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ABSTRACT

This booklet provides a short review of the literature on the small-schools movement and describes the common features of effective small schools, as well as offering examples of two schools that have met with success. It gives a closer look at small-schools facilities and outlines six necessary considerations for local and state leaders. The text also lists six questions state-level decision-makers should ask when considering small schools. Two audio CDs accompany the booklet featuring interviews with leaders such as Tom Vander Ark, executive director of education at the Bill and Melinda Gates Foundation; Valerie Lee, professor of education at the University of Michigan; and Craig Howley, director of the ERIC Clearinghouse on Rural Education and Small Schools. The educators discuss the small-schools movement, what it can mean to a school, the advantages and challenges associated with designing a small school, and the key factors for those considering a small-school design. (Contains 12 references.) (RJM)

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Viewpoints

Small by Design: Resizing America's High Schools

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Small by Design: Resizing America's High Schools

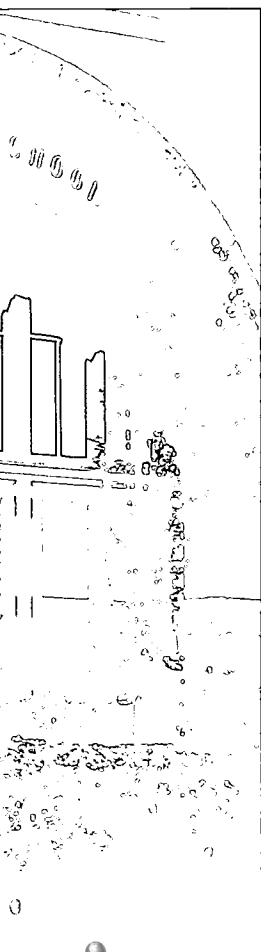
Viewpoints is a multimedia package containing two audio CDs as well as a short accompanying text. The audio CDs provide you with the voices, or viewpoints, of various leaders from the education field who have worked closely with, or observed the work of, small schools. These voices represent the many perspectives and opinions that surround the emerging issue of small schools and provide a general overview of the movement. The booklet contains an essay entitled Big Plans for Small Schools and is intended to compliment the interviews with a closer look at small schools facilities, at how some small schools are finding success, and recommendations local and state leaders might consider. This issue of *Viewpoints* presents an array of issues and perspectives to consider as you explore the option of designing a small high school.



The Issue

Approximately three-quarters of U.S. high school students attend schools of more than one thousand

students and more than half of the high schoolers attend schools with more than 1,500 classmates. As the high school age population continues to rise in most areas, we can expect to see about \$84 billion dedicated to constructing new schools within the next two years. Many educators, researchers, parents, and students feel as though that money would be best used to break up the large “mega-schools” as well as to create new schools with fewer students. The creation of small schools has been linked to higher student achievement, better discipline, as well as higher attendance and graduation rates. Additional research shows that the students who stand to benefit the most from a small school environment are those students who are most in need, namely low-income students. As we continue to examine how to best serve American high school students, it is tempting to seek a single answer that will result in improved learning and teaching. However, the simple reduction of the number of students is unlikely to have the desired effects. There are a variety of issues to consider from a policy as well as an implementation standpoint.



The Booklet: A Guide to Contents

The essay “Big Plans for Small Schools” serves as a companion piece to the CDs. The essay outlines the current opportunity in front of education leaders – to rethink the mega high school and use the dollars earmarked for school facilities to redesign or construct smaller schools. In addition, you will find recommended strategies for local and state level decisionmakers intended to help shape thoughtful and informed decision-making. You may find it helpful to read the booklet as an introduction to the topic before listening to the interviews presented on the CDs.



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Audio CDs: A Guide to Contents

The CDs provide you with various perspectives on the issue of small schools. Education researchers, school leaders, teachers, and program directors share their perspectives on the small schools movement, what it can mean to a school, the advantages and challenges associated with designing a small school, as well as key factors for those considering such a small schools design.

