



Class Sizes in Dakota, Washington, and Anoka Counties

Prepared for Rep. Bill Luther

**Minority Staff Report
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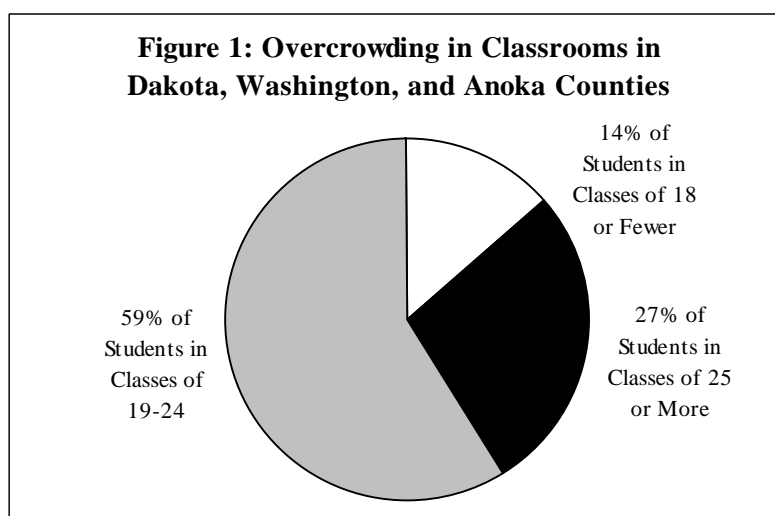
EXECUTIVE SUMMARY

This report on class sizes was prepared at the request of Congressman Bill Luther of Minnesota. It analyzes class sizes in kindergarten through third-grade classrooms in school districts in Dakota, Washington, and Anoka Counties. The report finds that during the most recent school year, 86% of young children in the three counties were taught in classrooms that exceeded the optimal level of 18 students per classroom. Classes in the three counties were more crowded during the 2001-2002 school year than in the previous year.

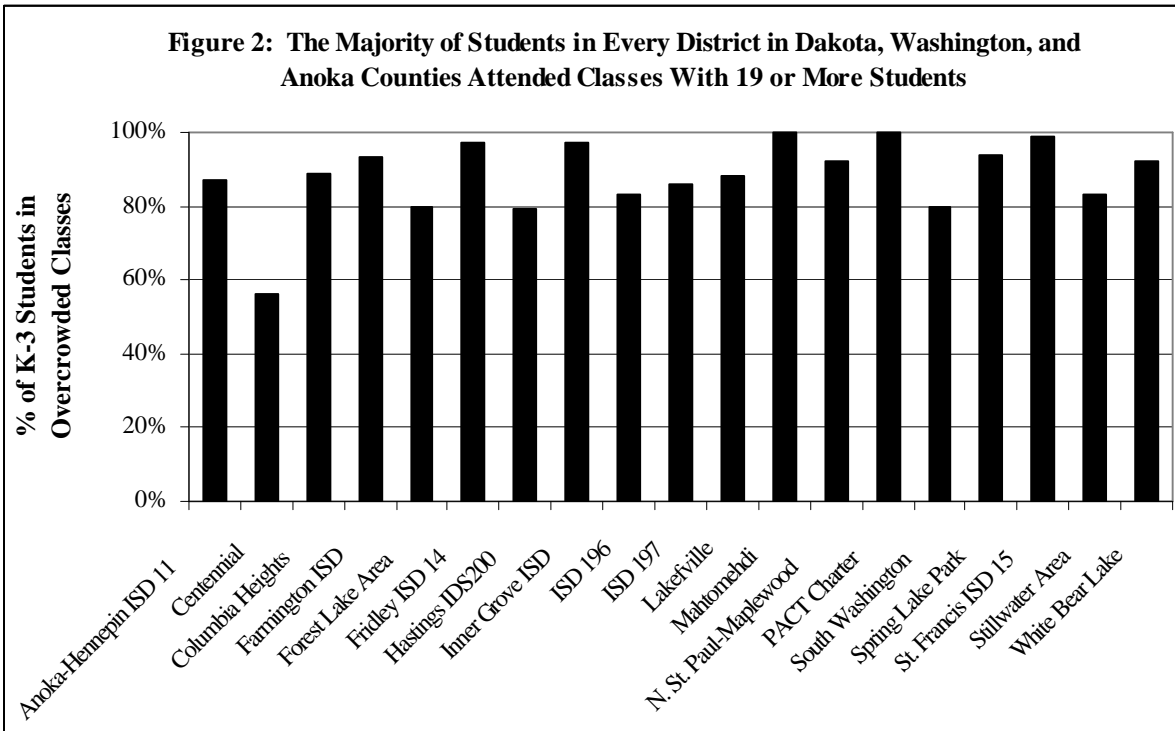
Almost all educational experts agree that class size in the younger grades has a direct and substantial impact on learning. Extensive studies have indicated that reducing class size to 18 students or less in grades K-3 can significantly improve student achievement. In 1999, the federal Department of Education declared that “class size reduction in the early grades is one of the most direct and effective ways to boost children’s academic achievement” and established a national objective to “reduce class size in the early grades to a nationwide average of 18.”

