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ABSTRACT

The American Institute of Architect's Committee on Architecture for Education convened for a conference addressing the urban school relative to quality of public education for all students, entitlement and privilege, community ideology, racial tensions, and the reopening and refurbishing of aging facilities. This report presents synopses of the discussions, including question and answer exchanges, overviews of the school tours conducted, highlights of opening remarks, and links to relevant Web sites provided by attendees and speakers. Speakers examined the new urban school and presented case studies as examples of new school designs that allow unique experiential learning opportunities for students. The conference explored how architects can lead in the managing and organizing tasks of urban school design projects; and examined the teaming of architects with educators, administrators, and politicians in developing prototype facilities. The speakers discussed the historical issues surrounding public schools; review ideas on assessing educational facilities to help balance the ideals with the monetary realities; and present ideas on collaborative efforts across sectors to solve urban school problems. Concluding comments explore the building of community consensus on school infrastructure repair, methods for tapping into the multifaceted roles of architects, and creative financial strategies. Contains a list of conference speakers. (GR)

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Urban Schools: Lessons Learned for All Schools

Committee on Architecture for Education
Chicago, September 24-26, 1998

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I. Introduction

The American Institute of Architects' (AIA) Committee on Architecture for Education (CAE) conference, "Urban Schools: Lessons Learned for All Schools," hosted at Chicago's Swissôtel, began September 24, 1998, and came to a successful conclusion Saturday, September 26, after two days of lectures, tours, and engaging discussions. Coincidentally, the morning following the conference end, in the Sunday, October 19, edition of *The Chicago Tribune*, a special feature was published about the Chicago suburb of Rockford, Ill., a town wading through many of the difficult issues CAE members addressed during the two-day conference: quality public education for all students, entitlement and privilege, community ideology, racial tensions, and the reopening and refurbishing of aging facilities. Consider this section from the Elizabeth Austin article, "A River Knifes Through It,"

> "Seen from a distance, Lewis Lemon Global Academy is an exceptionally pretty grade school, built of beige-toned tiles with dark green trim. The main entry is particularly impressive, a sunlit space with cathedral ceilings decked with rows of international flags. But on closer inspection, the school reveals troubling flaws. In nearly every corner are lengthening cracks, evidence that the 5-year-old school is settling unevenly. The floor in the bathroom is blotted with yellow stains; to cut costs, industrial-looking linoleum was substituted for the more traditional, and sturdier, terrazzo tile. Long strips of laminate peel off the coat racks, and there are torn spots in the carpet."

Although discussion of Rockford--a community rife with deep racial wounds and scars--was not part of the CAE conference agenda, it could have easily served as a case study of the many conflicts and crises that architects, administrators, community members, and urban planners confront when they discuss methods and means of offering quality educational facilities to our nation's youth, especially those living in large cities. With overcrowding, hundred-year-old buildings, daily technological advances, lack of funding, and the ever-evolving makeup of community and family life, architects managing urban school projects have responsibilities that extend far beyond the physical capacity and the aesthetic quality of the buildings they design. As the CAE conference speakers illustrated, architects are necessarily working closely with outside experts in the fields of sociology, information technology, public policy, and educational research.

In the following sections you can find synopses of discussions, including question and answer exchanges, overviews of the school tours, highlights of opening remarks, and links to relevant Web sites provided by attendees and speakers. Should you wish to download the text-only version of this report, you may do so by [??] Any comments or questions about this report should be directed to Karen Devine, writer/editor, Professional Practice, devinek@aiamail.aia.org, (202) 626-7449. Also, to take advantage of this electronic forum for expeditious information exchange, you will find the report from the spring Charleston, S.C., conference, "Laying the Groundwork: Districtwide Planning,"

listed in the table of contents. Those who read both texts will find that many of the themes and topics addressed in Charleston relate to those raised in Chicago.

II. Sessions

Opening Remarks

Richard J. Passantino, AIA, 1998 CAE chair, opened the event by noting that of all the CAE conferences to date, "Urban Schools: Lessons Learned for All Schools" was the most heavily attended. He attributed the large turnout to the fact that education has recently become an integral part of "our national psyche," as voters now realize the importance of solving problems like infrastructure decay and landscape deterioration of public schools. Passantino also pushed attendees to see how influential their guidance as architects--and the leadership of CAE--can be as school systems redesign and redefine themselves for the next millennium.

Kerry Leonard, AIA, conference chair, also welcomed CAE members to Chicago for this gathering of concerned architects. Leonard noted that the conference title, "Urban Schools: Lessons Learned for All Schools," is an important and timely one because many of the dilemmas facing urban school designers--racial tensions of the communities, limited resources, density--have a place in most rural schools as well. Thus, architects who specialize in educational facilities must look to the "richness of urban settings," and draw from them new ways to solve these and other problems that plague both city and noncity schools.

Leonard's charge for conference participants included: Look at best practices, focus on examples of superior-quality design, locate buildings from the past that can be restored, and identify building needs of the future. While assessing facilities in need of refurbishment, explained Leonard, we must learn to work from existing structures, identify historic buildings, and make qualitative assessments of what we have. This process will allow us to move forward and offer more schools that use their urban surroundings as deliberate and valuable elements of the learning process.

Before turning the podium over to Gery J. Chico, Leonard asked attendees, "Which side of the reactive and proactive line do we architects want to be on?"

Keynote speaker Gery J. Chico, president, Chicago School Reform Board of Trustees, has been called upon to lead the team working to revitalize the once-decayed Chicago Public School System. Chico's keynote speech began with a description of Chicago's aggressive capital expenditure program, which began officially in 1995, to rebuild the entire public school structure of the city. His initiative started with an effort to view educational facilities as inextricably linked to their surrounding communities. So far, the results of his plan have been very good: 8 new schools, 21 new additions, 27 annexes of detached structures, 183 play lots, and 52 campus blocks.

Chico explained that Chicago was able to "return fiscal integrity to the entire school system" when the $2 million budget debt was balanced, day-to-day repair positions--painters, electricians, plumbers--became privatized, and community contributions were actively solicited. With a privatized approach, Chico admitted that the work did cost more money initially, but they were able to "show the repairs immediately and let people see hope in their facilities."

Calling upon an ongoing debate, Chico maintained that even if statistical research doesn't prove it beyond a shadow of a doubt, we all must know intuitively that the educational process is directly linked to educational facilities: better facilities equate to a better education. Allowing this theory to serve as the mantra for his team, Chico knew that until the educational facilities were rebuilt in Chicago, the best students in the region would continue enrolling in private schools.

The Chicago Public School System, like many urban systems across the country, engaged managing and individual architects on site projects (i.e., 70 firms have been engaged in Chicago to rebuild the public schools). All have answered the call, Chico praised. Inevitably, Chico explained, parental pressures can sometimes force quick action to eradicate failing facilities as different sets of interests become blended: what facilities will educate children the best, how will they look, and what will the facilities mean for the future?

