no cost to taxpayers.

The result was the beginning of an innovative public and private development partnership among LCOR Incorporated, a national real estate development firm specializing in public and private partnerships; the District of Columbia Public Schools; and the District of Columbia government. LCOR would design and construct a new Oyster School in exchange for half of the school site. On the school's half, it would build a new school building, and on the other half it would build a privately owned, 211-unit residential apartment building. The property taxes from the apartment building would be dedicated to repaying the tax exempt bonds issued to fund construction of the school building.

The 21st Century School Fund, which grew out of the original organizing group, initiated the public-private development partnership and saw the Oyster School project through to completion. 21CSF hired experienced professionals to advise the school system on real estate, architecture, construction, finance, and legal issues. It helped the local school community—including parents, teachers, and administrative



staff—participate in the decision-making process. The determination of the organizers and other dedicated community members enabled the project to move forward, even as the District of Columbia experienced turnover in mayors, superintendents, school boards, district governance structures, and school district project managers. The new J.F. Oyster Bilingual Elementary School opened in September 2001.

Development partnerships between public and private organizations, when part of a community planning process, can be an important—albeit limited—mechanism for generating revenue for school construction and contributing to economic growth. The Oyster development partnership provided a state-of-the-art public elementary school that will retain and attract good teachers, support a renowned dual-language education program, attract families to public schools, and allow students to learn, play, and grow in a healthy, safe, and educationally appropriate environment.

—Text adapted from *Building Outside the Box; Public-Private Partnership: A Strategy For Improved Public School Buildings* (21st Century School Fund 2002)

Contact Information:
J.F. Oyster Bilingual
Elementary School
2801 Calvert Street, N.W.
Washington, D.C. 20008
202-671-3111
http://www.k12.dc.us/schools/Oyster/oyster.html
21st Century School Fund
www.21csf.org

This unusual public-private partnership combines a bilingual school site with a private apartment building. Property taxes from the latter repay tax exempt bonds issues to fund school construction. Photos: Courtesy of LCOR Inc.

CASE STUDY 7

Noble High School

NORTH BERWICK, MAINE

Serving students from the far-flung Maine towns of North Berwick, Berwick, and Lebanon, Noble High School opened in September 2001. The school district in this rural area extends so far that only one other Maine district buses children more miles to school.

Design and construction of the high school—which serves grades 9 through 12—was seen as an opportunity to unify the expansive community, making the facility a hub for the three towns and creating an educational center that enabled the district to carry out a number of education reforms. To date, these reforms have brought students from the bottom third to the top third in state achievement tests. The district is one of about a thousand in the United States belonging to the Coalition of Essential Schools, with curriculums focused on project-oriented teaching.

Noble High School's design grew out of a yearlong planning process intended to draw input from everyone in the community. The school district held three public forums, made numerous presentations, distributed surveys and questionnaires to elicit comments, and formed a 20-member "future planning committee." Students were invited to contribute ideas as well.

Learning units of 100 students constitute the school's 15 academic communities. An interdisciplinary team of four teachers instructs students in math, science, English, and social studies. Each academic community has two classrooms, a large multipurpose room, a science lab, a project room, and offices for administrative and small-group use. The rooms vary in size and function and their design affords ample flexibility. Movable partitions can be rearranged to create larger spaces. In the science rooms, gas and water lines are located on outside walls to accommodate mobile lab tables. Multipurpose spaces have built-in display areas to highlight student projects for peer review, an important part of the school's educational program. More than 2,000 data ports are located throughout the learning complex.

The students and community have equal access to the resources at Noble High School. A large library and media center, an audiovisual center, television studio, and editing room, two gymnasiums, and a fitness center are open for community use. Students enrolled in the two-year culinary arts program can practice their lessons while cooking for patrons dining at the Round Table, a 50-seat restaurant with a separate entrance and access to the town square. The restaurant—its kitchen stocked with commercial cooking equipment—is open to the community during school hours but is separate from the school cafeteria.

An adult education center also has a separate entrance and offers continuing education programs to community members. An all-day childcare center offers services to

students and teachers, as well as parents enrolled in continuing education classes. A community medical clinic, also with a separate entrance, provides healthcare for high school students and other children within the district. Through an arrangement with the local hospital, a nurse-practitioner is at the school every day. A 1,000-seat theatre is equipped to stage large community productions as well as those produced by the school. Originally designed with 500 seats, the theater was expanded on the basis of a community-wide referendum. A sophisticated lighting and sound system, and full fly gallery rigging, allow the staging of both amateur and professional community performances.

Contact Information:
Noble High School
388 Somersworth Road
North Berwick, Maine 03906
207-676-2843
http://knight.noblehs.sad60.k12.me.us/

The design of this high school was seen as an opportunity to unify the geographically far-flung community, making the facility a hub for the three towns. The students and community have equal access to the library and media center, audio-visual center, television studio, two gymnasiums, and fitness center. The school also houses an adult continuing-education center, all-day child-care, and a community medical clinic where a nurse-practitioner is on duty every day. A 1,000-seat theatre houses community as well as school productions. Photos: James R. Salomon, courtesy of Harriman Associates.

CASE STUDY 8

Crow Island School

WINNETKA, ILLINOIS

Crow Island School opened in 1940 and was named a National Historic Landmark in 1990. It currently serves 430 students in grades kindergarten through 5 in the Chicago suburb of Winnetka, Illinois. Designed by the architect and educator Eliel Saarinen and the firm of Perkins, Wheeler, and Will, Crow Island was among the first U.S. schools to incorporate concepts of progressive education in its design. Its novel architecture sparked discussion and debate when it opened, its design a distinct departure from the typical two-story square and rectangular schools of the day (Williams 1991).

The Crow Island design grew from the inside out, with children's needs a primary force in determining individual classroom shapes and other more detailed aspects of the building. The benches in the auditorium are graduated in size, with the smallest in the front and the largest in the rear, so that the feet of every child can touch the floor. Blackboards and other fixtures are placed at the proper height for children. Door handles, light switches, and plumbing fixtures are scaled to a child's level.

The school design also accommodates multiple instructional strategies. The L-shaped classrooms include adjacent workrooms and a private laboratory, a design that permits large group instruction while offering space for ongoing individual and team projects, science experiments, reading, and independent study. The classrooms are grouped in four separate wings according to

age level, and connected by a core of rooms for common use: the auditorium, library, gym, activities room, and administrative area. The grounds and play area extend from the classroom wings and are zoned according to age, providing increased freedom and greater safety for play activities (Winnetka 2003). Each classroom space provides access to an adjacent courtyard. Large windows offer extensive natural lighting and a strong connection between interior and exterior learning spaces. Adjacent to Crow Island School is Crow Island Woods, a virtually untouched forest abounding in wildflowers and wildlife. This wooded area provides an additional resource for teachers and students to explore and learn firsthand about the natural features of the local habitat.

Crow Island School exemplifies how learning environments can be responsive to the enduring qualities of childhood while reflecting the changing vision of school and its place in the larger community.

Contact Information:
Crow Island School
1112 Willow Road
Winnetka, Illinois 60093
847-446-0353
http://www.winnetka.k12.il.us/ci/

Crow Island was among the first U.S. schools to incorporate concepts of progressive education in its design. It was made a National Historic Landmark in 1990. Photos: Courtesy of Perkins and Will, Inc.

CASE STUDY 9

Interdistrict Downtown School

MINNEAPOLIS, MINNESOTA

Designed as an urban magnet school for the twenty-first century, Interdistrict Downtown School is situated atop a city-owned underground parking facility on busy Hennepin Avenue. Its neighbors include an historic theater, a university, a church, and a professional photo processing lab.

The $14.2 facility serves 600 students—kindergarten through grade 12—in a 102,500-square-foot downtown building. The project is the result of a collaboration among ten school districts comprising the West Metro Education Program. These include Minneapolis, Brooklyn Center, Columbia Heights, Edina, Hopkins, Richfield, Robbinsdale, St. Anthony-New Brighton, St. Louis Park, and Wayzata. Although the project was funded principally by a state grant, additional contributions came from a private Catholic university and the Minneapolis Community Development Authority.

In 1998, its first year of operation, the school served grades 3 through 8. Grades kindergarten through 2 and 9 were added in the second year, and the first class of twelfth graders graduated in June 2003. There are three school units: elementary, middle, and high school. Individual school teams of approximately 150 students occupy different floors of the building. Shared and community-use spaces fill the street level. All school spaces are flexible, designed to accommodate different teaching and learning styles and help students learn while doing.

Athletic facilities and performance spaces were not built into this school; students use the YMCA and other nearby facilities. The building's HVAC, plumbing, electrical, and communications systems are revealed on the interior to serve as teaching tools, with the principles of their operation integrated into the curriculum.

Rather than isolating students from the surrounding environment, this multicultural school uses its location to

integrate educational programs with the downtown neighborhood. It draws on local organizations as resources and uses them as external laboratories. Older students may spend as much as half of their time in these settings.

Partnerships have been formed with the Downtown YMCA, the Minneapolis Downtown Rotary Club, the University of St. Thomas, MacPhail Center for the Arts, Orchestra Hall, the Minneapolis Downtown Library, Illusion Theater, the Hennepin County Government Center, Loring Park, the historic Orpheum and State theatres, and numerous downtown Minneapolis businesses. School partnerships with downtown businesses, government agencies, and the arts community make it unique among schools in Minnesota and the nation.

The school is constructed of red brick, zinc panels, and ochre-colored precast concrete that complement the downtown architecture. Its creative design earned it the 2000 James D. MacConnell Award from the Council of Educational Facility Planners, International.