CD 1 – Interviews (in order of appearance)

1. Introduction
2. Tom Vander Ark is the Executive Director for Education at the Bill and Melinda Gates Foundation. The Gates Foundation has dedicated millions of dollars to exploring, creating, and replicating successful small schools. Vander Ark is a former superintendent.
3. Kathleen Cotton is a Senior Researcher at the Northwest Regional Educational Laboratory located in Portland, Oregon. Cotton authored an influential literature review on small schools and is well versed in current research on small schools.



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4. Patricia McNeil is the former Assistant Secretary of Education at the U.S. Department of Education. McNeil was a strong advocate for rethinking high schools in the department. She now serves as a consultant to the Baltimore school district in their efforts to create new small high schools by design.
 5. Valerie Lee is a Professor of Education at the University of Michigan. Lee is a well-known researcher on school restructuring and has conducted one of the only large empirical studies on the effectiveness of small high schools on student achievement.
 6. Craig Howley is the Director of the ERIC Clearing House on Rural Education and Small Schools. Howley has also conducted empirical research on small schools, especially about the effectiveness of traditional small rural schools.
 7. Mike Endress is the lead teacher at the Phoenix Academy in Milwaukee, Wisconsin. Phoenix is a high school of 130 students and 12 faculty, serving mostly minority students.

CD 2 – Interviews (in order of appearance):

1. Tom Gregory is a Professor of Education at Indiana University. Gregory is a long-time

student of alternative schools and oversees a training program for teachers wishing to teach in small high schools.

2. Mary Ann Raywid is Professor Emeritus at Hofstra University. Raywid is also a long-time student of alternative schools who has now turned her attention to the problems that new small high schools face.
3. Valerie Lee (continued)
4. Mark Buesgen is a Minnesota State Representative and an administrator at the Black Hawk Middle School in Minnesota. Buesgens is an observer of the political realities faced by districts both at the state and local level.
5. Tom Vandervest is the principal at Middle High School in Middleton, Wisconsin. Vandervest supervised his district's study of high school size when a group of parents wanted the current high school split into smaller schools.
6. Mike Klonsky is the Co-Director of the Small Schools Workshop at the University of Illinois at Chicago. Klonsky is one of the founders of the small schools movement.





Big Plans for Small Schools

*by Joe Nathan and Debra Hare,
Center for School Change*

Introduction

Policymakers now have an opportunity that only occurs once every two to three generations. That's how policymakers at all levels might want to think about the estimated \$84 billion that are going to be spent over the next several years in school building modification and construction (Agron, 2001). Federal research shows that a large proportion of school buildings are now in need of significant renovation or replacement (Education Writers Association, 1989). The decisions that are made about these buildings today will effect educational opportunities for the next 50 years. As states and school districts consider how to proceed, they need to consider recent research about the value of small schools and shared facilities.

This research is compelling. Eric published a federal examination of literally hundreds of studies, comparing what happened when similar groups of students attended large versus small schools. It found that stu-



dents attending small schools generally had higher achievement, better discipline, and attendance, as well as higher graduation rates. Students, families and teachers reported more satisfaction in small schools. Some of the research also shows that the students that benefit most from small schools are those most in need—for example low income students (Howley, 2000). The closer relationship between adults and students in small schools benefits all kinds of students and teachers as well, but especially those students often overlooked in larger schools or those that need special help. Mary Anne Raywid (1994), author of the ERIC summary, concluded that the findings about small schools have been “confirmed with a clarity and a level of confidence rare in the annals of education research” (p. 1).

Equally important, small schools need not be more expensive. University of Chicago researcher Tony Bryk reports, “While school districts that are currently saddled with large physical plants might productively move toward schools-within-schools, there is little reason to continue to build more buildings like this. In light of the positive consequences for both adults and students associated with working in small schools, the reality is one of diseconomy of scale” (Bryk, 1994, p. 6-7). An important study in New

York City found that when you look at the *cost per graduate*, small schools are actually less expensive (Stiefel, Latarola, & Fruchter, 1998).

For many communities, to rethink school buildings and community collaboration is a marvelous opportunity—one that comes once every 30 to 60 years.