Using the Lewis School--a 1920s facility on the far west side of Chicago with a new addition designed to match the original style--as a model for the future, Chico noted that there is a pleasant future in store for Chicagoans. Like the Lewis School, where architects were able to maintain the original design in spite of the pressing issues, those working to revitalize the communities are able to recall the past while beckoning the future through a concerted effort to properly consider the look of the schools.

In his closing, Chico admitted, "Dollars are finite." Thus, ingenuity and creativity of architects must be used to stretch the money as far as it can possibly go. "The architectural industry and profession in Chicago have responded" said Chico, ". . . and it's been great for our children."

Questions in response to Chico's speech, and Chico's answers to those questions, included the following exchanges: "How much is Chicago growing?" Chico said that there is a new baby-boom taking place nationwide, which is causing a surge in school-age population. However, the more ominous problem he anticipates is that in 10-15 years, the teacher colleges will put out 1,000,000 teachers, but the demand will be for 2,000,000 teachers. The inevitable result of this discrepancy in the numbers will be large percentages of underqualified teachers attempting to teach our kids.

Another audience member asked how privatization of maintenance could work on such a large scale. Chico explained that logistically it wasn't difficult: 1,000 titles were

eliminated from the budget. On a more personal level, Chico admitted that it was painful to have to remove jobs from so many workers.

Chico's response to the question, "Does a district have to reach a crisis point before changes can be made?" was "I hope not." He elaborated, "When you have politically entrenched interests, a crisis platform allows you to do things more quickly." Although his team still could've made changes, the urgency of the situation allowed them to work quickly by taking over every managerial aspect of the school system. Also Chico hired a group of people who shared his philosophy of immediate turnaround and didn't abhor privatization.

The next question for Chico was, "Are more young families moving into the city now that the school system has been built up?" Chico responded affirmatively and noted that Chicago's magnet school system is also a very strong draw for young families because it grants parents a list of options about choices for their children. Chico sees signs of life in neighborhoods that were previously lifeless.

The last question, one that resurfaced several times throughout the conference, was about the national trend of using school facilities in ways other than purely and traditionally educational. Chico said that the Chicago schools are being built and refurbished as community facilities. "Maximum use is vital," he stated. One reason that this is so important is that the families who use the buildings don't mind as much paying their personal property tax bills.

A New Urban School

Moderator Pamela J. Loeffelman, AIA, opened this session, "A New Urban School," by reminding audience members, "As we update schools, we need to remember that the kids are our clients." To illustrate this point, two case studies of alternative schools--the Downtown School and the School for the Physical City--served as examples of urban school designs that allow unique experiential learning opportunities for students.

The School for the Physical City

The School for the Physical City (SFPC), opened in the fall of 1995 during the push for more student-centered "small schools," is a New York City public school that uses the city's infrastructure as the foundation of its curriculum. Carmi Bee, FAIA, principal, Rothzeid Kaiserman Thomson & Bee, spoke to CAE members about his involvement in this unique endeavor, his "most satisfying project to date." Bee began by musing, "When one thinks of New York City schools, certain characteristics come to mind," e.g., a free-standing building, institutional interiors, a large student body, a building designed by officials and bureaucrats, and a facility that represents little student input. If Bee's description is typical of New York City schools, SFPC is anything but typical.

Located in lower Manhattan at East 25th Street and Park Avenue, SFPC is "a true urban school," said Bee, of the 55,000-sq.-ft. layout that spans five floors of a pre-World War I office building. The goal for SFPC's 500 students is to learn traditional subjects--math, science, and writing--through the lens of their surrounding built environment. Bee explained that the design of the building's interior directly relates to the philosophy and theme of school: vibrant colors correlate with function; close collaboration among administrators, teachers, sponsors, and architects is vital for maintaining a sense of "public" space; structure and building systems serve as educational mechanisms through exposed columns, pipes, and ducts; and students remain oriented, physically, spatially, and educationally, as they move through the building (e.g., a manhole cover on the floor is used as a navigational tool and height indicators are located on the walls showing how far above the street level each marker is). Also, the doors in SFPC are color coded according to function--painted doormats of the same color symbolize the threshold of the space. Bee said that the architects tried to maintain as much of the existing fabric of the building as they could because some structures are simply irreplaceable. In keeping with the dominant theme of orientation, sponsor Outward Bound offered ideas to help students "find their way" by outfitting a rock-climbing wall and ropes into the multipurpose room.

With such a central location, SFPC invites the city into the learning environment as students use the easily accessible public transportation and surrounding buildings as important resources for their lessons. In many ways, the city becomes a classroom, the classroom its own city.

Paralleling the moves of most civic centers, the design team of SFPC was concerned with the technological capabilities of the facility. Sponsors wanted the school to serve as a model for computer-focused pedagogy, so money was donated to provide Internet access to the classrooms.

The SFPC experiment started in 1993 when the New York City Board of Education thought the private sector could help drastic overcrowding problems. After six months of designing and one year of constructing, the SFPC became a reality. To date, reception has been overwhelmingly positive, Bee said.

The Downtown School

Following Bee's remarks about SFPC, Virginia Pease, PhD, an educational consultant from Bloomington, Minn., spoke to CAE members of the six trends to which urban school design projects are responding. Pease noted that architects must be familiar with these trends to accommodate ever-changing client needs best:

- *Dramatic Improvement Quickly*: "Simply put, the problems confronting urban school districts are bigger, costlier, more numerous, and tougher to overcome than those facing rural and suburban systems," explained Pease. Statistics have shown that children in urban schools perform worse than their rural peers. Although this has been

evident for over a decade, little change has been made due to, Pease asserted, the self-perpetuating belief in the bell curve.

- *Standards are here to stay*: 49 out of 50 states now have some form of education standards for students, and standards for teachers are quickly following.
- *Brain-based learning*: New brain research has been developed to show us what happens when kids are learning. Pease noted that the brain is in constant search of connections, thus learning is a participatory activity. Architects should interpret this data as calling for flexible spaces, movement, media-dense centers, fitness centers, and experiential facilities.
- *Small schools are better*: Pease informed listeners that when students are asked what they want from school, most respond similarly: to be known, to make friends, and to learn from other people. Personal attention and interaction are more readily available in small schools.
- *Labor pains as the nature of work changes*: It is no surprise that the global economy has changed work environments in our country. Thus, Pease said that we need to move beyond schools that don't have school-to-work systems. Partners in the communities can help with career exploration and professional development of both students and teachers.
- *Interfamily collaboration is the norm*: Families once considered nontraditional are now mainstream; therefore, institutions of the community once thought of as autonomous need to work together. Different forms of community negotiation, hoped Pease, can work to bend individual interests around more global interests.

Keeping these trends in mind, explained Pease, will allow architects to internalize hope for urban schools and write a new chapter for more effective urban school design.

