School Size: Is Small Better?

by Larry Lashway

Fifty years ago, American children were being educated in about 117,000 school districts around the country, frequently in one-room schools. Today the number of districts has dropped below 16,000--almost an 87 percent decline during the same period that U.S. population increased by nearly 70 percent.

This consolidation, achieved at the cost of anguished protests by thousands of citizens served by small schools in small districts, was viewed by most professional educators as a triumph for enlightened schooling. Larger schools created economies of scale that drove per-student costs down, and at the same time gave students expanded access to specialized courses, adequate libraries, and extensive extracurricular programs.

Ironically, just as the consolidation movement was basking in its achievement, research was beginning to suggest that the public's nostalgia for small schools was not misplaced. In the past three decades, steadily mounting evidence indicates that children and adolescents do best in schools with well under 1,000 students, with some critics arguing that even 200 may be too many.

The new research suggests that small schools are more likely to nurture a sense of belonging and community, engaging active student involvement through a positive, humane, and caring atmosphere. Even the supposed economies of scale for large schools are being reexamined; some analysts have suggested that computing the cost per graduate rather than the cost per student gives an economic advantage to small schools.

For school leaders, this evidence raises some important policy questions and may provoke some serious thinking about the links between school organization and student success. Even when districts are not able to construct new buildings of the desired size, they may be able to repackage existing facilities to get some of the same results.

The works reviewed here consider school size issue from a number of angles.

Kathleen Cotton reviews the research evidence on school size, finding strong support for the advantages
Kenneth Stevenson and Leonard Pellicer review a number of studies and conclude that neither small nor large schools have a decisive advantage.

Mary Ann Raywid examines different ways that small schools can be nurtured within large buildings.

Deborah Meier draws on her experience as a small-school pioneer to describe the many benefits of small schools.

Veronica Anderson tells how one elementary school in Chicago has transformed itself from a large school to a cluster of small schools in the same building.


What are the benefits of small schools? Kathleen Cotton reviewed 103 studies that found some relationship between school size and some aspect of schooling; most found that small size had positive effects.

Cotton begins with a crucial question: How many students can be in a school before it is no longer considered small? Definitions are flexible, to say the least; some researchers put the upper limit at 200, others as high as 1,000. Based on her review of the literature, Cotton estimates that elementary schools are "right-sized" when they have 300 to 400 students, and when high schools have 400 to 800.

About half the studies reviewed by Cotton showed no significant differences in achievement between small and large schools. The other half found that achievement in small schools is superior. Cotton concludes that achievement in small schools is at least equal to, and possibly better than, achievement in large schools.

Cotton goes on to note results in a number of other areas, such as student attitudes (the evidence "overwhelmingly favors small schools over large ones"); social behavior ("small schools have lower incidences of negative social behavior"); extracurricular participation ("significantly higher in small schools"); attendance ("smaller schools have higher attendance rates than large ones"); dropouts ("the holding power of smaller schools is considerably greater than that of large schools"); interpersonal relations (more positive in small schools); and self-concept ("both personal and academic self-concept are more positive in smaller schools").
Why is smaller better? Cotton found that researchers gave a number of answers: Students in small schools are necessarily more involved in school activities; people in small schools come to know and care about each other more easily; parent involvement is higher; staff and students generally have a stronger sense of personal efficacy.


When new ideas challenge orthodox views or stir up troublesome policy questions, American educators are in the habit of turning to research for guidance. Unfortunately, as Kenneth Stevenson and Leonard Pellicer note in their discussion of school size, research is sometimes slow to provide answers. With school size, "the one clear thing from the research is that nothing is clear."

Both sides in the debate can find research support for their positions. Small schools usually lay claim to having a more intimate and caring climate, including more flexibility, individualized attention, and parental involvement. Large-school supporters can point to greater variety and depth in curricular and extracurricular experiences, as well as to the always-potent bottom line that shows lower per-student costs.

However, when it comes to student achievement, the picture is much murkier. Some studies have found small schools to have a slight advantage, some have found no difference, and some have concluded that large schools have a slight advantage. Some of these discrepancies may be the result of different research methods; for example, achievement can be measured by performance on standardized tests, state recognition of school excellence (or dysfunction), grade point averages or college entrance-exam scores. The authors suggest that small schools are beneficial to a point, but when they become too small the loss in curricular opportunities may outweigh the benefits of positive climate.

Given these uncertainties, Stevenson and Pellicer argue that we should be cautious about making broad policy decisions about school size. Until the evidence becomes clearer, we should continue to ask questions. What are the key indicators of school quality? Do certain categories of students do better in smaller schools or larger schools? How can large schools be made more personable and small schools more efficient?

The authors conclude that there is no optimum size for schools. "The real issue is what happens inside a school, not the number of students that are served by a school."
Knowing the benefits of small schools can be helpful when school officials meet with architects to plan the district's next school. But as Mary Ann Raywid points out, many districts are saddled with big buildings that will last well into the next century. In trying to make do with existing facilities, some of these districts have found that big spaces need not mean big schools. Instead, large buildings can be adapted to serve several schools under one roof.