— Text adapted from *Educational Facility Planner,* "2001 Design Portfolio" (Council of Educational Facility Planners, International 2001)

Contact Information:
Interdistrict Downtown School
10 South 10th Street
Minneapolis, Minnesota 55403
612-752-7100
http://www.idds.k12.mn.us

This multicultural school integrates educational programs with the downtown neighborhood. It draws on local organizations as resources and uses them as external laboratories. Older students may spend as much as half of their time in outside settings. Photos: Cuningham Group Architecture, P.A.

CASE STUDY 10

High Tech High

SAN DIEGO, CALIFORNIA

High Tech High occupies the former Naval Training Center in San Diego. Launched in September 2000 by a coalition of industry and educational organizations, High Tech High is a small, diverse learning community with a projected enrollment of 400 students in grades 9 through 12.

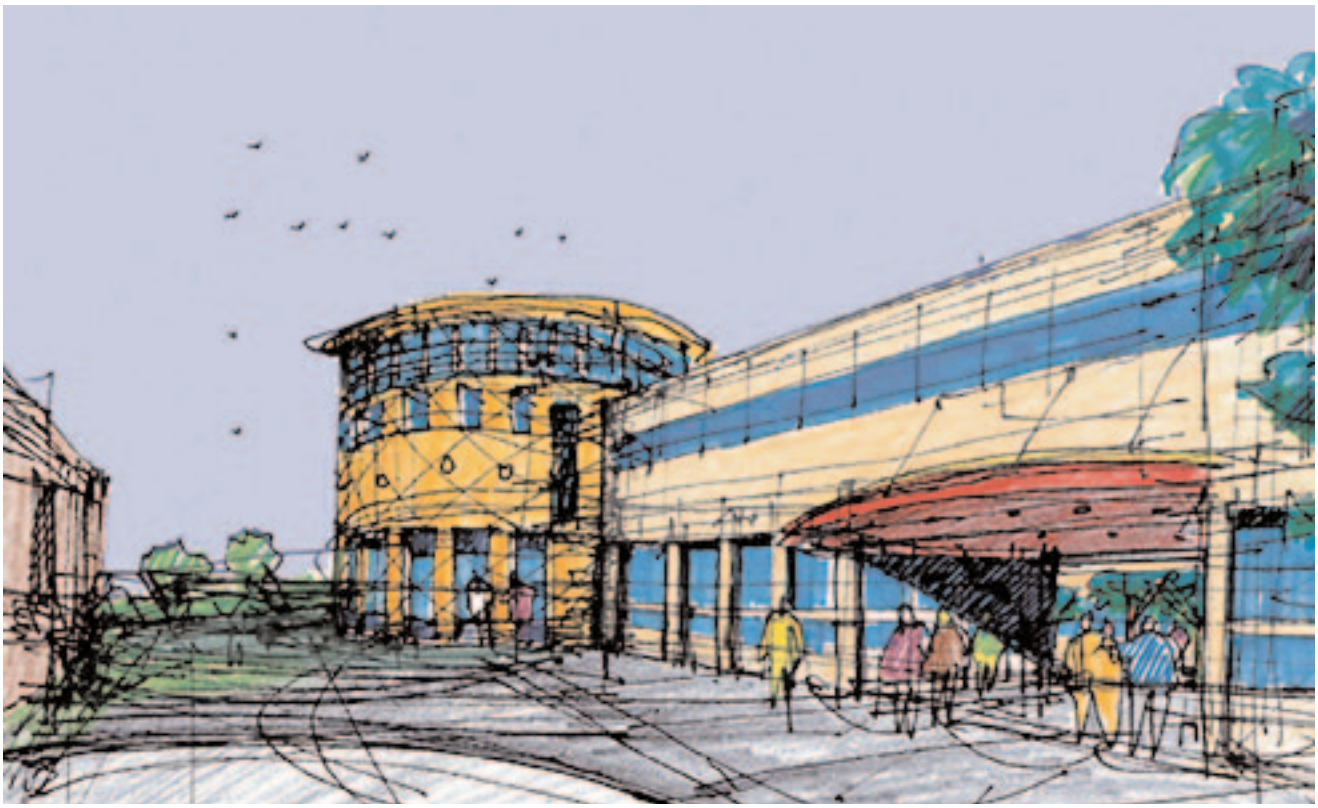
The 40,000-square-foot school has 14 classroom-labs flanked by high-ceilinged open areas. The school's size affords every student his or her own workstation and provides plenty of workspace for group projects. Other campus tenants include a culinary school, an architectural school, a community college, an artists' colony, a micro-economic development core, and various public and private agencies. Plans call for a new wing to house international studies.

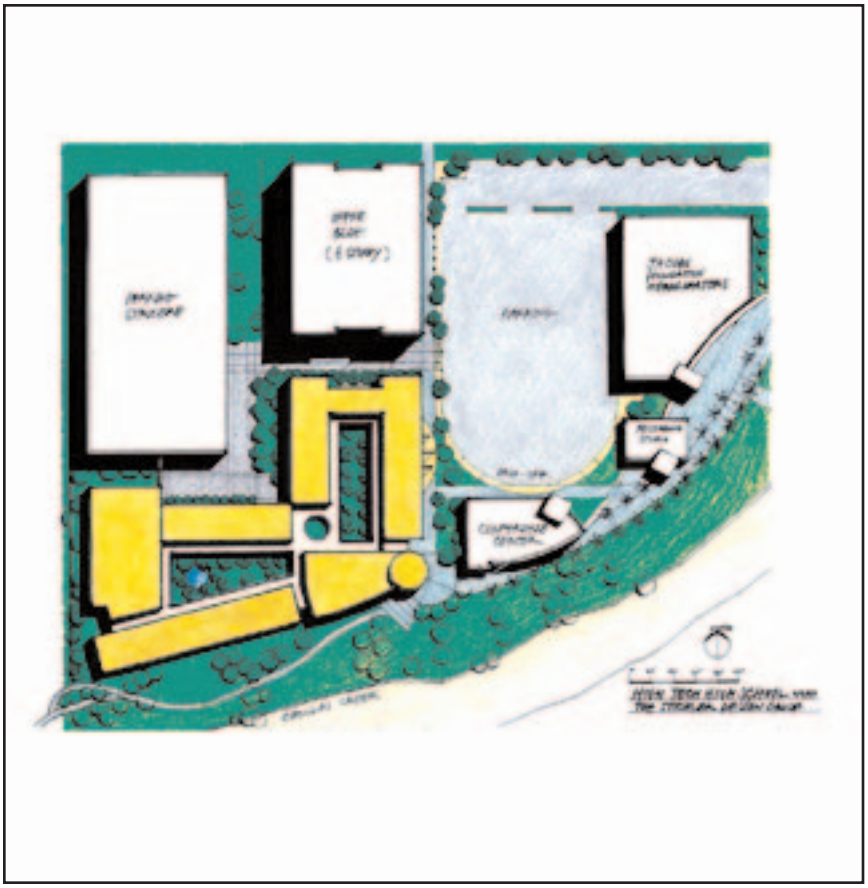
The school's philosophy is based on three principles: personalization, adult-world connection, and common intellectual mission. Innovative features include performance-based assessments, daily shared planning time for staff, state-of-the-art technical facilities for project-oriented learning, required internships, and close links to the high tech workplace.

Each student has a personalized learning plan and a permanent advisor. Centered on a program called Habits of Mind, the curriculum is engaging and rigorous. Students create projects, solve problems, and present their work to review panels composed of advisors, mentors, parents, and community representatives. All students must complete academic internships in local business organizations during their junior and senior years.

The educational and facilities design model is being replicated in other places through a $6.4 million grant from the Bill and Melinda Gates Foundation.

— Text adapted from the website of High Tech High at http://www.hightechhigh.org/about/index.shtml





Contact Information:
High Tech High
2861 Womble Road
San Diego, California 92106-6025
619-243-5000
http://www.hightechhigh.org/

Close links to the high tech workplace are a feature of this school, where every student has a personal workstation, a personalized learning plan, and a permanent advisor. All students must complete academic internships in local business organizations during their junior and senior years. Photos: Brady Architectural Photography, courtesy of The Stichler Group, Inc.

CASE STUDY 11

Henry Ford Academy

DEARBORN, MICHIGAN

The Henry Ford Academy, located at the Henry Ford Museum and Greenfield Village in Dearborn, Michigan, was developed through a partnership of the Henry Ford Museum, the Ford Motor Company, and the Wayne County Regional Educational Service Agency. The academy opened in the fall of 1997 with 100 ninth-grade students. By the time its first class graduated in 2001, the school had a full complement of 400 students in grades 9 through 12.

The collaborative effort of a global corporation, a prominent not-for-profit cultural organization, and the public school system has enabled an ideal integration of school and museum environments. Students at Henry Ford Academy use museum artifacts and exhibitions for analysis and inspiration. Math students examine the museum's structure, making estimates and calculations of geometric components, such as windows, walls, ceilings, and exhibit spaces. Teachers use the school partnership with the Ford Motor Company to help students find real-world applications for their discipline-based studies.

After six years of operation, students clearly have embraced the school-at-a-museum concept, with attendance at 98 percent and test scores three times the Detroit average.

Rather than occupying a single building, the school's grade levels are located in strategic areas of the museum site. The ninth-grade learning studio occupies the museum's main exhibit building, giving students access to thousands of three-dimensional museum artifacts, including automobiles, trains, airplanes, and other implements and inventions.