From one of the final slides of Pease's presentation, the CAE audience read the following: "Public schools did not exist forever. They did not come out of the forehead of a Greek or Roman god. They were contrived by ordinary men and women. . . and for just this reason, they can be rebuilt or reconceived, dismantled or replaced, not by another set of gods, but by plain men and women. . . You and I can leave school as it is, change it slightly, or else we can turn it inside out and upside down." (Jonathan Kozol "On Being a Teacher," 1991)

Pease's presentation provided a fitting segue into the specifics of the second case study of urban design: The Downtown School in Minneapolis. As the first school built in Minneapolis in 70 years, the Downtown School aimed to reach several project goals:

- A downtown school
- A community-based school
- Student/learner-centered environments
- An experiential school
- Interdisciplinary teaching/teaming
- Cultural diversity

- Technological advancement
- A green/living school
- Adaptable/flexible environments
- An architectural signature
- Buildings for the future.

John G. Pfluger, AIA, the project designer, from the Cuningham Group who spearheaded the Downtown School project, explained that the facility needed to reflect its location and be integrated into the core of Minneapolis. Pfluger also discussed the need to invent a "language of learning"--to have words that would reflect the goals of the Downtown School rooms. This unconventional discourse allowed the architects to see the rooms as flexible and adaptable, offering more multipurpose rooms for teachers and students.

The layout of the Downtown School shows a gathering space in the heart of the school and "storefront" learning spaces that allow those who pass by to witness the educational process. Multifunctional space and the exposed structure of the building keep the design urban, alive, and physically receptive to change.

The last presenter for this session, Joel Schurke, is the environmental resources director for the Cuningham Group. Schurke stressed the importance of sustainable buildings that support communities, social equity, and go beyond minimal environmental requirements. For example, in a school design that omits a "classic" gymnasium floor, 100 maple trees remain standing. Schurke commented that architects must keep statistics like this in mind when they offer their expertise on building design.

Schurke also explained how the Downtown School site was skewed to allow daylight to pass over the building and create a shadowing effect. By introducing light into the north side of the building, architects were able to tap into research that shows learning outcomes are linked to increased daylight measures.

Maximizing unique resources that might go overlooked by some architects, Schurke explained, the Cuningham Group hired solar artist Peter Erskin who aims to inspire people on environmental and social issues. Erskin's contribution to the Downtown School was to use sunlight to engage levels of emotional response by harnessing the light and projecting it into the building through a color spectrum that the students can adjust. This innovative and interactive part of the school layout illustrates how design professionals can tie educational tools into built surroundings.

To conclude the session, the Downtown School spokespeople commented on the lessons they've learned throughout this process:

- The challenge of leading and collaborating (i.e., reaching a balance with the give and take between client and the architects)
- Overcoming doubts from within as interdisciplinary expertise is sought

- The importance of language as discourses collide and reshape on a daily basis
- Faith and persistence.

Managing Architect

Bradley A. Paulsen, AIA, principal. K-12 Educational Facilities, Sverdrup Facilities, Chicago, moderated "Managing Architect," a session that explored how architects can lead in the managing and organizing tasks of urban school design projects. Two large public school systems, New York City and Chicago, offered intriguing contrasts for CAE members in attendance.

The first presenter, Andrew D. Mendelson, AIA, project principal, OWP&P, Chicago, discussed the Chicago Public Schools Capital Improvement Program. Mendelson talked about how visionary leaders in Chicago are prompting the rebirth of the public school system as the 430,000 pre-K-12 students are benefiting from the facilities and reform movement. The expenditure program is helping to preserve and extend the lives of Chicago school buildings. Fortunately, explained Mendelson, the leaders in this project are working to maintain quality, budget control, and architectural sensitivity while working quickly and within schedules.

Public School Architects and Engineers (PSAE) is a coalition of six Chicago architecture, environmental, and engineering firms charged with the rehabilitation program working to rebuild Chicago public schools. Their combined talents and expertise provide long-term vision and consistency for this difficult assignment. Thus, although many architects have been employed to assist in this revitalization project and several different design and construction specialists have been consulted, one managing team oversees the entire system to create an efficient and profitable plan for this design/bid/build contracting project.

The three major committees that comprise the rehabilitation portion of this project are:
- The *policy board* consisting of leading executives and political leaders
- The *resources committee* of architects and engineers with strong project management skills
- The *technical committee* led by Bill Latoza, spec writers, architects, and PEs.

Mendelson explained that his team was looking at old, neglected buildings, with very little money invested in repairs and no long-term planning efforts. Their mission was to stabilize the exterior envelope of each school first, then work on the inside could be considered, e.g., lead-based paint problems. Once the exterior and interior physical structures were refurbished, the next level of reconstruction commenced: information technologies, energy-efficiency programs, ADA programs, locker replacement, pools and recreation rooms, and FAA sound abatement.

Kenneth Karpel, AIA, director of design for the New York City School Construction Authority, spoke after Mendelson in a presentation that highlighted several differences in the New York City and Chicago public school systems' plans for revitalization.

With almost 1.1 million students and 1,400 buildings, the New York City public school system faced massive overcrowding, deterioration of facilities, and lack of space in the late 1980s. Since then, the New York City School Construction Authority (SCA) has been established and has been granted the ability to cut through much bureaucratic red tape. Karpel explained that SCA was allocated $ 4.3 billion over the span of five years and was charged with designing, building, and modernizing New York City schools. To date under SCA, 140 major project have been completed. Like the Chicago plan, each building's envelope is always the first priority for the rehabilitation team, then other methods of educational enhancement are considered.

The management responsibilities of SCA include system-wide needs assessments, establishment of budgets, prioritization of projects, and site identification. The SCA professional staff includes architects, engineers, and project managers, all dedicated to balancing the short-term issues of overcrowding facilities with the long-term need for capital improvements.

Karpel explained that communication and teamwork among members of the project team are vital to the success of SCA. Their goal for the concept of a "managing architect" is to define the scope of rehabilitation work with a sufficient level of detail so all parties agree that the project will proceed on schedule and produce the desired product.

In an effort to keep design standards high and attempt to integrate art work into the architecture of the schools, Karpel said that local artists were commissioned to devise creative design "extras" (e.g., functional play benches that spell "sometimes," "often," "never," and other multiple choice answers; outside weather stations; and interactive science labs).

Although SCA is exempt from many of the usual time-consuming steps for building and refurbishment, the New York City Board of Education offers comments at every stage, and peer review remains a consistent form of evaluation and assessment.

Karpel explained that the final step in this process is to solicit postoccupancy evaluations from school administrators, teachers, students, and custodial staff for the development of new and changing standards for capital improvement projects.

Rose Diamond, senior director for planning and capital development of the Division of School Facilities, New York City Board of Education, began her presentation by pointing to one of the major differences between Chicago and New York City's approach to public school capital investment programs: the amount of work that is done in-house.

Because the SCA has sweeping powers to bypass many time-consuming procedural steps, the managing architects are able to fully concentrate on designing and rebuilding schools, Diamond said.

CAE audience members asked Karpel how the managing architects deal with a client the size of New York City, (i.e., 32 individual school districts). Karpel responded that SCA possesses a lot of autonomy and that when their team determines a course of action for a facility, their decisions are rarely subject to debate. They offer only a few presentations to individual school councils because politics quickly come into play when school construction is divvied out to certain local interest groups. Karpel reasoned that once a community knows it's getting a project, the community is generally happy.

