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**Local Success
Stories**

**REDUCING
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SIZE**



U.S. Department of Education

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LESSONS FROM EARLY IMPLEMENTATION

When a record 53.2 million students returned to school this fall, students and their teachers in the early grades began to benefit from a growing national effort to lower class size. This year, five States — Iowa, Maryland, Minnesota, New York, and Wisconsin — enacted new initiatives or significantly expanded existing initiatives to lower class size. As a result, some 20 States now have class size reduction initiatives in place. And in July, every State received its share of \$1.2 billion provided by the U.S. Department of Education's new Class Size Reduction Program, an initiative to help communities hire 100,000 qualified teachers over seven years in order to reduce class size in grades one through three to a national average of 18 students.

These funds are already being put to good use. Based on preliminary data from nearly 46 percent of the nation's school districts, the Department of Education estimates that:

- More than 29,000 teachers have been hired with FY 1999 Class Size Reduction Program funds.
- Approximately 1.7 million children are expected to benefit directly in the 1999-2000 school year by being educated in smaller classes.
- School districts are concentrating this first installment of funds so that it makes a big difference for some students immediately. Average class size in the early grades has been reduced by more than five students, from approximately 23 to 18, in the schools where the vast majority of teachers hired with these funds teach.
 - 42% of the teachers are teaching in first grade. In their schools, average class size fell from approximately 23 students to approximately 17 students.
 - 23% of the teachers are teaching in second grade. In their schools, average class size fell from 23 students to less than 18 students.
 - 24% of the teachers are teaching in third grade. In their schools, average class size fell from more than 23 students to just over 18 students.
- In order to strengthen teacher quality, school districts are using approximately 8% of the funds they received to support professional development for teachers.

NEW STATE CLASS SIZE REDUCTION INITIATIVES

Some 20 States have their own initiatives to lower class size. This year, at least five States joined California, Indiana, Washington and other States to invest their own resources in bringing the benefits of smaller classes to their students. These new State initiatives are:

- *Iowa* created the Class Size/Early Intervention Program to reduce class size in kindergarten through third grade to 17 students for basic skills instruction. The State will phase in the program over four years, allocating \$10 million in the first year, \$20 million in the second, \$30 million in the third, and at least \$30 million in the fourth.
- *Maryland* established the Maryland Learning Success Program, an initiative to reduce class size in grades one and two, particularly for reading, to 20 students. The program, which will be phased in over four years, requires school systems to set specific performance targets and establishes a goal of hiring approximately 1,000 teachers, while reserving additional funds for professional development, supplies, and other implementation costs.
- *Minnesota* significantly expanded its class size reduction program in 1999, adding more than \$100 million over two years to current funding levels of \$90 million annually. The State's program, which began in 1995, strives to reduce class size to 17 students in kindergarten through sixth grade, but requires districts to first target kindergarten and first grade.
- The State of *New York* began implementing its class size reduction program, which targets funds for reducing average class size in kindergarten through third grade to 20 students. Funded at \$75 million this year, the program will be phased in over three years, with second-year funding expected at \$150 million and third-year funding at \$225 million. Funds may be used for teacher salaries and benefits, as well as for one-time start-up costs for each new classroom; however, funds may not be used for new buildings or professional development. The State targets funds to school districts according to enrollment.
- *Wisconsin* significantly expanded SAGE, its class size reduction program, from the current 78 schools to an additional 400 to 500 schools. These schools, which typically have high numbers of low-income students, participate in SAGE on a voluntary basis, signing contracts to reduce class size in kindergarten through third grade to 15 students. To support this expansion, SAGE funding rose from \$18 million for 1999 to \$58 million for 2000.

THE CLASS SIZE REDUCTION PROGRAM: HOW IT WORKS

The Department of Education's Class Size Reduction Program was enacted a year ago as part of the 1999 Department of Education Appropriations Act. In that bipartisan legislation, Congress made a \$1.2 billion down payment on President Clinton's proposal to help local communities hire 100,000 qualified teachers over seven years, in order to reduce class size in grades one through three to a national average of 18 students. This year, the President sent legislation to Congress to authorize the full seven-year effort, and his budget proposal asks Congress to provide an additional \$200 million in funding, raising the total to \$1.4 billion for the 2000-01 school year to help local communities hire an additional 8,000 teachers, for a total of 37,000 teachers.