It's also time for policymakers to listen to educators who say they can't deal with all the issues and challenges students and families face by themselves. Sharing facilities with social service agencies, higher education institutions, or even businesses can provide better service to students and families and allow educators to concentrate on teaching. Joy Dryfoos, who has studied shared facilities, wrote that the impact of these programs, "include and go beyond the expectations of traditional education reform" (Dryfoos, 2000). Sharing facilities also can, as the North Carolina Department of Public Instruction concluded (2000), "save taxpayers significant sums of money" (p. 24).

Despite the overwhelming evidence, most communities continue to build large isolated school buildings. Designing small schools or redesigning large school



buildings into smaller distinct schools is a big change for many communities—a change that is unlikely to occur without leadership from policymakers. Latest industry estimates show that about \$84 billion will be spent on school buildings over the next few years (Agron, 2001). For many communities, to rethink school buildings and community collaboration is a marvelous opportunity—one that comes once every 30 to 60 years. Unfortunately, without strong leadership this opportunity may well be lost.

How to do it right



Small schools generally serve fewer than 600 students, but take on an infinite variety of forms, including stand-alone schools, multiple small schools sharing one large building, and small schools sharing facilities with other agencies or schools in a leased space. However, just being small does not guarantee a school will do well. As noted above, small schools and shared facilities are, on average, more effective with students. But the most effective small schools, including those described here, share common features. These features include:

- Clear goals and standards to help focus curriculum, learning, and instruction.



- A distinctive educational approach.
- Strong outreach to and involvement with students' families.
- An orientation toward active learning in the classroom and in the community.
- Extensive partnerships with community and business groups (which might include co-location).
- Regular monitoring of student achievement using multiple measures to refine and improve schools.
- Involvement of students and educators by choice.
- A strong principal or other leadership structure that makes sure decisions are made and implemented (Newmann, & Wehlage, 1995; Education Trust, 1999; Henderson, & Berla, 1994).



Some schools have made the most of the opportunities created by being a small school that stands alone, or by being small schools that share one large building. These schools, such as Wyandotte High School and El Puente Academy of Peace and Justice, provide an important road map for policymakers.

Wyandotte High School

Many school districts have already invested in large buildings. Wyandotte High School in Kansas City was a large urban school that didn't let physical limitations stop it from making use of the research about smaller schools to improve outcomes for its students.

Eight years ago, Wyandotte High School was an extremely troubled place. Graduation rates, attendance, and achievement were quite low. But Wyandotte had a crucial thing in its favor—*strong leadership*. A new principal, Walter Thompson, came in to help make improvements. He spent a year *listening to teachers, parents, and community members*. Strong outreach to families and real involvement of teachers is a key to successful small schools, especially when converting one large school into several smaller ones.

After reviewing the research and listening to a variety of people, Thompson worked with the faculty to create eight *small distinct schools* in the building, which serves about 1500 students. Wyandotte High was not simply divided into houses or subgroups of students, an approach often taken to create smaller learning communities. Students select among seven small schools in the building. Each has a different theme so students and faculty (who have also selected the small



school in which they work) have a much greater commitment to the school. They aren't assigned a school—*teachers and students make a choice*. Each of Wyandotte's small schools offers different opportunities to students, increasing the odds that the needs of students with a variety of learning styles and interests will be met.

The first small school created, Opportunity Center, serves only 9th graders who have failed. Thompson selected the woman he thought was the single most talented person working with such youngsters and gave her the *chance to select several staff* to join her. Then seven other small schools were created around themes such as Business or Creative Arts.

By specializing, each school can have *focused curriculum, learning, and instruction*. While students take most of their course work in the small school they have chosen, housing the small schools together in one large building allows the students to *easily access courses being taught in the other schools*.

The results are heartening. Attendance, achievement, graduation rates, and behavior have improved dramatically. In addition, teachers report that Wyandotte is a far more satisfying, rewarding place to work than it used to be.