One audience member asked Mendelson what will happen 10 years from now to the institutional control of Chicago Public Schools--once they're built, they'll need to be maintained. Mendelson admitted that this is an important question to ask. "Who will guard the improvements?" Mendelson asked. This is a critical issue, and internal staff appointments must be made to help maintain quality over the long term, Mendelson answered.

Prototype Schools

Moderator August Battaglia, AIA, Vice President, FGM Architects and Engineers, Oakbrook, Ill., opened this session by expressing just how helpful it is to have a few nonarchitects at this CAE conference. As the profession expands its services to meet the evolving needs of clients, architects are inevitably being teamed with educators, administrators, and politicians.

Beginning the session on prototype schools, Jim R. DeStefano, FAIA, RIBA, President, DeStefano & Partners, Chicago, spoke about his firm's role as the leader of the managing architect team--Educational Design Group Enterprise (EDGE)--in the Chicago Public School System's Capital Improvement Program (CIP). With the task of providing superior education environments for 430,000 students, DeStefano & Partners, along with other members of EDGE, will manage $555.9 million in construction, addition, and educational enhancement costs over the next five years.

A key component to the success of this program has been the development of quality prototype facilities, DeStefano explained. The three prototype designs--a "linear" scheme, a "courtyard" plan, and an "E" configuration--offer flexibility, adaptability, expandability, and economy. Although each facility is composed of the standard modular components, each is tailored to meet the specific demands of its user and location.

The five-phase process for architectural delivery breaks down into the following steps:

- Phase I -- Planning and design (5 weeks) -- site selection, develop program, documentation of existing conditions, schematic drawings and budgets, schedule process, design development documents, etc.
- Phase II -- Transfer Documents (7 weeks) -- design and budget approval, finish and price DD documents, PUD documentation, pre-purchase steel, issue AOR documents, prepare "transfer manuals," zoning appeal and documentation, issue site preparation package, etc.
- Phase III -- Construction Documents Complete (12 weeks) -- issue steel mill order, monitor shop drawings and fabrication, 60 percent, 90 percent, and 100 percent review of AOR documents, respond to AOR questions, monitor AOR progress and compliance with design standards, etc.
- Phase V -- Bidding and Award (7 weeks) -- attend prebid, monitor and review, award project, etc.
- Phase V -- Construction (14 Months).

For multiple new schools and additions, DeStefano & Partners coordinates and oversees the efforts of team members who provide key services such as structural and mechanical engineering, zoning variances, cost estimation, specifications, scheduling, and geotechnical site analysis.

Illustrating a procedure that contrasts distinctly with EDGE initiatives, Michael J. Vanairsdale, Assistant Superintendent for Support Services, Fulton County Schools, addressed attendees with a presentation about a prototype school design competition held for a metro Atlanta school system. Diverse socioeconomically--poverty levels range from 0 to 99 percent--geographically, racially, and on many other levels, the Fulton County School district struggled with feasible means of alleviating the mounting problems in its schools.

The criteria for design contest entries were maximum use of tax payers' money; attention to landscape quality; and an inviting countenance for students, families, and community members.

The plan, offered in 1996, was to develop prototype educational specs through a community-based committee of design, construction, and education professionals and parents. This committee generated statistics concerning a system-wide needs assessment and researched project delivery comparisons. Their suggestion was to conduct a design competition to reduce risk to the school system and eliminate uncertainty of final design.

Mark Ray, executive director of capital programs, Fulton County Schools, College Park, Ga., continued the session with an overview of the Fulton County design competition. The competition was broken down into several steps:

- Establish a competition timeline

- Select a professional advisor to offer expertise and impartiality, develop rules and procedures, manage the competition process, and act as a judge to ensure an equitable competition
- Select a competition jury of outside design professionals, education professionals, facilities and construction staff, community members and/or parents
- Develop judgment guidelines based on specifications, Georgia's DOE regulations and guidelines, and forward-thinking design excellence.
- Invite design competitors
- Conduct orientation and briefing session; allow 6 weeks presentation preparation; provide $10,000 stipend to each competitor
- Conduct presentation competition: entrants required to use presentation boards with 36x42" foam core; presentation time was 60 minutes -- slides were permitted, but no models; submission binder needed to be provided one week ahead of time
- Select prototype school designs and architects based on cost, design, and specification criteria.

Ray explained that this competition process was the answer to the question of how the schools could be built in an efficient, cost-effective, and aesthetically appealing manner. Thus, the results of this process were the following: community leaders were at the table with staff during the planning of educational specifications; educational objectives were balanced with minimal costs; the facility was seen as open to the community; concerns of light and air and color were addressed during design phase; state of the art technology was implemented; and extracurricular activities were incorporated into the design.

Audience members asked Ray and Vanairsdale if they were able to modify the final design based on all of the submissions. They explained that ideas from each entry were considered, and several were adopted for the final design.

Another question was, "Now that that the originals are occupied, do you have any major changes to make?" Ray responded that some ongoing modifications are being done, especially with regard to information technology, but there haven't been too many major changes in design. There has been some discussions about changing the expression of some buildings, said Ray, but this discussion doesn't change the process--now that the system is in place, more design flexibility is allowed.

Final thoughts from attendees after this session showed that there were some sharp contrasts between the two prototype presentations. One CAE attendee said that the Atlanta competition allowed for emphasis on educational quality as well as cost-effectiveness and efficiency, while the Chicago plan seems more geared toward space alone. The agenda for the Chicago group was to get the students into new schools quickly to relieve the overcrowding. So although the stipend offered by Fulton County doesn't adequately cover the cost of planning, research, and design for the architects who chose to compete, the spirit of the competition demands attention to more broad requirements.

more sweeping accomplishments in terms of creativity, detail, and connection to educational philosophies and goals.

Historic Issues

The "Historic Issues" session was led by Laura A. Wernick, AIA, Associate, HMFH Architects, Cambridge, Mass. Wernick opened by commenting on how at the turn of the century, public schools were facing issues similar to those we're dealing with currently. At that time the problems included overcrowded facilities, disastrous attempts to accommodate many non-English-speaking students, and unrealistic expectations that schools could solve pressing social issues. Architects of that era were called on to consider new uses for materials, site spaces, natural light, and schools as anchors for communities. As Wernick expounded on the state of affairs at the turn of the century, audience members recognized that these considerations are resurfacing today in urban school design.

Bill Latoza, principal, Bauer Latoza Studio, Chicago, began his talk by offering an historical overview of Chicago Public Schools, which includes the first coeducational public high school in America. Also, Latoza remarked that most Chicagoans have always identified themselves by the neighborhoods in which they grow up, and that central to one's neighborhood is often a public school. With the new Chicago capital improvement program in place, Latoza's firm is working diligently to preserve the mystique and the heritage associated with many public facilities, especially public schools.