While the importance of class size to student achievement is widely accepted, few reports have investigated the actual class sizes in public schools in the United States. For this reason, Rep. Luther asked the Special Investigations Division of the minority staff of the Committee on Government Reform to investigate class sizes in Dakota, Washington, and Anoka Counties. The findings in this report consist of classroom-by-classroom statistics reported during the 2001-2002 school year by the public elementary schools in the three counties. Over 50,000 K-3 students in over 2,200 classrooms are covered by this report.

The report finds that there is a serious problem of overcrowding in classrooms in Dakota, Washington, and Anoka Counties. In the most recent school year, almost nine out of every ten children in grades K-3 were taught in classrooms that exceeded the optimal class size of 18 students. Moreover, 27% of children were taught in excessively large classes of 25 or more students. These findings are summarized in Figure 1.



The report also analyzes class size statistics for each individual school district in the three counties. During the 2001-2002 school year, overcrowded classrooms were a problem in each school district. The majority of K-3 students attended classes with more than 18 students in every school district surveyed in Dakota, Washington, and Anoka Counties. These findings are summarized in Figure 2. In addition, average class sizes exceeded 20 students in every school district except for the Centennial school district.



This report is the second report on class sizes requested by Rep. Luther. The first report was released in September 2001 and analyzed K-3 class sizes in Dakota, Washington, and Anoka Counties based on data from the 2000-2001 school year.¹ A comparison of the two reports shows that overcrowding increased during the 2001-2002 school year. In particular, the percentage of students in classes of 25 or more increased by almost 30%.

¹Minority Staff, House Committee on Government Reform, *K-3 Class Sizes in Minnesota's 6th Congressional District* (September 2001).

I. THE IMPORTANCE OF SMALL CLASS SIZE

There is substantial evidence that reducing class size to 18 or below in grades K-3 can have a substantial positive impact on student achievement. This research -- and the national program to reduce class size to 18 or less in these grades -- is summarized below.

A. The Findings of the U.S. Department of Education

The U.S. Department of Education has extensively studied the impact of class size on student achievement. In a series of reports, the Department reviewed the large body of research on class size and concluded that smaller class sizes lead to improved student achievement. According to the Department, “research has shown that class size reduction in the early grades is one of the most direct and effective ways to boost children’s academic achievement.”²

Researchers with the Department have concluded that “a consensus of research indicates that class size reduction in the early grades leads to higher student achievement.”³ The researchers reached this conclusion after reviewing over 20 years of studies employing varying methodologies. They found that “the significant effects of class size reduction on student achievement appear when class size is reduced to a point somewhere between 15 and 20 students.”⁴ They also noted that the research indicated that there were greater small-class advantages for minority and low-income students.⁵

In another report, Department researchers reviewed several recent studies on class size and found that they “provide compelling evidence that small classes in the primary grades were academically superior to regular-size classes.”⁶ The report concluded that “this research leaves no doubt that small classes have an advantage over larger classes in student performance in the early primary grades.”⁷

²U.S. Department of Education, *A National Effort to Ensure Smaller Classes with Well-Prepared Teachers* (1999).

³Ivor Pritchard, National Institute on Student Achievement, Curriculum and Assessment, Office of Educational Research and Improvement, U.S. Department of Education, *Reducing Class Size: What Do We Know?* (1999).

⁴*Id.*

⁵*Id.*

⁶Jeremy Finn, National Institute on the Education of At-Risk Students, Office of Education Research and Improvement, U.S. Department of Education, *Class Size and Students at Risk* (1998).

⁷*Id.*

B. The Tennessee “STAR” Study

The most comprehensive and scientific study to date on the impact of class size on student achievement is Tennessee's Student-Teacher Achievement Ratio (STAR) study. Initiated in 1985, STAR was a multi-year class size study conducted by the state of Tennessee. The study encompassed more than 7,000 students in 79 elementary schools. Within each school, kindergarten students were randomly assigned to one of three types of classes: small (13-17 students), regular (22-26 students), or regular with full-time aide (22-26 students taught by one teacher and one full-time teaching aide). The students were kept in classes with these assigned sizes for four years (from grades K-3) and were given standardized tests yearly. Teachers were randomly assigned to classes on a yearly basis. In effect, the STAR study was designed as a controlled scientific experiment on the question of whether class size is a significant factor in a student's academic achievement.

