

Executive Summary

The National Summit on School Design, convened by the American Architectural Foundation and KnowledgeWorks Foundation, brought together more than 200 participants from around the country in Washington, D.C., on October 6–8, 2005. Participants represented the full spectrum of school design and education stakeholders: teachers, parents, students, school administrators, education experts, architects, community groups, mayors, and other elected officials. A number of national education and design thought leaders and industry representatives shared information on current trends related to school design.

Preparing for the National Summit

In the months leading up to the Summit, AAF conducted interviews, focus groups, and forums with education and school design stakeholders across the country. These conversations set the groundwork for the Summit. In addition, AAF reviewed and summarized the work of previous sets of school design principles developed through the work of various conferences, reports, and organizations. A detailed description of the school design principles is provided in the appendix to this report.

The National Summit was not a convention or symposium, but an event to reenergize a national dialogue on school design, where participants were actively engaged in discussions about school design principles for the 21st century and the challenges and tensions related to effective design. Scenario workshops, planned and facilitated by Harris Steinberg of PennPraxis, Harris Sokoloff of PennGSE from the University of Pennsylvania, and Chris Satullo from the Philadelphia Inquirer, allowed participants to grapple with school design issues through the lens of hypothetical community scenarios that were emblematic of real-world places with real-world problems. These scenario workshops, each containing approximately 20 participants, were then reorganized into cross-scenario issue analysis groups to address specific issues and to provide recommendations and possible solutions. Participants shared their knowledge on such important issues as trends in learning, school size, siting and location, technology, financing, traditional versus alternative spaces, public process, and community relations.

Eight Recommendations for School Design Excellence

This report details eight overall recommendations made by Summit participants following discussions on a range of school design topics. Overall, participants felt school design should create a welcoming and nurturing environment for learning. Schools are a visible and daily symbol to students and teachers of the community's commitment to education. Schools that are poorly designed or poorly maintained provide an undesirable environment for learning and achievement. Below is a summary of the eight recommendations that should shape school design in the future. The findings include considerations important at the classroom, school, and community levels.

1. Design Schools to Support a Variety of Learning Styles

A clear theme of the Summit was the importance of designing schools to enhance learning. Research has shown that not all students learn the same way. Some students excel in project-based learning, in which small groups work together to tackle problems. Some students respond well to peer tutoring, and others learn best through individual study. In designing schools, we must reexamine the notion of the traditional classroom setting and focus on a new learning environment that is designed to support student achievement. Doing so requires greater flexibility in design to accommodate a range of learning scenarios inside and outside the school.

2. Enhance Learning by Integrating Technology

Technology is no longer simply hardware and software but must be integrated into the environment of any well-designed school. Technology both supports learning and helps schools operate more effectively. In addition, access to technology has become an important tool in helping equalize learning opportunities across the student population and community. Summit participants reminded school leaders that, as they make technology choices, they should involve students in the process. As we have all learned, students today are often far more technology savvy than adults. How students respond to technology should shape how they will use it in their classroom and learning settings away from school. Summit participants cautioned that too often technology is outdated by the time it is installed in a new school and that educators need more training on how best to use technology tools. Besides the use of technology tools in classrooms, school administrators reminded us that technology advances also allow schools to better control heating, cooling, air flow, and noise and to improve communications inside the school and with parents.

3. Foster a “Small School” Culture

Summit participants agreed that school size needs to be determined within the framework of a community’s needs and vision, academic goals, traditions, and economics. Nonetheless, they recognized the importance and benefits of developing a “small school” culture that fosters relationships and attachments. Participants felt more study is required to determine how these schools perform and how school size affects operating costs and curriculum options. Although there is evidence of a movement toward smaller schools, Summit participants shared that in many districts political pressure, driven by growing enrollments, results in the building of larger schools. School size issues are still a leading area of conflict in the national discussion on education and school design.

4. Support Neighborhood Schools

Participants felt it was important to seek strategies to preserve neighborhood schools whenever possible. Neighborhood schools allow many students to walk to school, thereby supporting healthy lifestyles; smaller schools reinforce student achievement; and strong neighborhood schools bolster property values for homeowners in the area surrounding the school. Preserving neighborhood schools provides the basis for nurturing the link between the school and the larger community. Summit participants noted that decisions on whether to renovate or build new schools and where to locate schools are difficult and should be made with the full input of the community. It was agreed that, often, public opinion will initially consider building a new school as preferable to preserving an existing facility. Often educators mistakenly believe that contemporary teaching and learning methods cannot be carried out in an older facility. In many states, regulations restrict the ability of school districts to renovate older schools or build on smaller sites.