Latoza spoke about how he and his colleagues began investigating local public schools a few years ago to get a sense of their history. "We found schools with terra cotta and masonry facades," Latoza detailed, "beautiful windows, wide hallways, spacious classrooms, high ceilings, a great place for students to study and learn. We also found buildings once rich in character and design, destroyed by inappropriate maintenance, repairs, and additions." The two points that Latoza's firm pinpoint when examining schools thought to be historic are an association with important historic content and an historic integrity in their features.

For more on Latoza's philosophy of preserving historic schools and the criteria his firm uses for labeling facilities "historic," visit the following site that offers the full text of Latoza's presentation: *http://bauerlatozastudio.com/LandmarkingSchoolsPaper.htm.*

Complementing Latoza's expertise on historic facilities, Eric Emmett Davis, Senior Architect, GEC Design Group, Chicago, presented a detailed look at Dwight Heald Perkins, arguably Chicago's most distinguished architect.

Born in Memphis, 1867, Perkins and his family moved to Chicago when he was a young boy. His professional growth began when he enrolled at MIT, continued with his work at the Boston office of Henry Hobson Richardson, and culminated with his return to

Chicago to accept a job at the architecture firm of Burnham & Root. His departure from Burnham & Root accompanied the commission of his first independent project, Steinway Hall, a showroom and concert hall with offices above. With Steinway Hall as the main project, Perkins established his own firm on January 1, 1894, at the age of 26.

As architects moved in and out of Chicago--Frank Lloyd Wright, Walter Burley Griffin, Marion Mahoney, and Robert Spencer, to name just a few--Perkins offered his studio as a collaborative space for innovative design and thought. The Prairie School movement was the direct result of this collaboration.

Perkins was not a Classicist, and he boldly stepped away from the precedents of the time. He believed that schools should be civic buildings, directly connected to other civic buildings. In his lifetime, Perkins designed over 40 schools. Some highlights of his approach include emphasis on natural light and ventilation, religious style used in secular space, firestair towers, stacked bathrooms, spreadsheets, and prototype designs. Perkins also thought that educational facilities should possess a monumental and civic presence, with syncopation of verticals and horizontals that allow them to stand side by side with libraries and other civic structures.

Continuing the saga of Perkins's life, Davis explained that in 1910 the Chicago Board of Education charged Perkins with extravagance, incompetence, and insubordination, and eventually had him removed him from the board. Being pushed from the design of schools, Perkins redirected his talents to work on forest preservation projects and to compel the legislature to reserve open spaces.

In the 1920s Perkins went deaf, had to leave his office, and he died in 1941. Davis ending his presentation by remarking that Dwight Heald Perkins "represents a level of quality and design to which we all aspire."

Following both presentations, audience members asked Latoza about codes and standards--many established in recent years before the construction of older facilities--when dealing with historic buildings? Latoza responded that Chicago ordinances identify landmarks and buildings that are architecturally significant. This process allows the architects to get facility inspectors into the buildings to explain why some aspects of an original design might be "overlooked" and considered preservable.

Another audience member asked why Dwight Perkins did not want to use cut stone in his structures. Davis answered that aesthetic standpoint was the first reason, cost the second. Terra cotta offered the more detail precision than cut stone. Davis explained.

Echoing a theme raised in many of the conference sessions, the last question of the event was if it was typical to bring public functions into schools for Perkins? Davis affirmed that, yes, Perkins designed his educational facilities to have areas accessible to the outside. One such example would be spaces for literacy programs and community theater events that Perkins saw as vital to the holistic design of a public school.

Facility Assessment: Making a Difference Where Our Children Learn

In an attempt to pit educational theory against the practice of architecture, moderator Jeffery A. Lackney, PhD, adjunct assist professor, School of Architecture and Urban Planning, University of Wisconsin, Milwaukee, posed the question, "Can we measure qualitative things quantitatively?" This question opened the session for the two speakers to comment on how they think we should assess educational facilities and how our lofty ideals can be balanced with monetary realities.

Daniel L. Duke, EdD, director, the Thomas Jefferson Center for Educational Design, University of Virginia, spoke about facility assessment from the perspective of higher education. Duke explained that in the architecture school at the University of Virginia, students are taught to design learning environments that move away from "school" as a physical place. High schools should no longer be one place, a monolithic building, Duke said. To illustrate the principles of educational design that Duke and his colleagues circulate throughout their department, he provided the following points:

1. *A good learning environment is one that reflects a clear understanding of how people learn.* To test this point, Duke asks: Does the learning environment encourage and facilitate inquiry and experimentation by students? Does the learning environment support the well-established idea that learning is often a product of social interaction? Does the learning environment provide a variety of stimuli for learning? Does the learning environment provide settings that are free of distractions to enable students to focus attention? Are study nooks and work stations available for students who are easily distracted or require periodic "focused time?"
2. *A good learning environment is one that reflects the prevailing ideals and values of the community that supports it*: e.g., communities that value equality of opportunity should have no major disparities in the quality of their learning environments . . . including alternative schools.
3. *A good learning environment is characterized by pervasive caring and help.* Duke asks: Do educators consider providing help to individual students to be one of their primary responsibilities? Do educators acquire the special skills that allow them to diagnose student learning problems and provide assistance? Is caring reflected in the quality of the learning environments to which students are assigned.
4. *A good learning environment is one that inspires and nurtures hope*:-- e.g., one that is safe, full of opportunities and support, and appealing to the senses.
5. *A good learning environment is one in which the quality of desired learning experiences dictates the quality of the setting (and not vice versa).* Duke asks: Have efforts been made to "customize" classrooms and other settings to meet the needs of different subject matter areas? Has the learning environment been designed as a teaching tool?

Closing his remarks, Duke offered an example of a school in Rocky Mount, Va., that comes closest to achieving these principles. The curriculum of this junior high school is designed to engage students in active learning. Without the look or feel of a school, this facility has no bells, classrooms, courses, cafeteria, gymnasium, or playing fields. Instead of traditional classes, students spend blocks of time in "career modules"--environmental/natural resources, arts, manufacturing, engineering/architectural design, media design, legal science, finance, health/human services, and medicine--where they research and solve problems in their chosen fields. The expectations of the community sponsors, architects, parents, and faculty are that the students will develop oral and written skills, auditory skills, a work ethic, a career path, the ability to work collaboratively, and valuable research skills through experiential learning. In this unique case, the principles that Duke listed for facility assessment, are illustrated.

Don (Sam) Wilson, Jr., Principal, Magellan Consulting Inc., Houston, *http://www.magellanconsulting com/*, began his talk with this notion: we are bombarded with talk about new and exciting schools for the new millennium, but if we think about how most school buildings last about 50 years, and we're replacing about 2 percent of our inventory every year, by the year 2000 we'll only replace 4 percent of our schools. So with all the talk of the new school for the 21st century, we're focusing our efforts on a very small number of schools.