The tenth-grade studio is located within Greenfield Village, a collection of more than 80 buildings that showcase American history. These buildings include the Wright Brothers' bicycle shop, Thomas Edison's laboratory, and Noah Webster's house. The studio utilizes movable walls between major learning spaces, providing teachers and students with flexibility for team teaching and cooperative learning. The eleventh-grade studio is located nearby in a structure that once housed a nineteenth-century carousel. Here, a large gathering space is supplemented with modular learning labs to provide a variety of teaching and learning environments. With input from students, the twelfth-grade learning labs were located in

an assemblage of passenger train cars, with group meeting spaces in the adjacent railroad terminal.

By using the Henry Ford Museum as an educational facility, the total capital cost of developing Henry Ford Academy was less than a quarter of that required to build a traditional high school. Sharing auditorium, cafeteria, bathroom, and other common spaces with museum staff also provides more opportunities for students to interact with mentors. The result is a rich new learning environment.

Calling it "one of the most innovative, forward-thinking high schools in the nation," the Council of Educational Facility Planners, International, awarded the project its 2001 James D. MacConnell Award for planning excellence (CEFPI 2001).

—Text adapted from the website of the Henry Ford Academy at *http://www.hfacademy.org/*

Contact Information:
Henry Ford Academy
20900 Oakwood Blvd., P.O. Box 1148
Dearborn, MI 48121-1148
313-982-6200
http://www.hfacademy.org

Housed at the Henry Ford Museum and Greenfield Village, this school uses museum facilities as teaching tools. The total capital cost was less than a quarter of that required for a traditional high school. Photos: Courtesy of Concordia, LLC.

CASE STUDY 12

Met Center

PROVIDENCE, RHODE ISLAND

The Metropolitan Regional Career and Technical Center is a small grade 9 through 12 public high school open to students living in Rhode Island. Its philosophy is to educate one student at a time, with each student's curriculum reflecting his or her unique interests, background, and learning style. Instead of teachers, students have advisors who are responsible for facilitating and assessing each student's learning. An "advisory"—a group that includes a maximum of 14 students—begins in the ninth grade and remains together until graduation. The long-term relationship between advisors and students is intended to aid student motivation and learning.

According to The Big Picture Company, an education-reform organization that founded and manages Met Center, the physical design of a school helps to shape the learning within it. Co-director Elliot Washor says it is the company's vision to

> ... create physical spaces for Big Picture schools that support our approach to personalized, real-world education and family and community engagement. Big Picture School buildings are intended to be a home base for students learning in the real world. Our focus is on building relationships, and our physical spaces must support this effort. All aspects of our buildings play a role, from lighting to furniture and technology, to productive spaces for project and group work, to quiet, comfortable places for individual focus and reflection (Washor 2003).

Met Center's first campus opened in the Shepard Building in downtown Providence in September of 1996. In 1999, a second campus opened on Peace Street, and in 2002 four additional Met school buildings opened on a central campus in South Providence along with a fitness center, a performance space, and a state-of-the-art technology center.

As a part of their learning plan, Met Center students spend three days a week at their home base school, where overall enrollment is limited to six advisories. Students participate in extended learning experiences two days a week in an off-site location, such as a hospital, professional office, government office, or restaurant. There, each student follows an innovative

and highly personalized "learning-through-internship" model, where the student, advisor, parent, and mentor collaborate to support the student's learning through an integrated curriculum based on real-world experiences.

With a grant from the Bill and Melinda Gates Foundation, The Big Picture Company is helping to replicate the Met Center model at 12 other locations. Besides Met Center, Big Picture schools are open in Oakland and El Dorado, California, and Federal Way, Washington. More are underway in Detroit, Denver, and Sacramento.

Contact Information:
The Metropolitan Regional Career and Technical Center
Providence, Rhode Island
401-752-3400 (Peace Street Campus)
401-277-5046 (Shepard Campus)
http://www.metcenter.org/
The Big Picture Company, Inc.
http://www.bigpicture.org/

Personalized education is the hallmark of this school, which assigns each student to a 14-student "advisory" group that fosters long-term relationships between advisors and students. Each student may spend two days a week in an off-site location such as a hospital, office, or restaurant; this internship model provides real-world learning experiences. Photos: Cal Wolk, courtesy of Concordia, LLC.

CASE STUDY 13

School of Environmental Studies

MINNEAPOLIS, MINNESOTA

The School of Environmental Studies (SES) at the Minnesota Zoological Gardens is an "optional" high school that accommodates 400 juniors and seniors drawn from four large, comprehensive high schools in the 28,500-student Rosemount/Apple Valley/Eagan public school district in suburban Minneapolis.

SES opened in 1995. The full-day school offers a complete program of curricular opportunities, although students may elect to return to their home high schools for band, choir, specialized academic offerings, and athletics.

The 12-acre SES site gives students ready access to zoo facilities, as well as to those of the adjacent 3,000-acre Lebanon Hills Regional Park, both within a short walk. The site is being developed by SES students and staff to create a variety of environmental learning laboratories and programs.

The school is socially structured into houses, pods, and work groups. The primary unit is a house of approximately 100 students. The school has two junior and two senior houses, each with three instructors certified in English and communications, social education, and science. Within each house there are secondary-level pods of approximately ten students, as well as tertiary-level work groups. Many instructional problems or challenges are analyzed in work groups, which are sized according to the nature of the problem posed and the desired approach to solving it.

Pods are physical as well as social structures. Each pod has individual desks, two shared wardrobes, and a circular conference table. Students take both group and individual ownership of these spaces. The pods are set around a "centrum," or great space, that forms the primary instructional area. Tables and chairs, rather than desks, make the pods highly flexible and can be

easily reorganized to suit the immediate needs of learners and instructors.

A visiting architect studying the relationship of the building to student activity noticed that the doors to the teachers' offices always are open. Students take this as an invitation to hold discussions. The flow of traffic through these doors is constant, sometimes for questions of an academic nature, but just as often to share a personal thought or experience. Teachers eat in the same place and wait in the same lunch line as students; this fosters the idea of students and faculty working closely together.

Because SES has a relatively small student body, student-teacher relationships spanning the two-year period are common. Some occur as a result of field studies or short courses, others as the result of visiting different classes to share an area of professional expertise, monitoring a computer lab, waiting in the lunch line together, or participating in the in-house ultimate Frisbee league, all-school Socratic seminars, overnight camp-outs, and Earth Day.

Critically important to the school's success is the willingness of local community members to act as mentors. Students working with artists, horticulturists, and architects have learned not only about the skills of these professions but have encountered adults with whom they can talk about a great variety of things. Field studies and intensive theme courses provide an additional opportunity for students and teachers to share long periods of time pursuing the same goals. An ongoing mentorship affiliation with the Lever Corporation and the National Park Service provides places for four students to intern in Yellowstone National Park each summer.

—Text adapted from the website of Independent School District 196 at *http://www.ISD196.k12.mn.us/schools/ses*

Contact Information:
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The school's social structure—houses, pods, and work groups—is reflected in its physical layout. Each pod has ten students, individual desks, shared wardrobes, and a conference table. These are set around a "centrum," the primary instructional area. Photos: Courtesy of HGA; photo below by Don Wong Photo Inc.

Photodisc.

PART FOUR

Making it Happen

The challenge of building new schools and modernizing existing ones offers the opportunity to enhance teaching and learning, and to strengthen communities at the same time.

By initiating a thoughtful, inclusive school facilities planning process, school districts can incorporate diverse points of view, take advantage of the power and creativity of parent and business partnerships, enlist widespread community funding support, and create high performance schools that serve both students and their communities.

There is no precise formula for making this all happen, but the following 19 steps—and the action checklists that accompany them—provide the basics.

Getting Started and Getting Organized — Steps 1 through 5

Involving the Community in the Planning Process — Steps 6 through 12

Developing and Implementing a Master Plan — Steps 13 through 19

In any community, if a cross section of key leaders gets together and sees an issue that needs attention, especially one with economic implications, something's going to happen.

—Cynthia Marshall, Executive Director, Cities in Schools of Charlotte/Mecklenburg County, Charlotte, North Carolina

Getting Organized and Getting Started
STEPS 1 THROUGH 5

The initial phase of the planning process requires strong leadership and commitment, which must come not only from school board members and school district officials; it must come from concerned and active people and organizations *within the community.*

STEP 1
Initiating the Planning Process

The planning process for schools is typically initiated by the local school board or school administration, but the spark that ignites the process may come from conversations among neighbors, a small group of concerned citizens, or a single individual.

An assistant superintendent and a local developer got things started in northern California's Western Placer Unified School District by talking to the local school board. In Gulfport, Mississippi, the school board president kicked things off, and

Step one is simple: Identify a handful of key players in your community—perhaps four to six—for an initial meeting or conversation. Photo: Photodisc.

Mighty things from small beginnings grow.

—*Annus Mirabilis,* poem by John Dryden published in 1666–1667

within a year more than 450 Gulfport citizens were participating in the district's master planning process. When eventually presented to voters, the plan they had developed to replace two facilities and renovate the district's remaining schools was overwhelmingly approved in the largest school bond issue allowable under Mississippi law.

STEP 1 ACTION CHECKLIST: INITIATING THE PLANNING PROCESS

✓ **Identify a handful of key players** in your community—perhaps four to six—for an initial meeting or conversation. When considering prospective players, take into account their likely level of commitment and their potential for leadership as well as their community standing. An active parent might be the right person to help spread the word and mobilize a larger group. An influential business owner or clergy member might be most effective at initiating the planning process. Local governmental leaders may have an interest in sharing facilities and the cost benefits derived from multiple uses of the same spaces.