The STAR study found that the benefits of small classes in grades K-3 are both significant and long-lasting. First, it found that when compared to their counterparts in larger classes, students in classes with less than 18 students reached more advanced levels of achievement in math and reading skills.⁸ This was true even when students in small classes were compared to students in larger classes with a teaching aide. Researchers reported statistically significant improvements in student achievement at each grade level. When translated into months of schooling completed, these results showed that at each grade level, students in small classes were ahead of their peers in their school work by several months.⁹

The study found that the benefits of smaller classes are sustained through later grades. Students who spent four years in small classes continued to demonstrate greater achievement levels as they progressed through school, even after they were returned to regular-size classrooms.¹⁰ By the eighth grade, they were ahead of their peers in core subjects by more than a year of schooling. By the end of high school, they had higher graduation rates¹¹ and a greater propensity to take college entrance exams.¹²

⁸Jeremy Finn, et al., *Short- and Long-term Effects of Small Classes* (1999).

⁹*Id.*

¹⁰*Id.*

¹¹Helen Pate-Bain et al., *Effects of Class Size Reduction in the Early Grades (K-3) on High School Performance* (1999).

¹²A. Krueger, and D. Whitmore, *The Effect of Attending a Small Class in the Early Grades on College Attendance Plans* (1998).

STAR researchers also found that the benefits of small classes were substantially greater for minority and low-income students.¹³ In the core subjects of math, reading, and word study skills, minority students derived twice as much benefit from smaller classes as white students.¹⁴

Overall, in a summary of the findings from the STAR study, researchers concluded that “at each grade level (K-3), across all school locations . . . on every achievement measure . . . and for all subjects . . . the small-class students exceeded their peers in regular and regular/aide classes”¹⁵ and that “attending a small class in grades K-3 is associated with enduring academic benefits in all school subjects in grades four, six, and eight.”¹⁶

C. Other Class Size Research

Other recent studies have obtained similar results. For example, in 1996 Wisconsin began the Student Achievement Guarantee in Education (SAGE) program. The program phased in small classes through three years in 45 schools. Researchers who studied the impact of these class size reductions found that “the results of analyses of classroom-level qualitative data suggest that teachers in SAGE classrooms have greater knowledge of each of their students, spend little time managing their classes, have more time for instruction, are more enthusiastic about teaching, and individualize instruction utilizing a primarily teacher-centered approach.”¹⁷ Tests conducted on students in the 2000-2001 academic year indicated that reducing class sizes resulted in significantly improved standardized test scores for participating students.¹⁸

Similarly, a class size reduction program implemented in North Carolina found that first and second grade students who attended small classes outperformed other students on standardized reading and math achievement tests. The study also found that the percentage of classroom time devoted to noninstructional activities such as discipline decreased by 30%

¹³Jeremy Finn, *Tennessee's Class Size Study: Findings, Implications, Misconceptions* (1999).

¹⁴J. Finn and C. Achilles, *Answers about questions about class size: A statewide experiment* (1990).

¹⁵Jayne Boyd-Zaharias and Helen Pate-Bain, Health and Education Research Operative Services, Inc., *Early and New Findings from Tennessee's Project STAR* (2000).

¹⁶*Id.*

¹⁷Molnar et al., *1997-98 Results of the Student Achievement Guarantee in Education (SAGE) Program* (1998).

¹⁸SAGE and Direct Instruction Projects, *2000 - 2001 Evaluation Results of the Student Achievement Guarantee in Education (SAGE) Program* (December 2001).

compared with larger classes.¹⁹

D. The Federal Role in Reducing Class Sizes

The emerging consensus on the importance of small class sizes resulted in a concerted federal effort to reduce K-3 class sizes to 18 across the nation. In his 1998 State of the Union address, President Clinton called for a national effort to reduce class sizes:

Tonight, I propose the first ever national effort to reduce class size in the early grades. . . . My balanced budget will help to hire 100,000 new teachers who have passed a state competency test. Now, with these teachers . . . we will actually be able to reduce class size in the first, second, or third grades to an average of 18 students a class, all across America.²⁰

In October 1998, Congress approved the President's plan to reduce K-3 class size to 18, appropriating \$1.2 billion to hire the first 30,000 new teachers. In the first two years of the program, 1999 and 2000, \$2.5 billion in funding allowed local school districts to hire 37,000 teachers. These teachers were hired in 23,000 schools throughout the country, and allowed 1.7 million students to attend smaller classes.²¹ In schools participating in the program, 86% of students were attending classes with more than 18 students before receiving federal funds to hire new teachers. But after additional teachers were hired using federal assistance, these schools were able to reduce the average class size to 18 students.