5. Create Schools as Centers of Community

Successful schools often are ones with great support and involvement from the community and ones that are often open to the community as well. Summit participants discussed the benefits of developing partnerships with local cultural organizations such as museums and libraries, universities, and businesses to expand educational opportunities for students and more deeply engage the community in the school. In some examples, schools are sharing public libraries or recreation facilities and using museums as a place for greater learning opportunities. A number of school districts have built schools to serve as the center of the community, so that facilities are used not only as a school but also as a place to house other community services such as recreational centers, resource centers, and performing arts spaces. In those situations, the school becomes a central resource for the entire community, garnering greater support and playing an important role in the community’s health. Participants expressed the importance of policies and design considerations to ensure student safety and security in these examples. In addition, participants felt school districts need more information about how to

structure and administer partnerships to maximize the benefit to their schools and communities. They cautioned that partnerships can sometimes come with strings attached that may not be in the best interest of schools.

6. Engage the Public in the Planning Process

Summit participants agreed that there is a need to improve communications and engagement with and between the school community and the community at large. There is often a “language gap” when educators and designers talk about schools with parents and community residents. An open, two-way flow of information and feedback between the school and the community it serves benefits both groups. When a school district wants to embark on design and construction of new or renovated schools, an open public process is essential. A great deal of planning and time is required for a school district and a community planning this process. Participants recommended that the public process start early, allowing for community input long before final decisions are made. The public process needs to include all school and community stakeholders, recognizing minority opinions. The use of a professional facilitator can bring objectivity to the process and help gain a consensus. It is helpful to start with a visioning process that allows all stakeholders to provide input about the role of the school in educating students and serving the community. It is important to allow students to participate in the discussion process as well. The input from these visioning meetings should shape how the facilities are designed and supported.

7. Make Healthy, Comfortable, and Flexible Learning Spaces

Summit participants heartily agreed that our nation’s schools must become committed to improving the quality, attractiveness, and health of the learning spaces and communal spaces in our schools. Over the past several decades, research and experience have demonstrated the significance of spatial configurations, color, daylighting, ventilation, acoustics, and other design elements on student achievement. Far from luxuries, these design decisions affect children’s ability to focus, process information, and learn. Beyond student achievement, such aspects of the built environment can also have significant health consequences for teachers, students, and others who work in the building. In addition, a well-designed, well-maintained school sends a vital message about the perceived worth of the building and its occupants to the community.

8. Consider Non-Traditional Options for School Facilities and Classrooms

Today, there are many ways in which a school may function, and many places where it may be housed. Often, these new types of school spaces and locations contribute to student learning by offering non-traditional opportunities to engage with academic subjects and the environment outside the classroom. Summit participants encouraged school districts and communities to explore options for employing underused civic, retail, and other adaptable nonschool spaces. Many cities have community assets such as museums, colleges, research labs, and other institutions that offer the potential for experiential learning. Participants felt that education needs to be connected to real-life applications and experiences, particularly at the high school level. Although moving away from traditional models will require much community discussion and engagement, there was a consensus that this dialogue can often lead to highly favorable results and important learning opportunities for students.

Next Steps: Advancing the National Agenda

Based on the recommendations of National Summit participants, AAF, KnowledgeWorks and other partners in the *Great Schools by Design* program are committed to advancing the work started by the National Summit on School Design and contributing to new knowledge and new strategies for the design and construction of schools nationwide. National and international thought leaders, researchers, and stakeholders will gather for a series of forums over the next two years to examine a range of topics in each of two broad areas derived from the Summit:

Design for Learning

- Student Achievement
- Classrooms for the Future
- School Size
- Technology and the Learning Environment

Schools for Better Communities

- Site Size and Location
- Safety and Security
- Community Engagement
- Partnerships
- School Financing
- Sustainable Design

Recognizing School Design Excellence

Through videos, publications and awards AAF and KnowledgeWorks will highlight successful schools that foster student achievement and serve as centers of community. Below are some examples of our potential work in this area:

- **Video Series**—AAF and KnowledgeWorks will produce documentary videos that profile school design excellence and highlight best practices.
- **Publications**—White papers, articles, reports on School Design Institutes, newsletters, and publications help school and community leaders become more informed about education and school issues.
- **Awards Program**—In 2007, AAF will introduce the *Great Schools by Design* awards program to recognize schools where design has helped contribute to academic excellence.

Transforming State and Federal Policies

State and local governments have a powerful and ongoing role in financing school construction and defining the rules and regulations that define siting, size, environmental sustainability, and other areas. These policies can either enhance or detract from innovative possibilities for school design, smart growth, and partnerships. AAF and its partners will bring experts together to develop creative models and policy recommendations to guide state legislatures and policymakers, with a particular focus on ensuring greater flexibility regarding site and size determinants. The federal role in school design, although limited, will be considered with a particular emphasis on how the federal tax code can be used to encourage and finance creative school and community partnerships.