Wilson continued by saying we need to quantify the standards we use to assess schools so there are clear guidelines for determining those schools that need to be renovated, built from scratch, or those that need additions. Wilson's goal is to offer a standardization that doesn't work against the educational ideals noted by Duke. Factors like renovation and repair costs, demographic trends and enrollment, the historic value of a school, and the availability of land influence how a school ranks on the standardization assessment Wilson conducts.

Wilson's team breaks its assessment down into different categories that either meet, fall short of, or exceed basic legal and educational standards: core capacity, support for programs, technology, supervision and security, instructional aids, physical characteristics, learning environments, and the relationship of spaces. By adding all of the results, Wilson can offer an educational sustainability summary.

Although some warn that the statistics approach can be dangerous and inaccurate, Wilson believes that there must be some quantifiable data to use, something other than a cry for standards, when promoting architectural enhancement of educational facilities. Why:

- Standards change, but data doesn't
- Districts can't argue with data
- Districts can debate standards forever
- Collecting data maintains consistency
- Data allows unsophisticated assessors.

The first question for Duke and Wilson was where they see their methodology and philosophy overlapping? Duke commented that the standards Wilson proposes are good because they don't apply to kids, only buildings. Also, Duke responded, "There's a difference between designing a place that prevents people from behaving irresponsibly and designing a place that teaches people to be responsible." So if standards can incorporate attention to the individual as well as the group, then the standards are great, Duke said.

In another audience question, a recurring conference theme was raised: "Is there research to support the theory that design is linked to educational achievement?" The panelists responded affirmatively, but tempered their answer by saying the research to support this theory is not completely irrefutable. So far educators are noticing mild relationships, but few will argue against the hypothesis that there is a clear relationship among safety, order, and learning.

Duke also commented that we're seeing a proliferation of alternative learning environments, residential public schools, and vocational/technical facilities. As professionals working to design educational facilities, Duke advised that we need to "put to bed the myth of the comprehensive school where everyone is served under the same building." He asked that we rethink our understanding of a high school to envision a network of learning opportunities for students, faculty, and administrators.

Returning to the statistical assessment that Wilson explained, one attendee asked how the numbers are used when the scores are assigned to each school. Wilson's response was that his team offers a weighted score that outlines what improvements can be made to the facility, and decisions regarding renovation are usually made based on the cumulative data. He ended by noting how his team is often called on to assess a school when political pressure becomes intense. By avoiding political influences, Wilson's group holds the line of the research and offers objective, unbiased, technical assessments.

The consensus following this presentation seemed to be that students can benefit from a combination of the theory and the statistics presented by Duke and Wilson.

Unlikely Partners: Collaboration Across Sectors to Solve Problems Facing Urban Schools

Moderator Thomas Blurock, AIA, Thomas Blurock Architects, Costa Mesa, Calif., set the stage for the case studies being highlighted in "Unlikely Partners: Collaboration Across Sectors to Solve Problems Facing Urban Schools." Blurock explained that in Washington, D.C., there's virtually no growth, so the important issue is how to rejuvenate an apathetic school system. In Pomona, Calif., growth is outrageous and space scarce. Blurock presented the two experts from each area who are working to pair educational facility experts with potential public and private funders.

Sarah J. Woodhead, AIA, from the D.C.-based Architecture and Planning organization, stated that the average building age for a D.C. public school is 58 years, and most are built on good sites but have no planning or long-term thinking. The estimated total cost to modernize the 146 schools is $1.2 billion.

Woodhead explained that the five-year-old 21st Century School Fund is "dedicated to building the will and capacity to modernize schools in the District of Columbia and other American cities." To illustrate this theory, Woodhead outlined three public school projects in D.C., each at a different stage of the modernization process.

First, Oyster Bilingual Elementary School is a 1927 facility with minimal space, poor physical condition, and inadequate space and layout. Partnering with local school parents, the District of Columbia Public Schools (DCPS), 21st Century School Fund, pro-bono and discounted real estate, legal, A/E, and CM services, a grassroots modernization project is underway. For updates on this project visit: *http://www.edu-infra.com/oyster/main.htm.*

Second, the School Without Walls is an alternative high school, housed in an 1890s elementary school building, with 400 students, each of whom is eligible for open spaces at local George Washington University courses. Students also fill lab space at University of the District of Columbia, use the Smithsonian Institutions for coursework, and take advantage of many nearby urban sites. The modernization project teamed local school parents, teachers, and administrators, DCPS, the 21st Century School Fund, pro-bono A/E, and paid real estate services. The process includes: on and offsite programming, team-building, zoning analysis, and market studies. The team hopes to maintain the facade of the original building while meeting the educational needs of a 21st century classroom.

Third, J. C. Nalle Elementary School exists in a 1940s building that is in poor condition, underutilized, and lacking sufficient program space. Located in the part of the city where population loss has been extreme and where 100 percent of students qualify for reduced price or free lunches, the 21st Century School Fund partnered with local parents and teachers, Freddie Mac Foundation, Marshall Heights Community Development Center, the Children's Aid Society, and DCPS to begin renovations.

Following the three case studies, Woodhead offered CAE attendees a few of the lessons learned:

- These projects are simple in concept, but complicated to implement with long incubation time
- Community ownership is vital for the success of the projects
- Architects and planners must know the interests of all involved
- Equity must be kept in focus as we bring *all* schools up to a standard

- Cities can be great places to go to school--the problems are solvable.

For more on these projects and others, visit the 21st Century School Fund Web site: *http://www.erols.com/t21stcsf.*

Patrick Leier, superintendent of Pomona Unified School District, spoke after Woodhead about a project initiated several years ago to alleviate the overenrollment problem in Costa Mesa, a depressed community of Los Angeles County. Leier explained that a large regional mall became the answer to their overcrowding problem. With the extra space of the mall, a grant, and a partnership with local private organizations, Leier is able to offer technology training for teachers willing to contribute to this alternative learning environment.

Facing problems like an extraordinarily high crime rate, unsettled debates surrounding bilingual education, and constant threats of overcrowding, Leier sees this move as an aggressive approach to deal with serious educational issues in an apathetic city not equipped to handle the problems.

The first question from the audience was how Woodhead's nonprofit organization received initial funding? Woodhead said that once DCPS started shutting down a handful of schools each year, people began to mull over public/private concept to rebuild schools. A group with vision approached the Ford Foundation for money, and they got it. The 21st Century School Fund is now in its fourth year of funding from the Ford Foundation.

Another CAE participant pointed to a parallel between Leier's program and Carmi Bee's School for the Physical City because both use space not designated as "school" space. Leier commented that the major concern for his team's use of nontraditional space for school was safety.

The last question for Woodhead and Leier was how they brought the teachers on board. Leier responded that there was high visibility for his program and that the best teachers in the region were targeted to come in to the constant training mode. Fortunately, said Leier, many strong teachers really enjoy it. With the fishbowl effect taking place, Leier sees their project as rebuilding the craft of teaching.

III. Tours of Schools

To supplement the information provided in the speaker sessions, conference attendees spent time touring several Chicago schools. Highlights from select tours are provided in the following section.