El Puente Academy of Peace and Justice

El Puente Academy of Peace and Justice, a small public school located in a very low-income area of

New York City, is a success story on many levels. El Puente was one of several *small schools created by educators and community groups when the district wisely offered this opportunity to people throughout the city*. As with Wyandotte, the involvement of teachers and community members was key to designing a school that works. It is also important to note that in this case the school district invited and facilitated the creation of small schools, resulting in several strong small schools within the district including El Puente.

El Puente serves a couple hundred high school students in a building that formerly was a church. The school *shares facilities with social service staff who help students and families* with a range of issues, including medical concerns, counseling, and teaching people to read. One of the best ways to make small schools no more expensive than massive ones is to share facilities with other organizations. Moreover, shared facilities can respond to a chronic concern of

educators—that they need help! In shared facilities like El Puente, educators can concentrate on helping young people learn.

With assistance from the school's faculty, El Puente's students frequently *combine classroom work with community service*. For example, they helped create a coalition of African American, Hispanic, and Chasidic Jewish people to block an incinerator that the city was going to put in their already badly polluted neighborhood. Also, students studying advanced mathematics are developing a skateboard park that will be located underneath a nearby bridge. When students give back to the community it creates strong connections between the school and community, which can create a two-way street of giving.



One of the best ways to make small schools no more expensive than massive ones is to share facilities with other organizations.

By getting students out into the community to learn, and by *making maximum use of resources outside the building*, El Puente can also offer students a broad and deep curriculum rooted in hands-on experience. This approach also *maximizes tax dollars* in many

cases. Out of necessity, a small school is more likely to make use of the public library, community recreation facilities, museums, zoos, and other publicly funded or subsidized resources, instead of trying to recreate these opportunities on the school campus.

El Puente's results are encouraging. More than 90% of the students who enter El Puente as 9th graders graduate four years later (in an area where large high schools have graduation rates of about 50%). And although El Puente faculty resist the idea that their school should be judged only on test scores, their students are doing very well on the challenging New York State Regents Exams.

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CREATIVE RURAL SOLUTIONS

Small rural high schools face unique challenges. In many states, rural schools face declining enrollments, geographic isolation, students spread thinly over large geographic areas, and economic and regulatory pressure to consolidate with neighboring schools and districts. In the face of these pressures, rural school districts need to be especially creative to keep their small schools. Research tells us that these efforts are worth it. Rural students, just like their urban and suburban counterparts, do better in small schools (Howley, 2000; Raywid, 1999).

Creative solutions include rethinking the entire design of a high school and making the most of the community and of technological opportunities. One of the nation's most noted small schools is in a rural area 60 miles southeast of Minneapolis: **Minnesota New Country School (MNCS)**. This secondary charter school enrolls about 125 students, grades 7-12. It is run as a co-op, with the faculty "owning" the school, and setting their own salaries and working conditions. Each school year starts with a family/student/advisor conference. The conference helps students develop a plan for how they

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will make progress toward graduation, which is based entirely on demonstration of skill and knowledge. There are no grades or bells at MNCS. Each student has a workstation with a computer, and the opportunity to decorate the station with pictures of friends and family.

12 Students work individually or in small groups on projects that help them achieve the required mastery. Faculty members see themselves as facilitators and coaches, moving from student to student throughout the day. Every six weeks the school has a presentation night, during which students share information they've learned. Some students have been hired by businesses to create Web sites. But learning at MNCS is not confined to what's available by computer.

Students are regularly out in the community, doing research, and performing service. One project that attracted national attention involved students who had discovered some frogs that did not have four legs. The students convinced the Minnesota legislature to allocate thousands of dollars to study the problem.

MNCS uses multiple measures to assess student progress. They regularly reflect improvements in achievement, as well as very strong attendance and a high graduation rate.

The Bill and Melinda Gates Foundation has given MNCS \$4 million to help replicate the school.