✓ **Extend personal invitations** to bring this small group together. Keep in mind that face-to-face conversations are more effective than phone calls, and phone calls are more effective than letters.

✓ **Select a leader** for the initial meeting. Consider someone who is skillful at facilitating conversations, but who will not dominate them.

✓ **At the initial meeting,** present the issues at hand along with the idea of creating a community-wide process for developing a school facilities plan. Trust the group to create solutions and provide guidance.

✓ **As a group, create an action plan** that encompasses the next four steps of the planning process. Consider beginning the action plan with a short statement of purpose that articulates clearly what you want the planning process to accomplish. This statement will be useful as you move through the following steps.

STEP 2

Funding the Planning Process

An extensive community-oriented planning process requires funding, and one of the first tasks of the initiating group will be to secure it. Since the process proposed here is both philosophically and practically a collaborative and inclusive one, a combination of public and private funds will probably provide the best funding mix.

Regardless of potential funding sources, members of the initiating group need to be able to tell prospective donors why the money is needed. While specific expenditures and expenses for the planning process undoubtedly will vary from community to community, funds likely will be required for each of the following activities:

- Training and support materials
- The services of a professional planner or facilitator or the dedicated time of a qualified district employee to oversee the process
- Paying for release time (utilizing substitute teachers) or extended time (with overtime payments) to allow school personnel to participate in planning sessions
- Paper, printing, and postage to produce and disseminate interim and final reports
- The services of a communications specialist or media consultant to help communicate goals and plans
- Clerical or technical assistance, as needed.

In a world of shrinking resources and growing demands for public accountability, obtaining funding for the planning process can be a major obstacle. When citizens want hard data and measurable results, the whole notion of planning might well be seen as an expendable frill. When teachers are underpaid or their positions are eliminated because of funding shortages, or when students have too few textbooks—let alone adequate access to computers—a community-based planning process might be viewed as a luxury the district can ill afford.

Addressing these issues and concerns requires proponents to imaginatively and persuasively articulate the benefits of

One of the toughest challenges in the beginning was convincing the school board that we should spend more money on planning.... In the end, the total cost of the facilities that were suggested in the master plan cost 19 percent less than if we had used a traditional model. Our planning costs represented only 5 percent of the projected savings. We felt like we had earned our keep.

—Roger Yohe, Superintendent, Western Placer Unified School District, Lincoln, California

planning, relying on concrete research and examples that demonstrate convincingly how an investment in planning can, over the long term, positively affect student achievement, the community, citizen support, and fiscal management.

STEP 2 ACTION CHECKLIST: FUNDING THE PLANNING PROCESS

✓ **Create a list of potential donors.** Consider both public and private sources.

✓ **Develop a proposed budget** based on the kind of planning process you envision for your district and community. Include categories for all the planning functions you foresee, along with a rationale and projected dollar amount for each.

✓ **Arm yourself with research** and examples illustrating the positive benefits of planning, particularly in terms of improved student achievement, community benefits, citizen support, and long-term savings.

✓ **Create a presentation** for potential donors. Include the overall goals of the planning process, an overview of the steps involved, expected outcomes and benefits, and an itemized list of proposed expenditures.

✓ **Decide who will approach each specific potential donor** to request financial support. Remember that school board support is vital to the success of a widespread planning effort, and that board members are more likely to sanction and allocate funding when they are included as players from the outset.

✓ **After you have secured funding,** tailor plans to reflect your actual budget.

STEP 3
Identifying a Facilitator

Once the school board has sanctioned a facilities planning process and secured funding to support it, the next step is to identify a facilitator to organize and oversee planning activities. Community-centered facilities planning is time-consuming and challenging; leading such a collaborative process requires great skill and commitment.

The best candidate to guide the work should possess a strong background in planning; a good working knowledge of current educational research and best practices; effective communication skills as a listener, speaker, and writer; experience in facilitating large group meetings; and a demonstrated ability to build consensus. The candidate also must be skilled in analyzing and using data.

A good facilitator may already exist within the school system. If not, the district should engage the services of a professional. Even when there are skilled facilitators on staff, an outsider may be best because of the neutral image, external knowledge, and fresh approach he or she can bring.

Although each district will need to consider its own unique situation and resources to determine who should be the facilitator, the process will succeed only if the facilitator can devote a significant amount of time and energy to the work.

It may take a year of thoughtful, concentrated work to build the community consensus necessary for a quality planning process. Time, knowledge, and expert facilitation skills are needed to share the information and perspectives necessary to help everyone understand the issues, express their views, and participate fully.

Ample time and a good grasp of planning are required to develop recommendations that match goals, address needs, and result in widespread community acceptance.

STEP 3 ACTION CHECKLIST: IDENTIFYING A FACILITATOR

✓ **Develop a facilitator job description.** Include tasks, time commitments, and preferred qualifications, such as:

- Strong background in facility planning
- Solid working knowledge of current educational research and

best practices

- Effective communication skills as a listener, speaker, and writer
- Experience and skill in facilitating large meetings, including the ability to set clear directions, remove barriers, and recognize when to step back and let the group's creativity and energy flow
- Ability to build consensus

✓ **Consider the needs of your district,** assess your resources (personnel, time, and money), and decide whether you will select a facilitator from inside or outside your school district.

✓ **Define the selection process.** Consider that widespread participation in selecting a facilitator will likely promote future support for the project. Moreover, such participation will reflect and demonstrate a key tenet of the entire facilities planning process: *including all community interests.*

✓ **Select the facilitator** and brief him or her on your goals and directions and on the work completed to date.

Photo: Digital Vision.

STEP 4

Assembling the Core Planning Team

4 A core planning team of about a dozen experienced and respected leaders is needed to serve as the leadership backbone for the project through to its completion.

For the team to succeed, it should include credible community members who represent the full breadth of opinion within the school district. The team's primary responsibilities will include:

- Naming steering committee members (see Step 5)
- Securing materials and resources
- Forming and leading the steering committee
- Scheduling meetings and establishing a reasonable timeline for completing the planning process
- Constituting subcommittees, as needed
- Managing the planning process between meetings of the steering committee
- Editing the school facilities master plan
- Communicating with the larger community throughout the process and distributing the master plan when it is completed.

A dedicated group of leaders who have diverse perspectives and a common commitment can implement a planning process that really makes a difference, mobilizing the kind of change described by Reverend Phillip Lance, member of the Los Angeles Unified Schools District's New Schools/ Better Neighborhoods Advisory Committee:

> L.A.'s best schools come in all shapes and sizes, but they are led by people who aren't deceived about wherein lies the real power to create change. These leaders build a local alliance that empowers them to battle and break free from the status quo. This covenant with the community must begin in the planning stages for a new school; otherwise, the bulldozers will wipe out many of the seeds of innovation.
>
> —Reverend Phillip Lance, President, Pueblo Nuevo Development, Los Angeles, California

STEP 4 ACTION CHECKLIST: ASSEMBLING THE CORE PLANNING TEAM

✓ **Develop job descriptions** for members of the core planning team. Include tasks and time commitments.

✓ **Identify a dozen or so key players** in the community. Solicit suggestions for team members from them and a variety of other sources. Consider potential members' commitment and leadership abilities as well as their standing in the community. Ensure that the planning team will represent the full breadth of community viewpoints.

✓ **Issue personal invitations** to serve on the core planning team. Remember, a face-to-face conversation is more effective than a phone call, and a phone call is more effective than a letter. As part of your invitation, explain the purpose of the planning process and summarize the job description for team members.

✓ **Bring the members of the core planning team together with the facilitator.** Provide them with background information and appropriate training in facilitation and the planning process.

STEP 5

Organizing the Steering Committee

5 One of the core planning team's initial tasks will be to organize a steering committee. While this committee will vary in size according to the makeup of the community and the school district, it should be large enough—and broad enough in its thinking—to represent the interests and resources of the entire community. Many successful steering committees have been comprised of a hundred or more educators, parents, students, and representatives from local civic and business organizations.

The steering committee ultimately will be responsible to the community for developing the facilities master plan. Among its members' most important roles will be to serve as key communicators between the community and the committee itself. Specifically, the steering committee will participate in each of the following activities, which are discussed in the following section of this book as Steps 13 through 19 of the facilities master planning process.

Step 13. Building common understanding, shared beliefs, and collective vision about schools and schooling within the community

Step 14. Determining facilities-related educational and community needs

Step 15. Identifying assets and resources

Step 16. Developing specific recommendations

Step 17. Communicating with the larger community to solicit feedback and build consensus on recommendations

In West Virginia, where minority populations represent a very small component of the total population, divisions along racial or even ethnic lines are rare. Here, divisions occur along lines of family or geography. Geographic divisions take place between folks who live in the hills and the valleys or between folks who live on opposite sides of a river. In Putnam County, even though most of the population is on the south bank of the Kanawha River, it is always important to make sure that north bank residents get their equitable share of the action. They represent a small but politically vocal and powerful minority.

—Dr. Sam Sentelle, Superintendent, Putnam County Schools, Putnam County, West Virginia

Step 18. Creating a school facilities master plan

Step 19. Supporting the plan's implementation

Key concerns for selecting steering committee members include the need to reflect as many perspectives as possible, to fully represent the region's social and ethnic diversity, and to include all geographic areas in the school district.

"Diversity" means different things to different communities. Consider, for example, the case of the Appalachian community that is quoted at the top of this page.

