"Smaller Schools Are Good"... It Depends!

"Small schools are good" may not be as true as it sounds! To encourage such a broad-based theme as small schools is certainly well intended, but an incredible number of factors also affect the success and true realization of this theme.

The question is, what is a "right-sized" school for your needs and how do you accomplish it?

Standards for Analysis

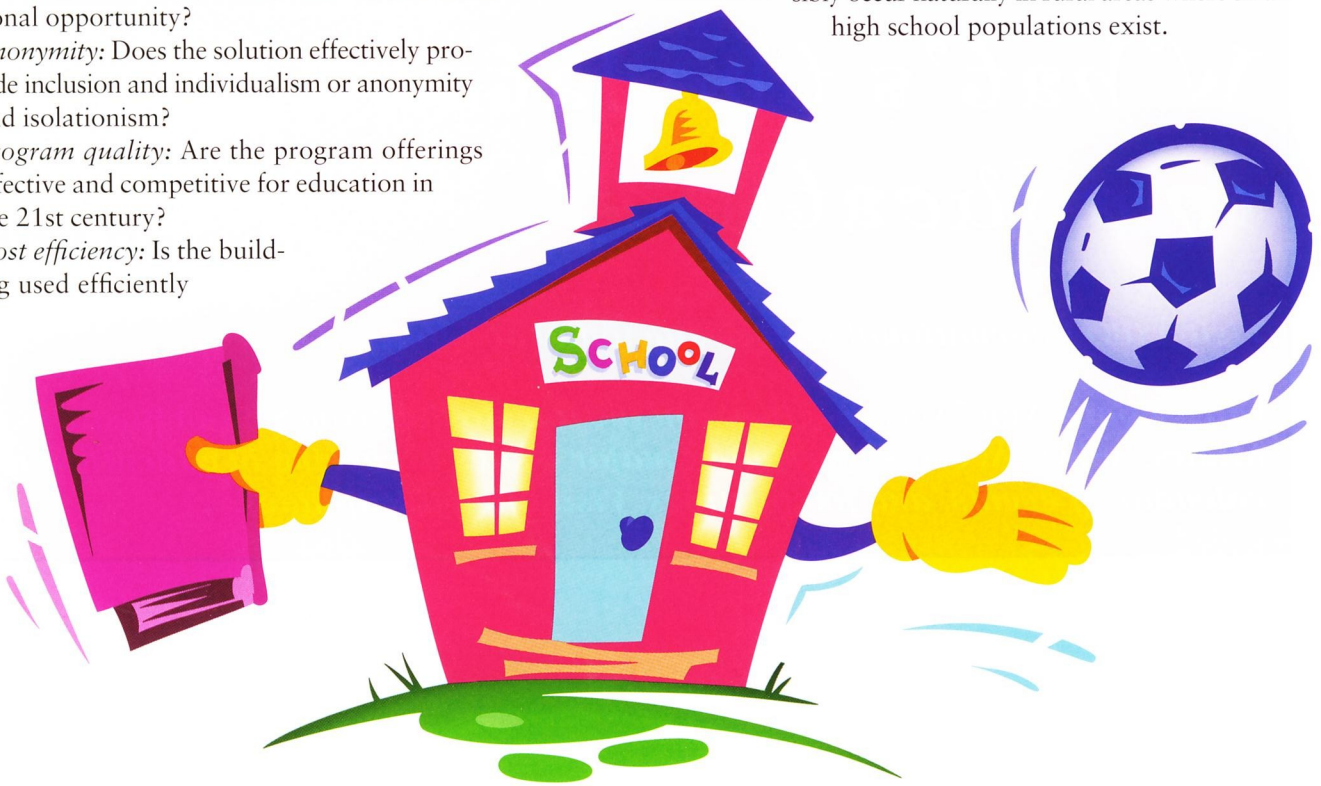
In reviewing high school size and making an informed decision, there is no absolutely perfect answer. The intention of this article is to give readers a chance to evaluate the ultimate right-sized school for their local circumstances. To help in the process, four factors will be used as a basis for analysis:

- *Equity:* Do the size and solution treat all students equally with regard to economics, culture, and educational opportunity?
- *Anonymity:* Does the solution effectively provide inclusion and individualism or anonymity and isolationism?
- *Program quality:* Are the program offerings effective and competitive for education in the 21st century?
- *Cost efficiency:* Is the building used efficiently with regard to space, square footage per child, and cost of construction?

Using the foregoing talking points, three high school sizes will be discussed: 400 students, 1,600 students, and 3,000 or more students. These numbers are intended to reflect a size range, not a specific quantity. Using more generic terms, they could be viewed as small, medium, and extra large, respectively.