Creative solutions also involve maximizing scarce resources. In Northfield, another rural southeast Minnesota community, the community, city, school district, senior citizens center, and war on poverty agencies all came together to produce a 50,000 square foot state of the art facility that serves residents, virtually from birth to death. The Northfield Community Center includes a vast array of services for families, children, teenagers and seniors, as well as a small public high school. The high school students located there are able to interview seniors to supplement history research and help with the Head Start Center, both of which are just a few steps from their classrooms. Charlie Kyte, former Northfield superintendent, now director of the Minnesota Association of School Administrators, calls the community center "one of the most rewarding projects I've ever worked on."

SCHOOLS WITHIN A SUBURBAN SCHOOL

Although it had nothing like Wyandotte's problems, a Texas suburban community used some of the same ideas to produce improvements. Seven years ago, South Grand Prairie High School, outside Dallas, enrolled more than 2000 students in a typical, above the national average suburban high school. The faculty and administration decided they were not satisfied. Today the building has been divided into five smaller schools, from which students select. Once again, each school has a theme such as Communications, Creative and Performing Arts, and Business and Computer Technology.

The changes have produced progress. Many more students are taking Advanced Placement courses than before, and the already above average graduation rate has improved. South Grand Prairie is a marvelous example of a faculty that did not face heavy pressure to change because of low student performance, but did so anyway because they wanted all students to move closer to their potential.

Implications for Local Decisionmakers

The following are some issues local decisionmakers need to consider:

- 1. School boards and administrators interested in creating smaller learning communities must understand the research, and make a compelling case for a different approach based on that research.*

The notion that “bigger is better” continues to drive facility decisions in most school districts, despite considerable and mounting evidence that small schools with certain characteristics can be far more effective in educating students. There is a widespread belief among voters that large schools are more cost-effective and that the wide variety of course offerings available in larger high schools is necessary for student success in college and in life. Again, the research tells us a different story (Raywid, 1999).

The notion that “bigger is better” continues to drive facility decisions in most school districts, despite considerable and mounting evidence that small schools with certain characteristics can be far more effective in educating students.

2. *School boards and administrators must design and provide leadership for a process or mechanism that encourages the creation of such schools.*

As discussed in an earlier section, a small school is more likely to be successful if administrators, faculty, and students are all committed to a common set of goals and a distinctive educational approach to attain those goals. Creation of viable new small schools with a shared vision and a distinctive educational approach will not just happen. New York City, Boston, and Chicago each have created a request for proposals process inviting educators and community groups to design new, potentially more effective schools.

3. *Administrators must be genuinely open to real parent and community involvement in the design and operation of schools.*

Inclusion is an important part of such a process. Faculty, students, parents, and community members need to come together around common beliefs about the educational approach best suited to their students. They also need to feel confident that their opinions will be heard and the work they do to plan a “new” school will receive serious consideration. Many communities hold a wealth of untapped resources, physical and otherwise, that can contribute greatly to the educational process of students. A well-designed

process will lead to the identification and ultimately the commitment of these resources.



4. *School boards and administrators should implement a system of choice within their district that allows students and faculty to make choices between schools and educational approaches.*

One advantage of a small school is that agreement on goals and a distinctive educational approach is far more likely to occur when fewer people are involved. It is also far more likely to occur if all involved actively make a choice to be part of the school. The creation of small schools is also more politically feasible if parents and students can make choices about whether and how to be involved.

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5. *Administrators need to develop a process for evaluating a variety of facilities options on a routine basis.*

Examples from across the country provide ample evidence of the wide variety of approaches that emerge when schools districts and communities engage in creative problem solving together. Most of these schools are unique to the community and circumstances from which they emerged.

6. *School boards and administrators should consider all options available including charter schools, contract public schools, and other alternative forms of public schools.*

In some communities charter and contract schools have been an important mechanism for the creation of small school alternatives in a district.

Implications for State-Level Decisionmakers

State policies can both implicitly or explicitly support the notion that “bigger is better” as well. Funding for school facilities is a complex mix of state and local resources, rules and regulations. Funding approaches for schools and the facilities that house them differ considerably from state to state, with some states taking a greater fiscal responsibility and others playing a greater regulatory role.

Each state needs to take a careful look at the incentives created by both state funding and regulatory policies relating to schools and facilities. These incentives may be leading districts to design and build large schools despite research about school size.