When the objective is to achieve comprehensive diversity on a single committee, it is helpful to consider community leaders who can represent several issues or constituencies. Whenever a diverse group comes together, disputes and disagreements may be expected, so it is wise to choose steering committee members who can remain open minded and committed to achieving community consensus and a shared vision. From the outset, these attributes need to be demonstrated by the facilitator and the members of the core planning team; they need to be consistently reinforced through training and vigilance.

STEP 5 ACTION CHECKLIST: ORGANIZING THE STEERING COMMITTEE

✓ **Make a list of potential steering committee members** who meet the three criteria of clout, commitment, and diversity. Keep in mind that members should include educators, parents, students, and representatives from local civic and business organizations within the community. Consider soliciting suggestions for potential members from groups such as the PTA, the local ministerial association, and the Chamber of Commerce.

✓ **Create a database** to track members and ensure broad representation from the outset. This database will aid communication throughout the process.

✓ **Schedule an initial meeting** of prospective members, issuing invitations through personal contact or by telephone. Follow up with a written invitation that includes a brief statement of the committee's purpose and a summary of expectations for members.

✓ **Send out materials in advance** of the first meeting. Include pertinent facts about the school district and its facilities, an overview of the facilities planning process, a schedule of future meetings, and literature about current research and best practices related to teaching and learning. The design principles and descriptions of actual innovative school designs contained herein can provide useful advance information.

✓ **Plan meetings carefully.** Prepare a list of operating norms to guide the steering committee. Build into the meeting schedule time to develop a common knowledge base, provide training and orientation for the planning process, and prepare a shared mission statement focused on addressing the district's and community's facilities needs.

Involving the Community
STEPS 6 THROUGH 12

The process of creating a school facilities plan should involve a shared community vision about the kinds of education its citizens want. By encouraging respectful and productive communication among diverse constituencies, a broad and inclusive planning process can bring about results far superior to one developed by only educators, or architects, or any other single group. Many viewpoints and multiple perspectives really *are* better than just a few, and an inclusive planning process can forge renewed commitment to the community's schools. People tend to support what they help create.

The synergy of shared decision making, problem solving, and goal setting builds a strong foundation for collective responsibility and an enduring support for schools. Steps 6 through 12 of the process—intended to involve community interests in school facilities planning—should be undertaken concurrently.

STEP 6
Involving Students

Ironically, students—the people with the largest stake in education and those most directly affected by the learning environment—are the ones most frequently excluded from decisions regarding its design. Leaving students out of the planning process is a mistake. Clearly they have a vested interest in the

With proper facilitation and in numbers sufficient to provide adequate peer support, students can be a tremendously productive force in the planning process. Photo: Photodisc.

Students are extraordinary teachers. They speak. They constantly tell us how our expectations, objectives, curriculums, and instructional strategies affect them. We need to look to our students to tell us why learning takes place—and why it doesn't. Our students are key sources for helping us identify what needs to be done.... Often we forget to ask them, and we forget to listen to the important messages they bring.

—Anthony Gregorc, as quoted in *The Hero's Journey* (Brown 1999)

outcome and deserve a place at the table. Including students is not only the right thing to do, it is the wise thing to do.

Student participation can be valuable for several reasons. First, students have much to offer to the process. They represent a pool of creativity and enthusiasm. Young people definitely know about schools—how their buildings feel and work, and how people feel and work when they are in them. They often are free from entrenched and typically self-defeating assumptions about why things are as they are or why they cannot be changed, and so can be a source of refreshing ideas and innovative suggestions. With proper facilitation and in numbers sufficient to provide adequate peer support, students can be a tremendously productive force in the planning process.

Second, students have much to learn from the process. The chance to interact with adult colleagues who are doing real work can give them a particularly rich learning context. Not only will they be able to watch adults apply their skills in real-world situations, they will have the chance to practice the skills themselves. Serving on the steering committee can give students the opportunity to exercise skills in research, analysis, communication, problem solving, and collaborative teaming, all of which are necessary for workplace success.

Third, the facilities planning process can demonstrate best practices in education: Learning that is integrated and applied, where teamwork and collaborative problem solving are the norms, and where student work is valuable. This was the case in Lincoln, California, where educators in the Western Placer Unified School District incorporated their planning process into the curriculum. In conjunction with their work as part of the community-based planning committee, teachers taught their students how to design, draw, and create models that they used to communicate with the architects designing Lincoln's new schools.

Finally, the community has much to gain by involving students because the students develop an ethic of community service and gain practice in caring for a society greater than themselves. Asking students to join in such a collaborative action is a critical strategy for fostering the spirit of community for the future.

> Surely it is an obligation of education in a democracy to empower the young to become members of the public, to participate, and to play articulate roles in the public space.
>
> —Maxine Greene, *The Role of Education in Democracy,* (Green 1985)

To enact change where it matters most—in the culture and instructional practices of schools—we need bold action. We must build a new coalition that includes teachers, students, administrators, support staff, caregivers, businesses, service organizations, and members of local and regional communities. The times demand that we act in greater numbers with extraordinary vision, integrity, and caring for children we serve. We believe we are up to the task.

—John L. Brown and Cerylle A. Moffett, *The Hero's Journey* (Brown 1999)

STEP 7

Involving Parents

7 As with students, parents historically have been a greatly underrepresented constituency in the school design process. In fact, parents have perhaps been the most underutilized resource in American education. Three decades of research has established unequivocally that parental engagement has a significant, positive influence on students' academic achievement, behavior in school, and attitudes about school and work. Yet too often parents are not included as essential partners in the education of their children. Clearly, parents have a vested interest in decisions about all aspects of schooling, not the least of which are decisions about where their sons and daughters will spend their days. They deserve a place at the table from the outset of any planning activity.

Parent participation can lead to a greater shared understanding about current educational theory and practice. For some parents, there have been too few opportunities to interact with schools in meaningful roles as adults, and their perspectives on education end up based principally on their own school experiences. When parents are included in planning as active participants, teachers and administrators have a chance to talk with them about current educational strategies, answer questions, gain feedback and suggestions, and suggest ways of helping their sons and daughters learn. Perhaps more importantly, educators can become fellow researchers with parents, together discovering better ways to teach. This kind of respectful, productive communication is likely to produce new ideas about school design, empowering parents to become staunch allies as well as valuable contributors.

In addition, parents' needs historically have not been reflected in the design of school buildings. There should be places for parents to park their cars and hang their coats, small group areas for meeting with teachers and staff, and workspaces for parents to use computers or make phone calls. Some recent school designs have gone beyond these minimal accommodations to incorporate parent centers within the building complex, thereby signaling to parents that the schoolhouse is their house. They are not only welcome, but encouraged, to take an active role in the work of educating students.

STEP 8

Involving Educators

8 The participation of a large contingent of educators in the facilities planning process is critical to the success of any school design. Although the need for participation may seem obvious, it has not been common. In the 1950s and 1960s, an entire generation of open-plan schools was designed and constructed with limited input from affected teachers. While there may have been significant educational benefits in these open designs, their potential never was realized because they were developed apart from their users. Changing the configuration of the learning environment without changing the practices of teachers and learners is like changing one half of an equation without the other: The result is imbalance. With open-plan schools, balance often was restored at considerable expense by modifying the facilities rather than changing instructional practices.

In recent years, many school architects have assumed that teachers would continue to teach as they have for 30 years, organizing instruction by department.The typical result has been self-contained classroom cubicles arranged on facing sides of a corridor. Meanwhile, educators have been discovering the benefits of team teaching, interdisciplinary learning, and block scheduling, methods which might benefit from a different kind of classroom arrangement.

As educators see how new and evolving technologies can enhance learning, they are abandoning the traditional lecture as the instructional method of choice. More active and effective learning strategies are finding favor; these involve students in cooperative group work, collaborative

We can no longer ignore the leadership capability of teachers—
the largest group of school employees and those closest to the students.
Empowered teachers bring an enormous resource for continually improving schools.

—John L. Brown and Cerylle A. Moffett, *The Hero's Journey* (Brown 1999)

Respectful, productive communication among parents and school planners is likely to produce new ideas about school design, empowering parents to become staunch allies as well as valuable contributors. Photo: Photodisc.

problem solving, and projects requiring knowledge application (Lippman 2002; George Lucas Educational Foundation 2003). These approaches significantly affect the kinds of spaces, furniture, and equipment required in a school and cannot easily be accommodated by a traditional departmentalized, self-contained series of classrooms.

Mismatches between design and use can be avoided when educators play a key role in every stage of the facilities planning process. Now, when educational practice involves a wider range of teaching and learning strategies than ever before, providing a place at the table for teachers in particular is critical. As practitioner experts and primary users, teachers—not just school administrators—must take a leading role in the process of developing facilities plans that support their best knowledge about learning.

STEP 9

Involving Business

9 The involvement of corporations, businesses, and organizations representing businesses can enhance and legitimize the school facilities planning process. As primary "customers" for the "products" schools produce, businesses have particular needs and unique perspectives. Having businesses participate in your school's design process tells the community that supporting schools is good business.

During the past decade, many businesses have spent substantial sums restructuring their work environments to reflect the new ways that people work in an information society. This experience can inform the process of rethinking school designs. A good example of the exodus from old-school business ways was the departure of Alcoa Aluminum, Inc., from a gleaming tower it owned on Pittsburgh's Golden Triangle. The company now is

settled in a facilities complex that has a radically different workplace design.