Program funds are distributed to States by formula. All 50 States, the District of Columbia, and Puerto Rico participate in the program. Because needs are greatest in the poorest communities, and because research shows that smaller classes provide the greatest benefits to the most disadvantaged students, the program targets funds to high-poverty communities. Each State distributes 80% of the funds to school districts based on the number of poor children in each district. The remaining 20% is distributed on the basis of total enrollment.

Class Size Reduction funds go directly to our nation's classrooms. Every dollar appropriated by Congress is allocated to local school districts. No funds may be used for Federal or State administrative costs, and within school districts, no more than 3% of the funds may be used for administrative costs. Because small classes make the greatest difference when teachers are well-trained, school districts may use up to 15% of the funds for providing professional development to both newly hired and experienced teachers in the early grades. The remainder of the funds are for recruiting, hiring, and training certified regular and special education teachers and teachers of children with special needs, including teachers certified through State and local alternative routes.

Average class size varies considerably from district to district. Although the Department of Education estimates that average class size nationwide in grades one through three is just above 22 students — and often considerably higher in large districts and high-poverty schools — there are districts where class size is already at or below 18 students. The Class Size Reduction Program provides flexibility to accommodate these school districts, as well as the growing number of school districts that will reach a class size target of 18 students as a result of the program. Districts that have reduced class size in the early grades to 18 students may use program funds to make further reductions in class size in those grades, to reduce class size in other grades, or to take other steps to improve the quality of teaching.

Currently, the program requires small, typically rural school districts that do not receive enough funds under the formula to hire an additional teacher and that have not reduced class size in the early grades to 18 students to form consortia with other school districts in order to receive funds. While a consortium is often an effective and efficient way for small districts to share resources and achieve common objectives (for example, providing professional development), sharing a teacher among school districts is almost never a workable strategy for lowering class size. Consequently, the Department of Education has waived the consortium requirement for each of the 40 States that sought a waiver. School districts in these States may hire additional teachers by combining program funds with local, State or other Federal funds, or may use program funds to provide professional development for their existing teachers.

RESEARCH UPDATE: GROWING EVIDENCE THAT SMALLER CLASSES MAKE A DIFFERENCE

In March 1999, the Department of Education released *Reducing Class Size: What Do We Know?* (available on the Internet at <http://ed.gov/pubs/ReducingClass>). The report summarized substantial research showing that class size reduction in the early grades leads to higher student achievement in reading and math when class size is reduced to 15-20 students. The benefits of smaller classes are greatest for disadvantaged and minority students. Additional studies, reported recently, have confirmed and expanded on these findings:

Smaller Classes Lead to Lasting Academic Improvements. Several new analyses of the Tennessee Class Size Reduction program show that reducing class size has both immediate and long-term benefits. The benefits of participating in small classes increase from year to year, both in the early grades when classes were small, and in subsequent years when students were placed in larger classes. At the end of fifth grade, students who were in small classes in grades one through three were about half a school year (5 months) ahead of students from larger classes, in all subjects – reading, language arts, math and science. Further, follow-up studies of the same students show that high school students who were in small classes in grades one through three beginning in 1985 were less likely to be held back a year or be suspended compared with their peers from larger classes. Students from small classes were found to be making better grades in high school and taking more advanced courses.^{1, 2, 3}

Teachers Benefit Too. Research on Wisconsin's class size reduction effort (SAGE) show that both teachers and students benefit from smaller classes. Teachers spend more time on instruction and less time on discipline problems. Teachers say they know their students better, know where each child is in the learning process and can provide more individualized instruction. All of these improvements in teaching are matched by increased student achievement, making teaching more rewarding.⁴