The following is a list of questions that might be included in such a review:

1. Do policies or practice encourage districts to build large facilities housing one school?

Most states have guidelines or rules that districts must follow when building or renovating facilities. Some states must approve facility plans before bonds can be issued. State requirements often include square footage requirements for classrooms, laboratory space, and shared space, etc. In some cases, these regulations may result in larger schools, and they may not be sufficiently flexible to allow creative solutions involving shared physical space with other government or non-government organizations.

Some states, such as Minnesota, have special grants for school districts that cooperate on one larger, shared facility instead of two or more smaller facilities in each district. These policies are often designed to push sparsely populated school districts to consolidate. Other states require smaller districts to merge, which can result in the creation of larger schools. These policies are not supported by research, which shows that students in smaller schools do better, even in rural areas (Howley, 2000).

Some state agencies provide school districts with model school building designs or design principles in order assist them in their thinking. It is important that these design principles reflect the research about

school size. If models are provided, it is key that a variety of models be shared, including shared facilities, stand alone small schools, and a number of distinctive schools sharing one building.

2. Do general operation funding formulas for students (per pupil) encourage the creation of larger schools?

States vary considerably, again, in how money is allocated to schools and districts for general operation. Most provide some per pupil funding that is a mixture of state and local resources. In addition, many states have funding that is designed for specific purposes, in many cases, but not all, these funds are based on the number of students served (perhaps in a special category such as low income). Many incentives and disincentives are purposefully created through funding formulas. No doubt some of these have an impact on school size.

3. Do policies penalize leasing arrangements?

The ability to lease space provides the added flexibility that may be necessary to create an innovative small school, especially one that shares space with others.



4. *Does your state have a charter school law? Does that law address the unique facility needs of charter schools? Does the charter law in the state provide sufficient opportunities for this form of small schools to thrive?*



In states that allow for the creation of charter schools, many small school options have been created. Most charter schools are small in size and many include other elements of successful schools such as a distinctive educational approach, parent and community partnerships and involvement by choice.

Since charter schools do not have a traditional tax base or bonding authority, their ability to raise funds for facilities is extremely limited. Some states, such as Minnesota, recognize this and provide additional financial resources to help these schools handle facility costs.

Some state charter laws include restrictions that make it difficult for charter schools to get started. While some regulation of charter schools is desirable and appropriate, certain restrictions, such as limiting the overall number of schools in a state, or limiting sponsorship to one entity, may be keeping strong, effective small schools from being opened.

5. *Are there state regulations regarding the use of public funds that make it difficult for schools and other government or non-governmental agencies to work together on smaller facilities?*

Some states have laws regarding intermingling of public funds, for example, that make it difficult for a city and school district to work together on a facility.

6. *Are state curriculum requirements or standards flexible enough to allow small schools to make creative use of community, business, and other resources to educate students?*



Collaboration in many forms is an important way that small schools can offer students experiences in a wide range of curriculum areas. For example, a small school might be co-located with a science museum where the students use museum resources to learn biology, chemistry, or physics. State requirements need to be sufficiently flexible to allow students to learn required content in a variety of ways or settings.

A Few Final Words

Over the next few years, many states and the communities within them will discuss school buildings. They will ask, "How can we make the best possible use of tax dollars?" Research and experience show us, there are many benefits from creating small schools of choice either within large buildings, or in collaboration with various organizations. Doing things differently is never easy. But strong leadership, such as that described above, shows that the right things—small schools and shared facilities—are not just desirable; they're doable.

About the Authors

Joe Nathan is the Director and Debra Hare is the Associate Director of the Center for School Change at the Humphrey Institute of Public Affairs, University of Minnesota. The Center for School Change has helped people start innovative small schools throughout Minnesota and the nation and recently published *Smaller, Safer, Saner Successful Schools* with the National Clearinghouse for Educational Facilities. Joe Nathan is an award-winning teacher, administrator, and founder of a small K-12 school that has thrived for over 20 years. Debra Hare is the former administrator of the Minnesota Senate Education Committee.

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