

SCOMM

137:24

STATE OF ALASKA



Interim:

119 North Cushman St., Rm. 205
Fairbanks, Alaska 99701
(907) 456-7423
Fax: (907) 451-9293

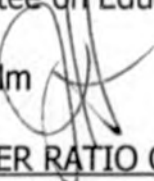
Session:

State Capitol Building
Juneau, Alaska 99801
(907) 465-3466
Fax: (907) 465-2937

REPRESENTATIVE JIM HOLM DISTRICT 9

DATE: January 25, 2006

TO: Representative Mark Neuman, Chair
House Special Committee on Education

FROM: Representative Jim Holm 

RE: HB 228, PUPIL-TEACHER RATIO GRADES K-3

Please schedule HB 228 for hearing in your committee as soon as possible.

The attached Sponsor Statement addresses the blank Committee Substitute version LS0673\F, which I hope your committee will adopt. Also attached is the original bill and other pertinent information.

Thanks so much for your help with this bill.

STATE OF ALASKA



Interim:

119 North Cushman St., Rm. 205
Fairbanks, Alaska 99701
(907) 456-7423
Fax: (907) 451-9293

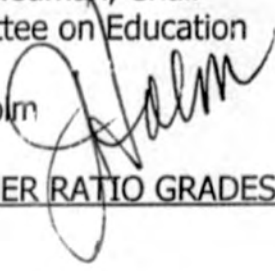
Session:

State Capitol Building
Juneau, Alaska 99801
(907) 465-3466
Fax: (907) 465-2937

REPRESENTATIVE JIM HOLM DISTRICT 9

DATE: April 28, 2005

TO: Representative Mark Neuman, Chair
House Special Committee on Education

FROM: Representative Jim Holm 

RE: HB 228, PUPIL-TEACHER RATIO GRADES K-3

Please schedule HB 228 for hearing in your committee as soon as possible.

The attached Sponsor Statement addresses the blank Committee Substitute version LS0673\F, which I hope your committee will adopt.

Thanks so much for your help with this bill.

Education
Committee

April 18, 2006

HB 228
Representative Holm

Pupil-Teacher Ratio
Grades K-3

1

HB 228
Sponsor Statement

2

CS for HB 228
HB 228

3

HB 228
Legislative Research

4

Current
Pupil-Teacher
Ratios

5

Fiscal
Notes

6

7

Representative Jim Holm
Alaska State Legislature
District 9

Session

Capitol Building, Room 110
Juneau, AK 99801
Phone: (907) 465-3466
Fax: (907) 465-2937



Interim

119 N. Cushman St.
Fairbanks, AK 99701
Phone: (907) 456-7423
Fax: (907) 451-9293

CS HB 228
Sponsor Statement

4/28/05

"An Act imposing a maximum pupil-teacher ratio for grades kindergarten through three in public schools"

Today we all recognize the difficulties of complying with "No Child Left Behind." Classroom instruction is impacted by a number of factors including discipline, materials, curriculum, teacher competency, and the number of students per class. HB 228 is an attempt to fix one of the major classroom problems, the pupil-teacher ratio (PTR). Generally we have turned to school boards to manage classroom size, but it has not worked as well as we'd like.

If the problem in higher grades is a lack of preparedness, discipline, and motivation, then I suggest this could be mitigated by laying a better foundation in early grades with a lower PTR.

Our kindergarten through third grade teachers are now expected to provide for each individual child's different learning style. One of the major retention problems in these grades is PTR. The old "sit quietly and learn together" idea is obsolete – so it requires space, to separate children who just can't learn while sitting still, from those who learn best that way and are distracted by those who can't. It also requires a great deal of individual attention. Neither is possible with a PTR higher than 20-1.

It's my intent that schools be given four years to comply, starting with Kindergarten the first year, then K+1, K+1-2, and finally K+1-3 in year four. Districts should also be allowed to have multi-age classrooms as long as the ratio remains no higher than 20-1.

Requiring a maximum PTR of 20-1 in grades K-3 will allow teachers to give our kids a much better foundation, and I urge your support for HB 228.