Beyond Academics. The benefits of reduced class size in the early grades go beyond the well-documented improvements in reading, mathematics and science. Smaller classes also lead to better identification of students who need special help, increased student participation and engagement, improved behavior, and reduced retention in grade. In a recent book, Professor Charles Achilles concluded that the outcomes associated with small classes are the foundation of safe schools: improved student behavior and human relations skills; increased participation in schooling and school-sanctioned events; increased sense of community in small classes; and generally improved school climate where students, teachers and parents feel more comfortable.¹

- 1 Achilles, Charles (1999). *Let's Put Kids First, Finally: Getting Class Size Right*. Thousand Oaks, CA: Corwin Press, Inc.
- 2 Finn, Jeremy D. and Charles M. Achilles "Tennessee's Class Size Study: Findings, Implications, Misconceptions pp 97-109 in *Educational Evaluation and Policy Analysis (EEPA), SPECIAL ISSUE – Class Size: Issues and New Findings*, volume 21, No. 2 (Summer 1999). Washington, D.C.: American Educational Research Association.
- 3 Pate-Bain, Helen; B. De Wayne Fulton, Jayne Boyd-Zaharias. *Effects of Class Size Reduction in the Early Grades (K-3) on High School Performance*. Nashville: HEROS, Inc. 1999
- 4 Molnar, Alex et. Al. "Evaluating the SAGE Program: A Pilot Program in Targeted Pupil-Teacher reduction in Wisconsin." Pp. 165-177 in *Educational Evaluation and Policy Analysis (EEPA), SPECIAL ISSUE – Class Size: Issues and New Findings*, volume 21, No.2 (Summer 1999). Washington, D.C.: American Educational Research Association.

IMPLEMENTATION CHALLENGES AND OPPORTUNITIES

The benefits of smaller classes with qualified teachers are clear. Available research, including the Tennessee STAR study, the Wisconsin SAGE program, and an evaluation of California's class size reduction initiative, show that small classes with qualified teachers lead to higher student achievement, more individualized attention for students, and fewer classroom disruptions. Small classes in the early grades give students a strong foundation in basic math and reading skills. They also provide long term payoffs, including fewer students retained in their grade, higher student achievement each year even after students are placed in larger classes, and better student preparation for college.

Although it is important to lower class size, it is not easy. Many schools lack extra classrooms for smaller classes. As the nation struggles to recruit and hire nearly two million teachers over the next decade, many communities — especially high-poverty urban and rural school districts — are already experiencing difficulties in recruiting and retaining qualified teachers. And State and local policymakers face the task of ensuring that lowering class size is an integral part of comprehensive reforms aimed at helping all children learn to high academic standards.

Fortunately, the Class Size Reduction Program provides school districts with the resources and flexibility they need to address these challenges. It also allows districts to use program funds to help meet local education priorities, such as improving early reading achievement, turning around low performing schools, ending social promotion the right way, or targeting help to the neediest students and schools. Indeed, although schools are only in the first months of program implementation, school districts across the country are already demonstrating how class size reduction can be an integral part of their efforts to boost student achievement and promote quality teaching.

Recruiting qualified teachers

While disadvantaged students are most likely to benefit from small classes, high-poverty urban and rural school districts face the most severe challenges in recruiting and retaining qualified teachers. For example, the National Commission on Teaching and America's Future found that students in schools with the highest concentrations of poverty — those who often need the most help from the best teachers — are most likely to be taught by teachers who are not fully qualified.

The Class Size Reduction Program enables school districts to address their need for fully qualified teachers. According to a recent report by the Council of Great City Schools, which examined how 40 big city school districts are implementing the program, almost 90% of the 3,558 new teachers hired under the program have full certification. Only three school districts reported employing instructors with emergency credentials.