The Drake Transition Center, located in an 1898 facility that stood vacant for two years prior to this most recent renovation, is an alternative school for students underprepared for grade advancement. The renovations to the building, a joint effort of several

architecture and engineering firms, include: refurbishment and replacement of interior woodwork and other finishes; the complete replacement of mechanical, electrical. and plumbing systems; the addition of science labs for summer science programs; the conversion of several classrooms into a multipurpose space; and the conversion of lower-level storage into a library, cafeteria, and lunchroom.

As attendees toured Drake, many were drawn to the sharp contrasts between the original structures of the building, like the stairwell and windows, and the more recent additions and changes, such as the hanging pendant lights in the halls, the computer facility, and the multipurpose room. Other CAE participants noted how closely the design of the building reflects the unique needs of the students enrolled in the transition school. Final comments related to how the logistical aspects of the renovation project--e.g., funding, building codes, and community politics--were difficult to compare with the educational benefits students receive in such a facility.

Little Village Academy, a Ross Barney & Jankowski design, was the next school that participants toured. A K-8 school that serves a large Hispanic population, Little Village Academy has won several awards since its dedication in 1996, including the 1997 Distinguished Building Award and the 1997 Interior Architecture Award, both from The American Institute of Architects Chicago chapter. CAE attendees listened to principal Fredric Arana explain how he believes that the vibrant and inviting design of the facility has had a positive influence on the attitudes of teachers and students. Adding more weight to the argument that superior building design enhances student performance, Arana noted that both attendance and test scores have risen in the two years since Little Village opened.

As participants toured the school, many commented on how Mexican culture has been successfully woven into the design. The dramatic case in point was seen in the skylit stair enclosure marked by an angled functional sundial. Other architectural features included the third-floor library that is a porcelain-and-glass box imbedded in the larger structure, a cafeteria that curves out into the playground, and the changing ceiling heights, colors, and textures throughout the interior.

Upon exiting the school, one attendee remarked that interior and exterior design of Little Village Academy were "celestial."

Rounding out the tours for the afternoon, conference attendees visited **Ames Middle School**, a three-story version of the courtyard prototype plan designed by local managing architects, DeStefano & Partners. Amanda Rivera, the interim principal at Ames, explained that the school was built to relieve overcrowding in the culturally diverse community. Mixed responses from the CAE attendees spoke to the complexity of the prototype question: Is the role of the architect eliminated in such a structured design plan? Does the personality of the building seem too harsh for a school facility? What is lost in a building design that puts efficiency and expediency before character and individuality? Although many on the tour commented that the school lacked in aesthetic charm, all

admitted that fast relief of overcrowding was accomplished successfully through this prototype design.

Also, volunteer guides commented that although the design concept is called prototype, each school is adjusted somewhat to meet the needs of the clientele. Much of the landscaping and color choices were made by local community groups who were integral in the ultimate acquisition of land for the school.

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V. Quicksweep

VI. Report From Charleston, S.C.

Laying the Groundwork: Districtwide Planning

Charleston, S.C., March 27-28, 1998

Conference Chair: Katherine Nielsen Peele

SYNOPSIS

Last spring, The American Institute of Architects' (AIA) Committee on Architecture for Education (CAE) sponsored a conference that explored the issues associated with districtwide planning as it pertains to rebuilding America's schools. With one-third of America's educational facilities currently in need of extensive infrastructure repair, architects are being summoned repeatedly to offer cost-effective, educationally sound solutions to what seems an impending crisis. From this CAE gathering in Charleston, S.C., "Laying the Groundwork: Districtwide Planning," came information relevant to means of building community consensus, methods for tapping into the multifaceted roles of architects, and suggestions about seeking out creative financial strategies. Believing that the total cost of school infrastructure repair will continue to rise, this conference served as a forum for school officials, facility and financial planners, and architects to discuss the economic, political, and social impacts that these grim trends imply. Attendees dialogued about long-range planning goals, private investment opportunities in school systems, and partnerships between architects and financial advisors.

OPENING REMARKS

Approximately 125 CAE participants were in attendance as AIA Executive Vice President/CEO Mark W. Hurwitz, PhD, CAE, commented that Charleston, S.C., with its pending school bond referendum seemed a most appropriate location for discussing the problems of urban design and educational facilities. Hurwitz discussed the architectural dilemmas that arose during the 1960s, a time when proposals for school designs had spectacular aesthetic qualities but lacked future vision and planning with regard to the level of funding that would be available in subsequent years for renovations. Following this architectural phase, the prevailing thought was to get the lowest bid--not the best and lowest, just the lowest. This unfortunate trend, Hurwitz speculated, has resulted in

communities with dilapidated schools that, in turn, cause children to go lacking in the area of education. Given the growth of education as a volatile political issue, architects should serve as advocates for education issues, Hurwitz asserted. Closing his remarks, Hurwitz posed the semi-rhetorical question, "Why should architects be interested in a conference on school district master planning?"

Gene Scholes, PhD, noted that the title of the conference, "Laying the Ground Work: Districtwide Planning," provides the answer to Hurwitz's question. She claims that "the topics of this conference will challenge each of us in the years to come," to refine the process of involving various groups within and outside of a community to acquire support for a project. Scholes explained that architects are being called upon to do more than design facilities as the administration process within school districts, colleges, and universities becomes more and more complex. Scholes claimed that architects might regard their workload as directly proportional to a school district's success or failure with master planning.

Unfortunately for all involved, the stewardship of the planning process often becomes a tug-of-war between what is expedient and what is the most politically savvy thing to do. Illustrated best in the editorial from the March edition of *School Planning & Management* titled "Show Me the Money, But First Show Me the Plan," author Jim Bates points to the necessity for long-range planning. Thinking long-term is vital for a variety of reasons: It forces the type of planning that avoids short sightedness due to hastily made decisions; it protects weary voters from funding ill-conceived schools; and it creates today a vision for tomorrow.

THE ROLE OF THE ARCHITECT

As we all know, Martin Luther King Jr. did not stand up and say "I have a plan." Pointed out by Hurwitz, Dr. King had "a dream." In other words, King had a vision, which is the beginning framework of a plan and the concept that supports districtwide planning. Synonymous with master planning, both entail highly technical aspects and can show

facility planners how positive changes can be made by using architects in the early stages of the planning process. Thus, conference attendees were told that the architect's role of stewardship is extremely important for guiding demographically, geographically, and culturally diverse groups to a point of consensus and shared decision making. Initially, the architect may or may not be the central figure for formulating leadership in the planning process. However, somewhere during the process, the architect's role will inevitably become significant. For those promoting bond issues, this initial stage of the decision-making process is highly relevant for understanding the community's receptiveness to funding a school's spatial needs.

Several conference speakers noted that the multiple roles of an architect add leadership to the long-range planning efforts, and the unique position of architects can eliminate unnecessary conflict and political discord among community leaders. Other speakers explained how districtwide planning is a dynamic process, one based on sound planning and community involvement. Although every community has shared characteristics, there are also political, social, and culture differences that make having universal approaches to districtwide planning unrealistic for architects caught in the intricate web of interests and intentions. Several speakers strove to outline innovative ways of building community consensus, ascertaining the multifaceted roles of an architect, and seeking out creative financial strategies, all vital components for defining and implementing districtwide planning.