By the 1999-2000 school year, over 20 states, including California, Florida, Illinois, New York, Ohio, and Texas, had active programs aimed at reducing class sizes for students in early grades.²²

Funding for President Clinton's class size initiative was included in the first budget signed by President Bush. Following this first budget, in January 2002, President Bush signed new education legislation, which resulted in a change in the program. Instead of a specific class size reduction program, the Elementary and Secondary Education Act contained \$2.85 billion in

¹⁹P. Egelson et al., *Does Class Size Make a Difference? Recent Findings from State and District Initiatives* (1996).

²⁰President William J. Clinton, *State of the Union Address* (January 1998).

²¹U.S. Department of Education, *The Class Size Reduction Project: Boosting Student Achievement in Schools Across the Nation* (2000).

²²See Clearinghouse on Educational Management, College of Education, University of Oregon, *Class Size Reduction Initiatives, By State* (2002) (online at http://eric.uoregon.edu/publications/policy_reports/class_size/initiatives.html).

grants to support a broad array of activities to improve the elementary and secondary education force, including reductions in class size.²³ This Teacher and Principal Training and Recruitment Fund allows money to be spent on a number of activities to assist teachers and schools, including assistance in the recruitment and retention of teachers, class size reductions, tenure reform, merit pay, teacher testing, and professional development for principals, superintendents, and teachers.

In the absence of funding dedicated specifically to reducing class size, there appears to be backtracking on the national effort to reduce class sizes. Recent reports indicate that “school districts and states across the country are backing away from reductions in class size. . . . [I]n many districts . . . class sizes are swelling . . . and class size reduction initiatives aimed at primary grades are being rolled back.”²⁴

II. STUDY OBJECTIVES AND METHODOLOGY

Congressman Bill Luther represents the 6th Congressional District of Minnesota, which contains all or part of Dakota, Washington, and Anoka Counties in the suburban Twin Cities area. Because of the importance of small class size to educational performance, Rep. Luther requested that the Special Investigation Division of the minority staff of the Committee on Government Reform investigate class sizes in grades K-3 within the three counties. Specifically, he requested that the study compare class sizes in grades K-3 in the three counties with the national goal of 18 students per classroom. This report presents the results of the investigation.

The report is based on unpublished data on class sizes during the 2001-2002 school year obtained by Rep. Luther’s office and the Special Investigations Division. There are 19 school districts in Dakota, Washington, and Anoka Counties. These school districts contain 138 public elementary schools that teach 50,032 K-3 students in 2,271 self-contained classrooms.²⁵

²³Congressional Research Service, *K-12 Teacher Quality: Issues and Legislative Action* (Apr. 9, 2002) (RL30834).

²⁴*Class Size Reduction Initiatives Faltering*, Los Angeles Times (May 18, 2002).

²⁵The investigation focused on class sizes in home room classes, where students spend most of their day. It excluded data on specialized classes, such as special education, physical education, art, music, and English as a second language. To eliminate potential reporting errors, the report did not include any classes which reported class sizes smaller than 10 or larger than 50.

III. FINDINGS

A. Overcrowding in Schools in Dakota, Washington, and Anoka Counties

The data reveal that there is a serious problem of overcrowding in K-3 classrooms in Dakota, Washington, and Anoka Counties. During the 2001-2002 school year, the overwhelming majority of young children in public schools in the three counties were taught in classrooms that exceeded the optimal class size of 18 or fewer students. Only 6,821 of the 50,032 K-3 school students in the three counties, 14%, were taught in classes of 18 or fewer students. In contrast, 43,211 children (86%) were taught in classes that exceeded the optimal class size.

In addition, a significant minority of students were taught in excessively large classes of 25 or more students. More than one out of every four students (27%) were taught in a class of 25 or more. Table 1 summarizes these results.

TABLE 1: Distribution of K-3 Students in Dakota, Washington, and Anoka Counties by Class Size

Class Size	Number of Students in class of that size	Percentage of Students in class of that size
18 or fewer	6,821	14%
19 - 24	29,625	59%
25 or more	13,586	27%

The average class size for the 2001-2002 school year in the three counties was 21.8 students per class.

B. Class Size Statistics by Individual School District

The report also investigated how class sizes varied among the school districts in Dakota, Washington, and Anoka Counties. This comparison shows that overcrowded classes were common in every school district.