In this review, Raywid takes a look at the growing movement to create "schools within schools." Although terminology varies from one district to another, she identifies four types of small schools.

A house plan assigns students and teachers to a smaller grouping within the larger school. Typically, students in each house take most of their courses together and share the same teachers. The house plan usually exists side by side with normal departmentalized structures, and curriculum is not affected.

A minischool adds curricular and instructional changes to the house plan, attempting to create its own identity and gain at least some separation and autonomy within the larger school. However, minischools remain under the authority of the larger school and share the same resources.

A school-within-a-school is officially recognized as a separate entity, running its own budget and planning its own programs. However, school safety and building operation remain vested with the principal of the larger school, and use of shared space (such as auditoriums) must be negotiated.

A small school is a school-within-a-school where the staff has been brought in from elsewhere in the district rather than from the larger school.

Raywid suggests that to fully live up to its promise, a small school must have three characteristics: separateness from the larger school (both physical and psychological), autonomy (ability to make its own decisions), and distinctiveness (something that sets it apart from other schools).

Possible disadvantages of small schools include increased costs, staff relationship problems (especially between teachers in small schools and those remaining in larger schools), the temptation to perpetuate ability grouping, and the creation of ambiguity in the principal's role.

In summary, Raywid concedes that small schools are not a magic bullet, but that school downsizing may be necessary so students can act as "engaged and committed agents in their own and others' education."
While many educators are willing to promote the cause of small schools, probably no one is better qualified to do so than Deborah Meier, founder and director of several small schools in New York City. Her work at East Harlem's Central Park East elementary and secondary schools established her not only as an advocate of small, autonomous schools, but as someone capable of bringing the vision to life through patient and skillful administration.

In this article, Meier succinctly summarizes the benefits that she has found in small schools:

1. Governance is simpler and more effective when the principal and faculty can meet around the same table.

2. Mutual respect is the norm because people know one another well enough to understand their skills and values.

3. Small schools allow teachers to simplify the organization rather than simplify the children. Instead of using a standardized approach to accommodate a complex bureaucracy, small schools can build organizational structures that recognize human individuality.

4. Safety is enhanced. "Small schools offer what metal detectors and guards cannot: the safety and security of being where you are known well by people who care for you."

5. Small schools are less likely to intimidate parents, who are then more likely to get involved.

6. Accountability is simplified. No statistical graphs or computer printouts are needed to know how students and teachers are doing; a walk around the school will give the principal firsthand insights.

7. In small schools, everyone belongs: "Every kid is known, every kid belongs to a community that includes adults." Those closely knit relationships allow teachers to pass on the "habits of heart and mind" that define an educated person, not just through lesson plans, but through the daily give-and-take of sustaining a community.
Much of the school-size debate has centered around high schools, which are typically larger and more anonymous than their elementary counterparts. But many elementary schools are also beginning to explore the advantages of smallness. In this issue of Catalyst, Veronica Anderson describes the practical realities of creating and operating a small elementary school in a large building.

Anderson sets the stage by describing the small-schools movement in Chicago, where some 125 small schools have been formed in recent years. The four principles guiding these efforts have been a self-selected faculty, complete or partial autonomy, a cohesive pedagogical approach, and an inclusive admissions policy.

Leadership of small schools can be complicated. Many are teacher-led, but state law requires that certified principals be attached to each school, giving rise to such unique arrangements as the "scatterplex" (several small schools that operate in different buildings but share a principal). In the scatterplex, principals must contend with the ambiguities of dealing with several different school cultures simultaneously.

Chicago small schools have followed different paths to achieve their goals. Anderson describes the transformation of Piccolo School from a traditional K-5 school with 49 teachers and 855 students to a cluster of a half-dozen small schools, each with its own special focus. The principal at Piccolo planted the seed for this change simply by asking teachers if they had ever wanted to start their own school. When several came forward with a well-crafted plan, the transformation was under way.

While the change process at Piccolo has run into occasional obstacles, all but three classrooms now house smaller communities: Connections features cross-age activities and an extra hour of instruction every day; Bright Beginnings is a primary-age school with a focus on reading; Unity-Umoja-Unidos is a dual-language K-4 program; Generation Global is built around a technological and multicultural curriculum; Great Expectations is a small primary school that will keep students with the same teacher for two years; and Helping Hands uses fine arts and multiple-intelligence theory to serve special education students.

Other schools have had rockier starts. Nia School, which uses an Afrocentric curriculum, began as a spinoff of a larger school, but eventually had to move to a separate location because its relations with the rest of the school became strained (mostly due to its recruiting of students).

While Anderson's account suggests that new small schools are often fragile, it is also clear that they have added diversity and vibrancy to a previously monolithic environment.
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The ERIC Clearinghouse on Rural Education and Small Schools assisted in the selection of publications reviewed in this issue.