> At Alcoa, private offices and anonymous cubicles are a thing of the past. The emphasis now is on equality and ease of communication…. Alcoa's design philosophy is emblematic of a new awareness that the physical nature of the workplace does affect the way we do business…. The idea is that we're reducing the amount of space individuals receive, and we're reallocating that space to a much wider variety of places where people can interact—break areas, meeting areas, team areas, and so on. The individual workstation, then, becomes little more than a place to hang your hat. As your tasks change during the course of the day, you move from place to place, gravitating naturally to the area where you can most comfortably perform the task at hand (Fandray 1999).

Such changes in the design of corporate America are widespread. Companies as diverse as Citibank, Hewlett-Packard, and Boeing are embracing an expanded view of space as it relates to the work people do. Business leaders can help effect similar changes in learning environments for students by helping communities to perceive and understand the work world. It is a world far different from the factory model of the 1950s and 1960s.

Involvement by businesses in the planning process is not a one-way street, benefiting only students and schools. Businesses gain from the partnership because educational programs and environments that create better-prepared students can save them thousands of dollars in training costs. Businesses obtain more immediate benefits from their involvement in schools as well. The quality of local schools is an important consideration for potential employees as they consider whether to relocate in order to accept a job offer. For this reason, employers want high

Because of their sheer numbers, retirees will have great influence on public expenditures in coming years. Community leaders in some areas are thinking long term, and recognizing that planning and designing new schools as community learning centers provides an opportunity to forge an intergenerational coalition of support. Photo: Photodisc.

The schools should be centers of...neighborhoods and take advantage of library bonds, recreation and park bonds, and health dollars to serve kids in more efficient and productive ways for the twenty-first century.

—David Abel, Managing Director, New Schools/Better Neighborhoods, Los Angeles California

quality schools in order to attract a high quality workforce (Bond 1998).

With such a vested interest in the quality of education, business leaders are uniquely positioned to catalyze educational improvements by taking their place at the table in the school facility planning process.

STEP 10

Involving Senior Citizens

10 The design and planning of new schools should reflect two new realities: the need for life-long learning to keep citizens employed, productive, and engaged, and the coming demographic change, as the baby boom generation begins to retire. Beginning in 2011, the first wave of the 80 million Americans born between 1946 and 1964 will retire. The number of citizens over age 65 will more than double from 30 million to 70 million over the next 25 years (Sullivan 2002).

Because of their sheer numbers, retirees will have great influence on public expenditures. Concerns about the rising costs of health care could lead to competition for scarce public dollars. Senior citizens whose children are grown may see little reason to support bond issues for school construction when they are more concerned about health care expenses.

An alternative to this scenario of competition would be for community leaders to think long-term and recognize that planning and designing new schools as community learning centers provides an opportunity to forge an intergenerational coalition of support.

The efforts of school officials to build a new school in Gaylord, Michigan, is a case in point (see Case Study 1). After senior citizens there had helped to defeat two bond referendums for a new school, school and community leaders began a community planning process that for the first time included them. Seniors were particularly eager for Gaylord to have a performing arts center. The decision by school officials to incorporate a performing arts center into the new school was a key factor in winning the public support to pass the bond the third time it was presented.

There are many reasons why senior citizens should be involved in the planning process and why new schools should be built with senior citizens in mind. Ending the unhealthy age segregation that pervades American society and giving students more adult connections is one reason to involve seniors. Keeping seniors healthy and active is another. "It makes little sense for public officials to spend millions of taxpayer dollars to build state-of-the-art schools with computer labs, gyms, swimming pools, and other recreational facilities for students, then deny their use to community residents, including seniors, because they are not school age" (Sullivan 2002).

STEP 11

Involving Community Organizations and Government Agencies

11 Cultural and civic institutions can be important partners in planning school facilities. When organizations such as museums, libraries, zoos, parks, and hospitals join forces with schools, a community can leverage these resources to enhance student learning. The partnerships foster connections that increase institutional support at many levels.

The Henry Ford Academy in Dearborn, Michigan (see Case Study 11), exemplifies such a partnership. It has enjoyed wide-ranging benefits, including significant savings in capital costs through the mutual use of existing facilities. Minnesota's School of Environmental Studies (see Case Study 13) illustrates another creative use of community resources. It was built on zoo grounds through a partnership among Independent School District 196, the city of Apple Valley, and the Minnesota Zoo. Each of the 400 students at this alternative high school has his or her own computer work station, is a member of a ten-person team, and conducts projects using the zoo as a living laboratory.

In other communities across the country, school-to-work programs have created opportunities for students to apply their

When you feel you have a stake in your school, whether you're a teacher or a student or a parent, you're willing to work harder, make sacrifices, and protect and build up your highly personal investment.

—Seymour Fliegel and James MacGuire, *Miracle in East Harlem: The Fight for Choice in Public Education* (Fliegel 1993)

learning in government, recreation, healthcare, and other community settings. By shifting appropriate programs off-site, the school districts in these communities have been able to increase their capacity significantly.

Such joint ventures can lead to more intelligent and efficient use of dollars, space, personnel, and expertise. By harnessing a community's resources to a common vision for the future—one in which schools play a central role, everyone stands to benefit, especially young people.

In Los Angeles, citizens who have formed the organization New Schools/ Better Neighborhoods recognize the power of such an approach:

> All levels of government should work together to build the best schools in the best locations that we can—coordinating our efforts and leveraging our resources to make our school sites not only centers for education, but for reading and research as libraries, for health care as clinics, and as epicenters of civic life in their communities.
>
> —Zev Yaroslavsky,
> Los Angeles County Board of Supervisors,
> Los Angeles, California

Law enforcement and fire departments are two additional government entities that need to be included in the school facilities design process from the outset. Too often in the past, local police and fire officials have been brought in for oversight and building permitting only after the design process was well under way. Lessons from incidents of campus violence underscore the importance of the relationship among school officials, law enforcement, and community safety personnel as well as the correlation between school design and effective security. The eyes and ears of professionals specifically trained to notice safety features can be invaluable to the process of designing schools.

Even when planning and architecture firms employ their own safety and security experts, engaging police and fire officials makes sense, since they will be charged with helping maintain school and student safety long after the planners and architects have completed their work.

STEP 12

Involving the School Board and District Administration

12 The sanction of the school board is vital to the success of any school facilities planning process. Board members can use their power and influence to bring the right players to the table, create the best possible conditions for action, and leverage the necessary resources to support the planning process.

The school board's involvement will vary from one community to the next. In some cases, a board member may become active on the core planning team and participate in all steering committee sessions. In others, the board may appoint a liaison to the steering committee or choose to hear only periodic progress reports and wait to act upon recommendations from the committee.

Whatever involvement it chooses, the school board's attention is critical and requires each member to be fully informed throughout the planning process. To this end, school board workshops should be held at regular intervals to review the steering committee's work and consider policy and budget issues related to the committee's goals and recommendations.

As with the school board, the superintendent and other school district officials have critical leadership functions to fulfill. Unlike board members, district officials cannot chose whether to be actively engaged in the facilities planning process; their involvement is vital. They must be skilled listeners and articulate communicators. They must be facilitators of understanding and disseminators of information. They must be effective consensus builders and good decision makers. They must be able to empower others and use their own power wisely. Most importantly, they must be willing and able to serve as stewards of a collective vision and to be visionaries themselves.

Developing and Implementing a Master Plan

STEPS 13 THROUGH 19

Once the organizational preliminaries and community liaison considerations have been completed, the real work of developing a school facilities master plan begins.

Throughout this process, the steering committee will typically meet once a month in a comfortable space large enough for the whole group, followed by break-out sessions.

As meetings progress, participants will complete several work products. They will amass a common understanding of the district's educational needs and resources, and then articulate their agreements as a set of statements known as shared beliefs. Taken together, the common understandings and shared beliefs comprise a collective vision that addresses the question, "What will our educational system look like in the future?"

The steering committee will also develop a list of facilities needs, make specific recommendations, and seek community consensus. Finally, it will write a facilities master plan and include suggestions for implementation. These activities are discussed in the following pages as Steps 13 through 19.

It is tempting to portray the facilities planning process as simple and straightforward, but that would be misleading. The process may prove at times to be challenging and time-consuming because it involves many people and diverse opinions. The end result, however, will be a purposeful plan for the future of the school district.

As the facilities planning process moves forward, the steering committee will typically present overviews and findings to the whole planning group. The small-group break-out sessions that follow afford an opportunity for each person's opinions and creative ideas to be heard and considered. Photo: Photodisc.

STEP 13

Building Common Understanding, Shared Beliefs, and a Collective Vision

13 The steering committee's first task is to develop a common knowledge base.

Participants can begin by studying community demographic studies, summaries of student achievement data, and district-wide strategic plans. They can review base documents that govern the education of their young people, including learning goals, graduation requirements and state and national standards. This is also a good opportunity to survey the attitudes and perspectives of the community. Using such data, the committee will be able to create a school and community profile that includes general characteristics, strengths, limitations, and emerging issues.

While developing the knowledge base, the steering committee should consider not only present conditions, but future possibilities. This will require examination of current research and best practices in three areas: effective schools and instructional

The collective vision of citizens in San Diego's City Heights area has resulted in a comprehensive approach to community redevelopment. This community center is part of a 30-acre "urban village" that includes residential housing, a continuing education center, a Head Start facility, a library, a swimming pool, tennis courts, a performance annex, and recreational fields. Three schools are an integral part of the effort; see Case Study 4. Photo: Joseph Martinez, courtesy of Martinez+Cutri Architects.

practices; the implication of future trends for students; and changing expectations in the workplace. The committee may also profit from visiting other facilities in school districts where educators and citizens have reinvented their institutions to meet changing societal needs.