The majority of K-3 students attended classes with more than 18 students in every school district surveyed in the three counties. In addition, average class sizes exceeded 20 students in nearly every school district in the three counties, and exceeded 22 students in 12 of the 18 school districts. The school districts with the highest percentage of students attending classes with 19 or more students were Mahtomedi (100%), PACT Charter School (100%), St. Francis (99%), Fridley (97%), and Inver Grove (97%). In Anoka-Hennepin-ISD 11, the largest school district in Rep. Luther's district, 87% of K-3 students attended classes of 19 or more students. Table 2 provides statistics on individual school districts.

**TABLE 2: Data on Class Sizes by Individual School District in
Dakota, Washington, and Anoka Counties**

School District	# of K-3 Students	# of Students in Classes of 18 or Fewer (%)	# of Students in Classes of 19-24 (%)	# of Students in Classes of 25 or More (%)	Average Class Size
Anoka-Hennepin- ISD 11	11,695	1,476 (13%)	5,417 (46%)	4,802 (41%)	22.6
Centennial	2,070	912 (44%)	794 (38%)	364 (18%)	16.6
Columbia Heights	932	106 (11%)	317 (34%)	509 (55%)	23.3
Farmington - ISD	1,738	117 (7%)	1,095 (63%)	526 (30%)	22.9
Forest Lake Area	2,236	219 (20%)	767 (34%)	1,250 (56%)	23.8
Fridley - ISD 14	677	17 (3%)	582 (86%)	78 (11%)	21.2
Hastings - ISD 200	1,281	274 (21%)	590 (46%)	417 (33%)	21.4
Inver Grove - ISD	1,096	35 (3%)	614 (56%)	447 (41%)	23.3
ISD 196	7,494	1,237 (17%)	5,424 (72%)	833 (11%)	20.5
ISD 197	1,391	196 (14%)	1,035 (74%)	160 (12%)	21.4
Lakeville - ISD 194	3,059	353 (12%)	2,317 (76%)	389 (13%)	21.4
Mahtomedi	686	0 (0%)	661 (96%)	25 (4%)	22.9
N. St. Paul - Maplewood -	3,191	256 (8%)	2,288 (72%)	647 (20%)	22.6
PACT Charter	116	0 (0%)	116 (100%)	0 (0%)	23.2
South Washington	4,645	933 (20%)	3,454 (74%)	258 (6%)	20.1
Spring Lake Park	873	50 (6%)	540 (62%)	283 (32%)	22.4
St. Francis - ISD 15	1,738	18 (1%)	1,026 (59%)	694 (40%)	24.5
Stillwater Area	2,454	418 (17%)	1,286 (52%)	750 (31%)	22.1
White Bear Lake	2,660	204 (8%)	1,302 (49%)	1,154 (43%)	23.1

C. Class Sizes in the 2001-2002 School Year Compared to Class Sizes in the 2000-2001 School Year

This report is the second report on class sizes in Dakota, Washington, and Anoka Counties requested by Rep. Luther. The first report examined class sizes during the 2000-2001 school year. A comparison of the two reports shows that K-3 class sizes in the school districts in the three counties increased during the 2001-2002 school year.

In particular, the percentage of students attending excessively large classes rose significantly in the last year. In the 2000-2001 school year, 21% of K-3 students attended classes with 25 students or more. In the 2001-2002 school year, 27% of students attended classes with 25 students or more. This represents an increase of almost one-third. Moreover, the average class size also increased from 21.3 in the 1999-2000 school year to 21.8 in the 2001-2002 school year. Table 3 presents a comparison of class sizes in the 2000-2001 and 2001-2002 school years.

TABLE 3: Comparison of Class Sizes in the 2000-2001 and 2001-2002 School Years

School Year	% of Students in Classes of 18 or Less	% of Students in Classes of 19-24	% of Students in Classes of 25 or More	Avg. # of Students Per Class
2000-2001	14%	65%	21%	21.3
2001-2002	14%	59%	27%	21.8

IV. CONCLUSION

The vast majority of K-3 students in Dakota, Washington, and Anoka Counties attend classes that contain more than the optimal number of students. During the most recent school year, only 14% of students in the three counties attended classes with 18 or fewer students. Eighty-six percent of students attended classes with 19 or more students, including the 27% of students who attended classes that contained 25 or more students. A majority of students attended classes with more than the optimal number of students in every school district surveyed in Dakota, Washington, and Anoka Counties. Between the 2000-2001 school year and the 2001-2002 school year, the percentage of students attending the most overcrowded classes has increased by almost one-third, and the average class size in the three counties has also increased.