BUILDING COMMUNITY CONSENSUS

A representative from the local school district in South Carolina's Charleston County commented that the extent to which community consensus can be achieved will be evidenced by the outcome of the issue being voted upon. Two examples of the complexity inherent in building community consensus are Charleston County's pending school facilities bond vote and the ongoing dilemma of McClellanville Middle School. On the eve of March 28, 1998, Charleston County residents speculated about whether the proposed $350 million Charleston County school facilities bond referendum would or

would not pass. Opponent reasons ranged from lack of trust in the local school board to reluctance to pay higher taxes. (Since this report was first drafted, the school facilities bond vote in Charleston County failed to pass.)

Mark McCormick, a program manager for Heery/Mitchell, gave a compact and informative synopsis of the participation architects had in formulating and fostering support and confidence among school officials, residents, and the consultants for bond referendum campaigns. The director of public relations for Charleston County Public Schools, Meg Howle, attested to the tedious and time-consuming process of building support. "It requires never-ending patience," explained Howle, "organizational skills, as well as the ability to facilitate individuals from diverse cultures, attitudes, and perspectives in constructive discussion."

Offering support to the need for community unanimity by way of a personal experience, Jeffrey Rosenblum, AIA, gave a brief narration of the pitfalls he encountered during both the planning and construction process of McClellanville Middle School. Largely divided along racial lines, residents never arrived at any level of consensus. The planning process represented "the best and the ugliest of the South because school officials and the white community did not want the school. They wanted to maintain the past and viewed the school as a catalyst for change," Rosenblum surmised. Despite protests similar to those during the desegregation of America's schools, McClellanville Middle School was eventually constructed. Alas, the construction began before finding a solution to major sewage issues. As a result of the dissension within the community and with no end in sight, inadequate sewer problems still continue today, fueling the increasing financial costs of maintaining the school.

ENVISIONING DISTRICTWIDE PLANNING

Several CAE speakers noted that students today are suffering from a lack of future visioning with respect to school facilities. Architects possess the skills and abilities to facilitate a long-term visioning exercise that can build consensus among community

leaders as to what schools ought to reflect and provide. The exercise should address "heavy political issues" and assess the following goals:

- Identification of the issues associated with the educational predictions for the 21st century, such as technological expectations
- The need for better communication with other civic planners
- The need for more adequate and flexible teaching space.

Conducting such an exercise should produce recommendations from which goals originate and the foundation upon which a comprehensive master plan can be assembled. This new type of collaboration is characterized as districtwide planning, "A challenging topic for years to come," commented Dr. Gene Scholkes. Districtwide planning seeks to entice creative solutions that might accompany the highly technical aspect of master planning required by architects.

As Katherine Nielsen Peele, AIA, pointed out, master planning is a field far from the teachings of design school. Consequently, there is a need to be aware of competing agendas and interest that give rise to the reasons for long-range planning. It assists in the avoidance of wasted building dollars and ill-conceived plans.

DISTRICTWIDE PLANNING FROM A FINANCIAL STRATEGIES PERSPECTIVE

One method of breaking the traditional train of thought is to allow the definition of districtwide planning to evolve according to the composition of each individual group. One differing perspective on districtwide planning is the City of Oklahoma's approach.

According to speakers Charles Jones III, AIA, and Ronald Bogle, "what is needed is not districtwide planning but community-wide planning." By increasing private investment opportunities, as exampled by Charleston's business improvements and San Antonio's canal project, taxes are generated for improving schools and other quality of life issues. With school buildings averaging 60+ years, new ideas and collaborations are imperative. Viable alternatives to bonds, the speakers claimed, are the formation of alliances with

different groups and the stimulation of community dialogue. As one conference attendee stated, "we need to rethink the way schools are arranged according to grade levels, reexamine the traditional thoughts and ways of accomplishing tasks, consider increasing corporate and public collaboration, and design schools that meet the needs of students and their future work place."

Echoing the sentiment for futuristic visioning, Dr. Veronica Stalker, with her efforts to implement districtwide planning in the community of Waukee, Iowa, believes that a "city is only as good as it schools." Dr. Stalker facilitated the collaboration of architects, financial planners, developers, city planners, and residents to produce a school master plan reflective of the community's anticipated growth. "Innovative ideas are the substance of dreams turned into reality," explained Stalker. The collective strategic management and development of a districtwide plan that CAE members witnessed throughout each session represent the type of initiatives necessary for the transformation of old rundown and disregarded schools into vital and productive schools that prosper and are assets to their communities.

FINANCIAL STRATEGIES

CAE members will undoubtedly admit that, historically, the relationship between financial advisors and architects has not been a warm and receptive one. Generally speaking, while financial advisors and analysts focus on numbers, architects tend to be creative. However, in spite of the skepticism that must follow such sweeping generalizations, most architects will readily admit that financial advisors are invaluable to projects. Building the confidence and trust level within a community with regard to the accuracy of financial data (the cost to tax payers) is just as persuasive in boosting the passage of a bond referendum as anything else that is done.

Architects can be instrumental in showing financial planners how they can leverage scarce monetary resources by maximizing spatial requirements through dual usage. Jeanne Frederick Vanda and Glen M. Williard, Managing Directors, Public Financial

Management. Inc., Minneapolis, believe that early involvement by financial analysts can produce the following benefits:

- A reduction in the impact of long-term debt
- A decrease in initial payment
- A shorter timeline
- A decrease in the impact upon the budget.

According to Ronald E. Bogle, Vice President Institutional Advancement, Oklahoma City, early involvement can also stimulate creative financial strategies such as:

- Tax increments from district funds
- Special tax from the state
- Increased private development initiatives.

FEDERAL FUNDING PERSPECTIVE

Understanding the need for new funding wellsprings and creative leveraging techniques, the AIA has aligned itself with a powerful coalition entitled "Rebuild America's School." Pending legislation in Congress to provide federal assistance for school construction will be a major political issue in the upcoming election.

CLOSING REMARKS:

CAE members believe that now is the time to forge interdisciplinary partnerships to educate Americans about the necessity for improving school infrastructures nationwide. Partnerships should be composed of community residents, government entities, business leaders, and architects.

The successful collaboration of these partnerships will impact all of our lives.

The abilities and skills of architects will be essential for constructing educational facilities that are multipurpose learning centers for the evolving information age. Serving as an agent for positive change, the restoration of school structures into safe

and healthy environments could serve to eliminate other factors--low self-esteem, overcrowd classrooms, and archaic technology--that have assisted in the erosion of the American education system. As the millennium approaches, just how serious American citizens, businesses, and communities are about the education of our children will be demonstrated by our commitment and dedication to researching, soliciting, and successfully implementing long-range plans that incorporate diverse and multifaceted solutions.