The time spent developing a future focus is essential. Otherwise, analysis of existing conditions may bog down in entrenched ideas. When the operable assumption is that new or renovated spaces will be used in the same ways that spaces have been used in the past, facilities planning tends to focus more on structural requirements, code compliance, and mechanical systems than on planning for a future that includes emerging technologies, curricular changes, and new strategies for educational delivery.

As the knowledge base is being developed, two effective information-sharing techniques for the committee are large-group presentations and small-group discussions. Large-group presentations offer an efficient means for exploring current research and best practices, while the small-group break-outs provide an opportunity for each person's opinions and creative ideas to be heard and considered. The facilitator plays an important organizational role. He or she assembles important information for the larger group to review, arranging for presentations by such professional advisors as architects, school planners, curriculum designers, and other specialists; he or she also fosters conditions that encourage meaningful small-group information exchange.

Once satisfied that the knowledge base has been established, steering committee members may be tempted to begin brainstorming and making lists of facilities needs. Their purposes will be better served in the long run, however, if they take time to agree upon some conclusions regarding the knowledge base. Such conclusions should result in written statements of shared beliefs, which can be reviewed by the larger community. These statements form the foundation for the committee's collective vision of the kind of educational system they want for their community.

The importance of putting into writing such a collective vision cannot be overemphasized. The existence of this document will help to ensure that the final school facilities plan is customized to address specific identified goals, rather than being a one-size-fits-all blueprint. Most importantly, by establishing common ground at this point in the process, the steering committee members pave the way for the kind of respectful discussion and collaborative problem solving that will be required to successfully complete the facilities master planning process.

STEP 13 ACTION CHECKLIST: BUILDING COMMON UNDERSTANDING, SHARED BELIEFS, AND A COLLECTIVE VISION

✓ **Develop a common understanding** and clear picture about current conditions by reviewing:

- Community demographic studies
- District-wide strategic or facilities plans
- Learning goals, student achievement data, and graduation requirements
- State and national standards
- Community attitudes and perspectives

✓ **Consider "what could be"** and develop a "future focus" by reviewing:

- Current research and best practices on effective schools
- Future trends and potential implications for students, schools, and communities
- Changing workplace needs and expectations
- Innovative models from other districts and communities

✓ **Develop statements of shared belief** about education and the role of schools in the community. Begin with the six design principles presented in this book and consider preparing examples of more concise belief statements, such as:

- Students need opportunities to apply their learning in meaningful ways.
- Positive relationships are key to good learning and strong communities.
- All members of the community need access to technological tools for learning.
- The community is a critical educational partner.
- To be successful in the workplace, students must be both self-directed workers and good team members.
- Lifelong learning is a desired and necessary strategy for survival in today's world.

✓ **Craft a collective vision** that reflects shared beliefs, and put this collective vision into writing. As a group, answer this question: What will our educational system look like when we "get there"?

STEP 14

Determining Educational Needs

14 Once the collective vision has been successfully written, steering committee members will be ready—and probably eager—to draft a wish list. For such a list to advance the planning process, it must be framed in terms of facilities needs. The list should be thoughtful, strategic, and focused on the future.

Facilities needs, of course, can be wide-ranging. They can encompass issues as simple as air conditioning in every classroom, or as ambitious as elementary schools with no more than 300 students.

An imperative goal at this point is making sure that the facilities needs listed by the steering committee are consistent with the written statements of shared belief that the committee drafted in Step 13 of this process.

For instance, if the steering committee has written as one of its shared beliefs that students "need opportunities to engage in project-based learning and to work in teams," then spaces other than the typical 900-square-foot lecture classrooms will be required. If a shared belief has stated that "the most effective schools embody a strong culture of personalization," then more configurations that serve small groups will have to be designed. If a shared belief has stated that "parent involvement on school campuses is important," then schools will need spaces for parents to park their cars, hang their coats, meet with teachers, or help with school activities. If a shared belief has stated that "schools should be centers of learning for the whole community"—as it did in one Mississippi community—then other needs will become apparent.

> We assumed at the beginning of our steering committee meetings that high schools were for high school students and teachers. But as we began to educate ourselves, we learned that our facility could be designed for the whole community, not just the students, to use. Before long, we were talking with a local group that was trying to raise money for a performing arts center but was far from reaching their goal. They loved the idea of joining forces with the high school to become a community center. Other members of the community were interested in trying to find a place to hold community meetings. With the community and the high school collaborating in this new way, we were able to win state funds for a performing arts council. Eventually we built our school and our new "town square." It includes a performing arts center and a community meeting hall for weddings and meetings and—you name it. The kids say they like having more grown-ups around.
>
> —Rilla Wiley, Steering Committee Member, Tishomingo County, Mississippi

When schools are envisioned as centers for the entire community, a whole range of possibilities emerges, along with new sets of needs. If, for instance, the steering committee's collective vision calls for schools that are "a resource for lifelong learning"—for retraining dislocated workers, teaching computer skills to seniors, teaching families to use the internet, or any number of other community learning endeavors—then school facilities will need to be open beyond conventional school hours.

When listing facilities needs, the steering committee should think globally about conditions within the community, and specifically about conditions in classrooms and schools.

Opposite: Steering committee members need to think outside the box as they identify potential resources. Schools have partnered with such local organizations as zoos, parks, museums, and recreation centers to expand the educational experience. Photo: Digital Vision.

STEP 14 ACTION CHECKLIST: DETERMINING EDUCATIONAL NEEDS

✓ **Starting with shared beliefs and a collective vision, develop a list of facilities needs.** To guide this process, consider the following questions: What will we need to do to enact our beliefs about schooling and our vision of schools? What kinds of facilities will we need to accomplish these activities? What kinds of learning environments will we need to:

- Help students see links between school and the rest of their lives
- Increase parent and community participation in schools
- Improve coordination among schools and other social service agencies
- Provide stimulating, lifelong educational opportunities

✓ **When developing the list of needs, think both specifically and collectively.** Consider the needs of specific groups, such as students or parents or the business sector. At the same time, consider the collective needs of the whole community.

✓ **Frame the list of needs in language that directly links them** to your shared beliefs and collective vision.

STEP 15

Identifying Resources

15 At the same time the steering committee is analyzing facility needs, it should also be considering resources available to meet those needs. Many such resources will already be on hand at existing schools. Others may be located within the larger community. It is important that the steering committee consider both internal and external resources as potential solutions.

To identify resources at existing school sites, the steering committee should review the district's facilities evaluation report, if such a document is available. If not, the committee should consider conducting such an evaluation itself (a time-consuming endeavor) or commissioning experts to do so.

To identify resources within the larger community, the steering committee can consult everything from the Yellow Pages to real estate listings, calendars of cultural activities, and directories of local businesses. When teachers, students, parents, and business representatives work together to discover and identify community assets, they not only increase their personal understanding but help develop a valuable public knowledge base about the community.

Steering committee members need to think outside the box as they identify potential resources. Examples abound of instances where unconventional thinking has yielded creative solutions. Some school districts have financed projects through private-sector investment—or public-private partnership—when traditional methods of funding like local property taxes have proved ineffective or insufficient. Others have learned how to take advantage of library bonds, recreation and park bonds, and health dollars to serve both communities and students in more efficient and productive ways. Still others have explored creative leasing, shared- and multiple-use agreements, interagency contracts, or revenue-generating projects.

In his exploration of the hidden assets of Los Angeles, UCLA Professor Richard Weinstein illustrates such outside-the-box thinking about opportunities for joint use:

> Some of the biggest holes in the fabric of the city are supermarket and shopping mall parking lots, which rank high on the mess list. The air rights over parking lots could be acquired for schools, community centers, and additional parking. The commercial enterprises would be advantaged, day-care and other services provided, and the urban design of the area improved. Joint development of this sort should be encouraged from the start where thoughtful design can solve the additional density resulting from mixed commercial and educational uses.

STEP 15 ACTION CHECKLIST: IDENTIFYING RESOURCES

✓ **Review the school district's facilities evaluation report,** if one exists, or consider commissioning one, to identify resources available at existing school sites.

✓ **Identify other significant private or public resources.** To guide the discovery process, consider the following questions: What kinds of support for learning do students receive beyond the classroom and school? What community resources are available that might be employed to support the school district and its students?

✓ **Identify and create a list** of the community's available resources.

✓ **Consider and explore innovative partnerships,** creative financing, and interagency relationships.

STEP 16

Developing Recommendations

16 After the steering committee has identified facilities needs and identified available resources, its next task is to prepare written facilities recommendations that match available resources to identified needs. Guiding questions for this phase of the work include: How can the school district and community work together most effectively to realize their collective vision for schools? In what ways can the school district and community combine forces to build on their strengths?

To revisit an example cited in Step 14, if the steering committee's stated belief said "students need opportunities to engage in project-based learning and work in teams," and the collective vision called for "spaces different from existing traditional classrooms," the resulting recommendation might specify "remodeling existing classrooms to include additional square footage, more storage, and appropriate utilities." As another example, if the committee has listed the need for a community performing arts center and identified a school space that could be modified to meet this need, the specific recommendation might be to "remodel the school's performing arts facility to provide direct street access, appropriate security, and adequate parking."

The best recommendations will be specific and creative, they will refer to one or more of the steering committee's shared beliefs, and they will be consistent with the collective vision. Recommendations may also be prioritized at this point and should take the form of a report.

STEP 16 ACTION CHECKLIST: DEVELOPING STEERING COMMITTEE RECOMMENDATIONS

✓ **Develop a list of recommendations that is consistent** with the knowledge base, shared beliefs, facilities needs, and identified resources.

