## School Size: Research Based Conclusions

School size is a critical factor in determining educational outcomes. Research links small school size with higher levels of achievement and cost effectiveness. Small size also makes other school improvements more effective. Many urban systems have recently improved education for all students by breaking large schools into smaller units. Small schools have long been more common in rural areas, and when population is sparse, they sometimes need to be even smaller than would be appropriate in more densely populated areas. But the advantages of small schools can be undermined if they are under-funded or forced to organize and operate the way larger schools do. Moreover, the advantages of smallness can be used to justify schools that segregate students by income, race, or social background, denying all students essential educational opportunities, compromising constitutional rights, and diminishing social justice. But when well motivated and properly funded, small schools can provide strong education for rural students. What follows is what researchers have found about school size.

Small Schools Get Better Academic Results. Student achievement is higher in small schools, ${ }^{1}$ and even higher in small schools operating in small districts. ${ }^{2}$ Small schools also have much lower dropout rates ${ }^{3}$ and more graduates who go to college. ${ }^{4}$ Students from smaller schools do as well or better in college than those from larger schools. ${ }^{5}$ Small schools are particularly effective for students from low-income families and for students of color, helping to reduce the achievement gap. ${ }^{6}$

Small Schools Promote Better Student Behavior. A 1999 U.S. Department of Education study found that schools with more than 1,000 students had far higher rates of violent student behavior than schools with fewer than 300 students, and teachers and students in small schools were far less likely to be victims of crime. ${ }^{7}$ Small schools allow teachers to focus more on teaching and less on discipline.

Small Schools Have Higher Rates of Participation. Students who participate in activities at school have higher achievement, are less likely to drop out, have higher self-esteem, attend school more regularly, and have fewer behavior problems. ${ }^{8}$ Small schools create more opportunities for participation, so a larger percentage of students participate and they participate in more kinds of activities. ${ }^{9}$ For example, if 15 students are needed for a team, six small high schools will create 90 opportunities, if adequately funded to do so, while one large high school serving as many students would create only fifteen opportunities. And because small schools need a large percentage of students to fill each activity, they engage a broader cross-section of students, helping reduce social and racial isolation. ${ }^{10}$ Small schools also have higher levels of parental involvement, and parental involvement is a critical factor in student success. ${ }^{11}$ Parents can be most involved if all their children attend one K-12 school instead of going to separate elementary, middle and high schools. In sparsely settled areas, a large school would have to cover a very large area, and travel time alone discourages many parents and students from participating in activities.

Small Schools Are More Cost-Effective. Making schools bigger does not produce significant cost savings. ${ }^{12}$ School consolidation often increases transportation costs, offsetting any savings. Increased behavior problems and dropout rates add "hidden" costs. Because small schools graduate a higher percentage of students, their cost per graduate is comparable to larger schools even if cost per enrolled student is not. ${ }^{13}$ In addition, consolidation causes budget problems if state funding is tied to attendance
rates, because attendance rates decrease as school size and travel distance increase. ${ }^{14}$ And a study of school designs indicates new small schools can be built at a cost per student similar to large schools. ${ }^{15}$.

Small Schools Strengthen Local Economies. Rural communities with schools seem to fare better economically than similar communities without schools. One study found that rural communities with schools had higher rates of growth, higher housing values, a lower percentage of households receiving public assistance, more professional workers and entrepreneurs, and higher per capita self-employment income than rural communities that had lost their schools. ${ }^{16}$ Another study confirmed the importance of schools in retaining population. ${ }^{17}$ Very little of the money spent busing students to larger schools benefits the local economy, as it might if state and local policy were to put that money to use by adequately funding small schools. Finally, because high school dropouts earn less than high school graduates and are far more likely to be unemployed, to depend on public assistance, and to end up in prison, ${ }^{18}$ small schools help increase the number of economically productive adults and cut government costs.

Why do Small Schools Work So Well? In a small school, each student can be known and valued. No one gets lost in the crowd. All the adults in the school can know all the students. Small schools can be more flexible in response to individual students and their circumstances. Students have better attitudes when the school is personalized, when all can take part in activities, and when everyone knows their actions will be noticed. ${ }^{19}$

How Small Is Small? Best academic outcomes and cost-effectiveness are seen in rural schools, including high schools, with well under 75 students per grade as an upper limit, not an optimum size ${ }^{20}$. In rural areas, where population is sparse and students are drawn from a large geographic region, schools may need to be much smaller. A school is too big if it puts students at risk because it discourages parent involvement, prevents student participation, requires lengthy bus rides or interferes with each student being known on a personal basis.

Can a Small High School Offer a Full Curriculum? Yes. Small schools are able to concentrate on core curriculum and respond to individual student interests and needs. In addition, they can access a wide curriculum through interactive distance learning. In the most effective distance learning models, several schools collaborate to establish an interactive television network that allows a teacher in any of the schools to teach students in other schools on the network. Teaching is in real time, student-teacher ratio is equivalent to a regular classroom, and students and teachers interact as if they were located in the same room. Schools can share specially certified teachers for low-demand courses. For example, one school may have a Spanish teacher and another a physics teacher; each teacher can teach a class over the network and provide course access to students in all the networked schools. Interactive distance learning networks are less expensive to build and operate than a new large school; they can be run by participating schools; they can offer high-quality instruction; they engage students with technology; and they preserve the advantages of small schools ${ }^{21}$. Small size also makes it easier for teachers to organize hands-on learning opportunities that engage students in rigorous academic work that has meaningful consequences in the local rural community. ${ }^{22}$

## Endnotes

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