Philadelphia is using Federal class size reduction funds to address the related challenges of teacher recruitment, support for new teachers, and class size reduction. In addition to hiring 34 fully certified teachers, the city has hired 254 "Literacy Interns," college graduates who lack teacher certification. Many are mid-career adults making the transition to teaching. After intensive summer training in balanced approaches to literacy instruction, these interns now work in self-contained, reduced-size classrooms under the supervision of fully certified teachers, delivering research-based literacy instruction in kindergarten and first grade. They are also enrolled in alternative teacher education programs that lead to full certification. Once certified, the former Literacy Interns will teach in small classes on their own. Throughout their initial years in the classroom, the Literacy Interns receive an extraordinary amount of mentoring and support, and their students experience the benefits of smaller classes immediately. In sum, Philadelphia's unique strategy recruits capable people into teaching and ensures that they become fully qualified.

Using Class Size Reduction Program funds, the *Jackson Public Schools* in Mississippi hired 20 additional teachers and placed them in 20 low-performing elementary schools. Many of these teachers had previously retired or had left the district, but were recruited to return because of the opportunity to teach in smaller classes and to work closely with other teachers. These experienced teachers are also serving as mentors for less experienced teachers, and they often team up with beginning teachers to provide regular support and supervision.

Philadelphia and Jackson show how lowering class size can work hand in hand with efforts to recruit and prepare qualified teachers. However, in some circumstances, class size reduction can have unintended consequences. For example, *California* launched a major statewide class size reduction program in 1996, investing approximately \$1.5 billion annually over the last three years. The first evaluation report showed that class size reduction led to increased student achievement. But the initiative has also led many experienced teachers to leave jobs in urban school districts for teaching jobs in more attractive suburban systems. Further, it has caused the widespread use of teachers with emergency credentials, particularly in high-poverty urban and rural districts.

The Clinton Administration monitored California's experiences carefully from the outset and designed the Class Size Reduction Program to avoid such unintended consequences. For example, while California provides equal funding to all school districts regardless of need, the Federal program targets funds to high-poverty school districts, drawing teachers into these districts instead of creating opportunities for teachers in these districts to leave. Moreover, while California school districts receive class size reduction funding only if they immediately meet a strict limit of 20 students *per class*, the Federal program supports a more gradual approach, allowing school districts over time to reach the more flexible goal of reducing class size to 18 students *on average*. Furthermore, this gradual approach gives school districts more time to recruit and hire qualified teachers. Finally, unlike California's program, the Federal program invests in teacher quality by providing funds for teacher recruitment, preparation, and professional development.

The Department of Education has worked closely with California education officials to ensure that Federal class size reduction funds alleviate rather than exacerbate the difficulties faced by many school districts. The Department provided California school districts with a waiver allowing them to use funds under this program to improve teacher quality or reduce class size in other grade levels, once they have met the State class size target of 20 in the early grades. Further, the Department required school districts with uncertified teachers in the early grades to use a portion of these funds to help teachers complete certification requirements.

The *Long Beach Unified School District* is using its Federal class size reduction funds to hire 15 new teachers to reduce class size in ninth grade and to strengthen the quality of teachers they have already hired to reduce class size in the early grades. Federal funds support five internship programs to prepare and certify teachers currently holding emergency credentials. These programs provide participants with support from experienced teachers, who meet regularly with uncertified teachers and give feedback after observing them at work. Participants in the internship also take courses and provide 30 hours of instruction in support of the State's early reading initiative while under the observation of a mentor teacher.

Improving early reading achievement

Students who are proficient readers by the end of third grade are more likely to succeed academically and graduate from high school. Reducing class size in grades one through three, especially when coupled with research-based approaches to reading instruction, is an effective way to improve reading achievement. A number of school districts throughout the country are using funds from the Class Size Reduction Program to support this strategy.

In Maryland, for example, *Montgomery County* is combining Federal class size reduction funds with State and local funds to support its Early Reading Initiative in every first and second grade class in the county. This initiative cuts class size to 15 students for a 90-minute period each day devoted to intensive reading and writing instruction. During this time, teachers use a variety of techniques and activities that create a comprehensive literacy program to help students become proficient in all aspects of reading and writing. Teachers receive two weeks of intensive instruction during the summer and participate in ongoing professional development throughout the school year.