✓ **In developing recommendations, consider these questions:** How can the school district and community work together most effectively to address limitations and areas of need to realize their collective vision for schools? In what ways can the school district and community combine forces to build upon their strengths?

✓ **Check steering committee recommendations** to ensure that they are specific and consistent with the collective vision. Assess whether they harness resources in the best way to meet community needs.

✓ **Compile facilities recommendations into a report** that can be easily understood and readily shared.

STEP 17

Communicating with the Larger Community

17 The steering committee should have maintained open communications about the facilities planning process throughout its duration.

Once the recommendations report has been issued, however, the steering committee will need to embark upon a deliberate and strategic effort to publicize the report's contents and rationale. The goal of this publicity is to foster community understanding of the recommendations, solicit feedback about them, and build community consensus.

Steering committee recommendations should be communicated in ways that are easy to understand and readily accessible. News releases, newspaper articles, radio spots and television features can be used for getting the word out. Creative publicity ideas are in order. In Puyallup, Washington, for example, the school facilities steering committee decided to publish *Building Traditions,* a quarterly newsletter explicitly for this purpose.

A plan for working with the local media is a good idea and should acknowledge that media interest depends on newsworthiness and understandability. Research

and recommendations can be brought to life with examples and anecdotes. A trained communications consultant can help to package steering committee information into engaging media messages.

The steering committee should remain mindful that communication with the public at this point is intended as a two-way street: Part of the purpose is solicitation of community feedback. To facilitate two-way communication, committee members must report to their constituencies at critical decision points and bring back to steering committee meetings community input. In addition, the steering committee can hold workshops with the school board or individual school site councils, host coffee hours or town meetings, conduct surveys at shopping malls, implement phone trees, create speakers bureaus, and develop its own website and listserv.

Whatever outreach methods it employs, the steering committee should strive for a communications process that deals with community opinion and feedback respectfully, openly, and honestly. *Putting the Pieces Together* recommends four proactive efforts for ensuring such productive communication and for helping to build productive partnerships (U.S. Department of Education and the Regional Educational Laboratory Network 1996):

- Reach out to your critics by inviting them to see a new program, listening to their concerns, and providing opportunities for them to contribute.
- Develop good written communications, such as a low-cost newsletter widely distributed throughout the community.
- Keep participants and local leaders informed by hosting an open house or site visit.
- Share the bottom line to show that collaborative programs are cost effective and get results.

Once the recommendations report has been issued, the steering committee will need to embark upon a deliberate and strategic effort to publicize the report's contents and rationale. The goal of this publicity is to foster community understanding of the recommendations, solicit feedback about them, and build community consensus. Photo: Brand X Pictures.

STEP 17 ACTION CHECKLIST: COMMUNICATING WITH THE LARGER COMMUNITY

✓ **Establish a comprehensive communications plan** for disseminating and collecting information.

✓ **Consider creating a special steering committee newsletter** or publishing regular updates in existing district and community newsletters.

✓ **Decide how to involve the local media** (newspaper, radio, community websites, and television).

✓ **Make sure outreach efforts are inclusive** enough to encompass a broad spectrum of stakeholders. Use such strategies as conducting workshops, hosting coffee hours, convening town meetings, conducting surveys in public places, implementing phone trees, creating speakers' bureaus, and hosting a special website or listserv.

✓ **Develop a system for listening,** recording, and responding to people's feedback.

✓ **Consider engaging the services of a media consultant** to manage the communications aspect of the planning process.

✓ **Keep in mind that the three primary purposes** of any communications plan should be to create common understanding, gather feedback to help identify further improvement opportunities, and build community consensus.

The completion and approval of a master plan will normally lead to the preparation of educational specifications, a final architectural design, and construction plans and specifications. The process of community engagement should continue at each step. Photo: Photodisc.

STEP 18

Creating a Master Plan

18 The facilities master plan is the culmination of all the steps that have come before.

Before compiling the work products generated by Steps 13 through 17, however, the steering committee must carefully assess community feedback received during Step 17 and make any adjustments to the plan that it deems appropriate.

That done, the committee should define action steps, determine timelines, and assign responsibilities for achieving its recommendations. It should then prioritize the recommendations, if this was not done during Step 16.

Finally, the committee should compile this information—along with work products from Steps 13 through 17—into one document, the final facilities master plan. Preparation of the final document may require the aid of school district officials or school planning consultants, along with good editorial, graphic design, and printing support. Various feasibility, cost, and other studies may be needed to supplement the master plan. These are normally prepared by school district officials, appropriate governmental agencies, or school planning consultants.

Ultimately, the completed facilities master plan should be submitted to the school board for approval.

Then the steering committee should take time to celebrate its accomplishments!

STEP 18 ACTION CHECKLIST: CREATING A MASTER PLAN

✓ **Based upon the feedback** received during the communications phase, make necessary modifications to steering committee recommendations.

✓ **Priority rank** the recommendations.

✓ **Identify action steps** and determine timelines, resources, and the assignment of responsibilities for achieving recommendations.

✓ **Draft a master plan.**

✓ **Submit the master plan** to the school district or other appropriate agencies for supplementary feasibility, cost, or other studies.

✓ **Edit the master plan** and prepare it for publication.

✓ **Present the finalized master plan** to the school board for approval.

✓ **Celebrate the completion** of a major milestone in the planning process.

STEP 19

Implementing the Master Plan

19 Completing a master plan is a cause for celebration because the steering committee has accomplished its primary mission.

But implementing the plan—moving from vision to action—will be its true test. Exciting plans are not enough. The hard work of the master plan will not be beneficial unless the plan is implemented. Everyone involved in the planning process must understand that implementation requires time, commitment, and oversight.

Recognizing that it will take months or years before construction work is completed, many steering committees choose to stay in place throughout the process. When they do, their focus will naturally shift to the new and equally critical tasks of tracking progress and assisting the school board in its implementation tasks. This is what happened in Lincoln, California:

> We knew it would take years to implement every recommendation on the master plan.... We decided to incorporate as a 501(c)(3) not-for-profit organization. Before long, a local developer gave us a parcel of 179 acres of land worth about $1.8 million dollars. Next week we will hold a groundbreaking ceremony for an Outdoor Learning Environment (OLE) on that land, which includes a Native American archeological site. We also have plans to expand arts in the schools and child-care before and after school. We have set up a subcommittee to focus on grant writing to support these new ideas. Our job is to serve as community support group for the school board. Through our "Project Build" master planning process, we have developed a deeper level of trust and empowered each other to make things happen. We haven't abandoned our existing schools just yet, but our plan is to keep the planning process alive and continue to search for opportunities to integrate our learning with the world around us.
>
> —Joanne Neft, President,
> Western Placer Education Foundation,
> Western Placer School District,
> Lincoln, California

Provided that funding is in place to implement the community's vision, the completion and approval of a master plan will normally lead to the preparation of educational specifications, a final architectural design, and construction plans and specifications. The process of community engagement should continue at each step, helping to devise creative solutions and moving the construction project to completion.

When occupancy of the completed project has been achieved at last, the steering committee should undertake one more task: a retrospective examination of the planning process. It should assess to what extent the planning process has strengthened the community, wisely allocated resources, and positively affected teaching and learning. Those engaged in planning have too often failed to address this question: What specific benefits resulted from the actions that were taken and the dollars that were spent?

By documenting results, the steering committee can evaluate its efforts, demonstrate accountability, and add to a growing body of knowledge that connects the facilities planning process to favorable academic outcomes and community growth.

STEP 19 ACTION CHECKLIST: IMPLEMENTING THE MASTER PLAN

✓ **Determine how to maintain the community's interest** in bringing about faithful implementation of the master plan.

✓ **Discuss with steering committee members what they might do during the implementation phase,** such as support a bond campaign, develop school-community partnerships, or participate in an ongoing oversight effort.

✓ **Develop ways to assess the effect** of the planning on academic outcomes, resource allocation, and community growth.

✓ **Give the plan time.** Remember that implementation will not happen overnight.

Photodisc.

PART FIVE

Some Final Thoughts

The intent of this publication is to stimulate and facilitate an effective community-based educational facilities planning process. It is built upon the belief that given creative leadership, good information, and time to collaborate, citizens can and will make good decisions about their schools and communities.

The collaborative school facilities planning process embodies those qualities that John Dewey's classic *Democracy and Education* states should characterize education in a democratic society: common interests, freedom in interaction, participation, and social relationships (Dewey 1916). When new partnerships and alliances are formed and old boundaries are dissolved among school, family, jobs, and community, the results serve everyone's interest.

Every member of society has a vital stake in the healthy development of today's students and tomorrow's parents, workers, and citizens. Strategic, collaborative thinking can do a great deal to ensure the kinds of learning environments that will improve academic outcomes and strengthen communities.

Are we bound by bricks and mortar? No.
Can we discover new possibilities in old spaces? Yes.
But we must be prepared to support change...we must empower community members, teachers, and students to shape the future of education by acting as facilitators who support risk taking and encourage continuous learning.
Thirty years ago, when I first began teaching, I took great pride in having my own classroom. Today, I take even greater pride in being part of a community of learners that extends beyond my classroom walls.

—Linda Batz, Principal, Hunterdon Central Regional High School, New Jersey

Photo: Terry Vine/Getty Images.

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Additional Information

See the NCEF resource lists *Community Participation in School Planning, Community Use of School Buildings, Facilities Master Planning,* and *Educational Facilities Planning—Overview* online at http://www.edfacilities.org/rl/

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