400-Student "Private" School Model

Some emerging schools under the small-school profile are targeting about 400 students with approximately 100 students in each grade level (9th–12th grades). Some charter schools appear to be looking at this model, as well as select magnet alternative schools. They may be placed within large urban areas and suburban areas or may possibly occur naturally in rural areas where small high school populations exist.



By Franklin Hill

- A substantial variety of sports, clubs, and other after-school activities allows many more students to reach their individual maximum potential and stand out.
- Students can take leadership positions in clubs, organizations, and sports without having to be superstars.
- The building can be designed with properly distributed smaller group-use areas, such as commons, cafeterias, resource areas, and locker spaces, to produce the true small school in a larger school environment.

Program Quality. The midrange high school offers financial opportunities that may affect program quality.

- Its economy of scale allows for separate two- and three-dimensional art room programs rather than one generic multipurpose art room.
- Adequate scale allows differentiated science with particular emphasis on appropriate advanced-placement standards.

Cost Efficiency. A midrange school offers substantial cost-effectiveness benefits in facility design. This point is often overlooked when the number of students is emphasized without a collective look at curriculum, technology, and the building itself. Such issues may include:

- Is there adequate staff to meet varied achievement levels combined with affordable class sizes? In other words, are there enough honors English sections with an enrollment to justify cost-effective scheduling?
- A larger building is likely to be more efficient with regard to net-to-gross ratio—the quantity of hallway spaces and mechanical rooms in proportion to educational spaces. Very small buildings can be inefficient with regard to net-to-gross ratio and thus can cost more on a per-pupil basis.
- Typical analysis of schools with 1,600 students reveals a balanced demand for advanced-placement chemistry or honors physics to justify specialized spaces with cost-effective enrollments. In addition, qualified staff can be selected to teach these programs while also teaching regular classes.
- Larger spaces, such as gymnasiums and locker rooms, can be used more effectively throughout the school day, as well as for after-school use. Many smaller schools must "supersize" these spaces to meet extracurricular demands; thus, they are disproportionately sized for regular daytime use.
- Cafeteria and dining areas can also use economies of scale or options for distribution that can more effectively create schools within schools without expending valuable educational dollars on underused kitchens, support space, loading docks, and storage.

3,000 Plus–Student School Model

Some circumstances are pushing school districts to create high schools with over 3,000 students. They are often located outside of larger urban centers where multiethnic, lower-income, working citizens can afford to reside. Limited available expensive land makes "high-rise educational densities" the only affordable solution, increasing enrollment.

Equity. On a per-pupil construction basis, very large schools are often the most economical. Simple economies of scale can be applied to room use, scheduling efficiencies, and so forth.

- Many new immigrant populations are being pushed into this megaschool cost-efficiency situation. But, the population is usually balanced by a random selection of other students from throughout the community. Thus, with regard to equity within the district, the large school may be acceptable. However, when compared with smaller schools in neighboring communities, true educational excellence may not be comparable, and may thus be unequal.
- Tax equity may be less fair, as many low-income suburbs require higher bond revenues to afford similar educational provision. Highly appraised housing or the benefits of a large corporate tax base may be unavailable, thus the lower-income family in a modest residential community may pay a disproportionate percentage of income toward education or be required to vote "no" on election day to the overall detriment to all parties concerned.

Any enrollment requirement—if properly planned, designed, and balanced with curriculum, teachers, and staff—can prove to be educationally appropriate and very successful.

Anonymity. Some of the megaschools use the house concept (see 1,600-student model) as an attempt to subdivide a large population into smaller educational units. Each house may act as an individual high school—at least in concept. Breaking the school into segments often sounds good and looks good on the design drawings, but it may be operationally ineffective in very large schools. Issues to consider include:

- Has class enrollment actually been decreased to provide a manageable teacher-student ratio where learning occurs most directly—in the classroom?
- Whereas houses may focus on core curricular subjects, what about shared common areas? Sometimes anonymity reemerges when students leave the house and go to the commons, physical education areas, cafeteria, and library.
- Parking lots may have as many as 2,000 to 3,000 cars; there, again, the school takes on a large-city aspect.
- Are athletic events managed buildingwide, thus further defeating the intention of the school-within-a-school model?

Equity. Several issues can arise regarding equity with the "boutique" 400-student school model.

- Attendance may be based on "choice" but may actually have an undercurrent of elitism. Some parents may have political or financial influences that allow their children to attend the small, "private" school model rather than other students.
- In an attempt to maintain diversity, attendees may be selected in a fashion that may not occur naturally through a lottery method. This may promote a form of favoritism based purely on ethnicity, handicaps, or special-needs situations.
- Under certain circumstances, entire *families* become eligible to attend a select small school for all high school years. Some parents view this as winning the grand slam of student selection, while conversely depriving others in the district of equal access on a student-by-student basis.