In the State of Washington, *Tacoma* has targeted its \$1 million in Federal class size reduction funds to support its "Great Start" program, aimed at improving reading instruction and achievement in the early grades. Combining Federal funds with State and local funds, Tacoma has reduced first grade class size to 15 or 16 students in one-third of its elementary schools. As a result, 850 students in 57 first-grade classrooms are being taught in smaller classes. Their teachers receive training on how to teach reading, and they continue to improve their effectiveness by meeting regularly to discuss which teaching practices work best for their students.

Strengthening accountability and turning around low-performing schools

A growing number of States and school districts have strengthened accountability by demanding educational progress from their schools. Title I requires every State and school district to identify low-performing Title I schools and to help them develop and implement improvement plans. Several school districts, including Atlanta, Birmingham, and New Orleans, are incorporating class size reduction into their approaches to turning around low performing schools. In Ohio, the *Columbus Public Schools* have hired 58 fully certified teachers with its Federal class size reduction funds, placing them in 13 high-poverty, low-performing schools. In these schools, the program has reduced class size in grades one through three from 25 students to approximately 15 students. These schools, as well as others in Columbus, are implementing proven models of reading instruction, such as Success for All, and they receive the professional development and support needed for effective implementation of these models.

Addressing space limitations

In many schools and school districts, space for additional teachers and smaller classes is already available. In others, space is being "created" by using libraries, computer labs, or other facilities. Ultimately, school districts will need additional classrooms for the teachers hired to reduce class size. To help address this long-term need, President Clinton has proposed a \$25 billion initiative to help State and local governments repair or replace 6,000 overcrowded and unsafe schools by providing tax credits to subsidize the cost of school construction bonds.

Until schools can expand their facilities, the Class Size Reduction Program allows school districts lacking space to explore other ways of effectively providing the benefits of small classes to students. Schools have tried a number of approaches, including:

- having two certified teachers team teach in a single classroom either for part of the school day or for the entire school day,
- hiring an additional certified teacher for a grade level (e.g., providing three teachers for two third grade classes) and dividing the students among the larger number of teachers for sustained instruction each day in priority subjects such as reading or math,
- hiring an additional certified teacher who works with half the students in a class for reading and math instruction, while the other half remains with the regular classroom teacher, or
- converting to a year-round schedule.

Each of these approaches enables schools to take advantage of space that may be unused for part of the school day or school year. Each can provide smaller groups of students with instruction from a highly qualified teacher for a significant block of time on a daily or regular basis. Each can ensure that students stay with the same teacher on a sustained basis. And none requires students to be tracked by ability on a permanent or long-term basis.

CONCLUSION

A growing body of research involving large-scale, carefully controlled experiments shows that lowering class size in the early grades will produce significant and lasting benefits for students. The early implementation experience shows that the Class Size Reduction Program is well on the way to helping schools throughout the country realize these benefits. The more than 29,000 teachers already hired under this program have helped bring about significant reduction in class size in the early grades. Early experience also demonstrates that the program contains both the flexibility and the funds needed to help school districts tailor implementation to local needs and priorities, and to recruit, train, and hire qualified teachers.

The Education Department's Class Size Reduction Program is part of the Administration's comprehensive approach to improving student achievement by raising standards, increasing accountability, improving teacher quality, and targeting help to schools and students with the greatest need. Smaller classes will make the greatest difference if they are staffed with well-prepared, qualified teachers, if their schools are held accountable for helping students reach challenging academic standards, and if students receive extra help outside the classroom, through reading tutors, mentors, and after-school programs.

To ensure that each of these approaches receive adequate support, the President's FY 2000 budget pays particular attention to improving the quality of teaching in our classrooms. In addition to the funds set aside for teacher professional development in the Class Size Reduction Program, the President's budget requests significant increases for programs that help recruit and prepare qualified new teachers, and equip them to use technology in the classroom. The budget also proposes significant investments in programs that train current teachers in effective approaches to teaching reading in the early grades and meeting the needs of students with limited English proficiency and other special needs. Taken together, these investments will help ensure that as we continue to reduce class size, there is a talented teacher in every classroom.