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Anonymity. Viewing the student as an individual is emphasized more under this size profile. The principal may know every child by name, as well as the parents and family history, but . . .

- Is the school large enough to provide "enough mix" to stimulate challenging exchanges and differences of opinion without causing hurt feelings and broken friendships?
- Is the size adequate to reflect real life? Is there a point at which individual pampering is excessive and the true strength of an independent learner is untested under fire? What about athletics and extracurricular activities, which are also a part of learning but not always affordable in a small school?

Program Quality. Program quality is difficult to quantify but is often a function of teacher excellence, curriculum delivery, technology, and the learning environment. With a very small school, this combination of factors is complex to analyze.

- In some circumstances, a "brain drain" may occur wherein the best teachers with the most seniority can choose to participate in the small-school model and are thus unavailable to other schools that may also need their teaching excellence.
- Especially small class sizes may also appear in the small-school model because of scheduling, a factor that further enhances educational benefits but escalates the operational cost, possibly at the expense of other schools and pupils in the district.
- Selected learning spaces (e.g., art rooms and science labs) may become more generic to increase use. Thus, an advanced-placement chemistry lab may not be provided; instead, there might be only a general science lab that does not serve biology, chemistry, or physics well. Art may be curtailed to only one lab for both two- and three-dimensional activities, as well as electronic art.

Cost Efficiency. Cost efficiency for the small school has many issues to consider.

- Recently constructed very small schools have been built substantially over budget. One West Coast example was over three times the estimated cost, a factor "overlooked" because of the perceived positive intention and educational outcome. Yet, most traditional schools cannot afford this serious error without raising criticism.
- Scheduling in very small schools is often below 70% efficiency. Rooms may sit idle simply because there are not enough students to schedule into them. Art, technical education, and industrial arts are frequent high-cost examples. High construction costs, scheduling inefficiencies, and low staffing ratios can push small school operational costs higher on a per-pupil basis.
- Shared core areas may have a higher than normal per-pupil size. Examples include commons areas, kitchens, and theater and performing arts spaces. That is often why very small schools are expensive.

1,600-Student School Model

Many school districts appear to be centering on a 1,600-student high school model for either new or remodeled buildings. À la Goldilocks, 1,600 is not too small, not too large, but just right. Several factors give credence to the 1,600-student size as having some valuable attributes worth considering.

Equity. Factors to consider include:

- A 1,600-student school can be placed in a community catchment area of 4,000. A catchment area of this size can include different ethnic groups, economic conditions, and geographic divides, such as large arterial roads.
- Students can attend this sized school without a major districtwide busing program.
- The school is large enough to allow substantial participation in a variety of sports and a midrange level of competitiveness that can serve both the most athletic student and the student participating "just for the fun of it."

Anonymity. A properly postured house concept may be composed of four 400-student houses or minischools. Each house may be further reduced to four neighborhoods composed of 100 students each. In short, the 1,600-student high school can accomplish four boutique 400-student models. Factors may include:

- There are enough students to create diversity of friendships without anonymity.

Program Quality. A very large school has an opportunity to average program quality throughout the entire building.

- Some teachers will certainly be exceptional, whereas others will possibly be more average. But the student may receive an overall reasonable quality of education after completing the 4-year experience.
- Very large schools may operate at 90% efficiency: almost every room is used almost every hour. These efficiencies may not occur, however, if the houses are made small enough and individual libraries, commons areas, dining areas, and electives are distributed to each house—a strongly encouraged design concept.

Cost Efficiency. Simple economies of scale can be applied to room use, scheduling efficiencies, and so forth and can reduce the total cost per pupil.

Summary

I believe emphasis must be placed on the fact that any enrollment requirement—if properly planned, designed, and balanced with curriculum, teachers, and staff—can prove to be educationally appropriate and very successful. My concern is that at the very small and very large enrollment sizes, factors can be overlooked in favor of political correctness. At the smaller end, additional expense per student can be overlooked at the expense of other students in the district, whereas the very large schools do not usually provide human-scaled cafeterias, common areas, locker rooms, or student support spaces to create a "real" school-within-a-school concept.

The most important issue is to make *informed decisions* regarding the school size being contemplated. Thoroughly understand and properly evaluate the multiple and interrelated factors for learning success. Most importantly, explore your options, clearly understand the implications, and make decisions that are most appropriate in as many ways as possible for your local needs. ■

Franklin Hill of Bellevue, Washington, is a national educational consultant with experience in each of the issues discussed in this article. He is an educator trained in design with over 250 schools to his credit, including the Disney Celebration School, partnership schools with IBM, corporate learning facilities, and desegregation cases, as well as prestigious districts across the country. He is qualified in both education and design and was a school administrator and a vice president of an architectural firm before opening his own national firm in 1987.