Education
Committee

April 18, 2006

HB 228
Representative Holm

Pupil-Teacher Ratio
Grades K-3

1

2

CS for HB 228
HB 228

3

4

5

6

7

24-LS0763VF

Mischel

4/27/05

CS FOR HOUSE BILL NO. 228()**IN THE LEGISLATURE OF THE STATE OF ALASKA****TWENTY-FOURTH LEGISLATURE - FIRST SESSION****BY****Offered:****Referred:****Sponsor(s): REPRESENTATIVE HOLM****A BILL****FOR AN ACT ENTITLED**

1 **"An Act imposing a maximum pupil-teacher ratio for grades kindergarten through**
2 **three in public schools."**

3 **BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:**

4 *** Section 1.** AS 14.03 is amended by adding a new section to read:

5 **Sec. 14.03.065. Maximum pupil-teacher ratio.** (a) In a public school, the
6 ratio of pupils to a teacher may not exceed 20 to one in a class in grades kindergarten
7 through three.

8 (b) The pupil-teacher ratio established under (a) of this section does not
9 preclude mixed-age classes as long as the ratio is not exceeded in a class with students
10 in grades kindergarten through three.

11 (c) In this section, "teacher" means a person who holds a teacher certificate
12 under AS 14.20.020 and is engaged in classroom teaching in a regular instructional
13 program.

14 *** Sec. 2.** The uncodified law of the State of Alaska is amended by adding a new section to

1 read:

2 TRANSITION. The pupil-teacher ratio established under AS 14.03.065, added by
3 sec. 1 of this Act, shall be implemented after the effective date of this Act as follows:

4 (1) during the first school year, the ratio of pupils to a teacher may not exceed
5 20 to one in a class in grade kindergarten;

6 (2) during the second school year, the ratio of pupils to a teacher may not
7 exceed 20 to one in a class in grades kindergarten through one;

8 (3) during the third school year, the ratio of pupils to a teacher may not exceed
9 20 to one in a class in grades kindergarten through two; and

10 (4) during the fourth school year and thereafter, the ratio of pupils to a teacher
11 may not exceed 20 to one in a class in grades kindergarten through three.

Education
Committee

April 18, 2006

HB 228
Representative Holm

Pupil-Teacher Ratio
Grades K-3

1

2

3

HB 228
Legislative Research

4

5

6

7

Legislative Research Services

Alaska State Legislature
Legislative Affairs Agency
Division of Legal and Research Services

State Capitol, Juneau, AK 99801
Phone: 907-465-3991
Fax: 907-465-3908

April 12, 2005

Memorandum

TO: Representative Jim Holm

FROM: Chuck Burnham
Legislative Analyst

RE: Effects of Reducing Class Size in Primary Grades
LRS Report 05.250

You asked about research on the effects of reducing class sizes. Specifically, you asked that we provide a compilation of research that discusses the effects of limiting the size of kindergarten through third grade classes.

A number of states have implemented class size reduction policies in recent years in response to studies showing that smaller classes positively impact several aspects of education including students' level of academic achievement, their attitudes and attendance, and teacher morale and retention. The growing body of research on the subject indicates that small classes at the kindergarten through third, or "primary," grade levels provide the greatest and most long-lasting benefits.

Overall, at least 21 states have established maximum class sizes, most of which place particular emphasis on reducing the size of primary classes. Several states—California and Tennessee, for example—have undertaken large-scale studies on the impact of their class size reduction programs. Although the results of these studies are somewhat varied, there is growing consensus among researchers that policies encouraging smaller class sizes are generally beneficial. These positive results must be measured, however, against the sometimes drastic increases in costs associated with class size reduction programs, which include capital costs for expanding facilities and increased spending for the hiring of more teachers and staff. Further, researchers warn that the positive aspects of class size reduction can be reduced or eliminated where shortages of qualified, high quality teachers force school administrators to hire sub-par instructors.

A number of organizations involved with developing education policy have examined the body of research on class size and have synthesized the findings of that research into published reports. We provide, as attachments, three such reports as follows:

Attachment A: ERIC Clearinghouse on Educational Management, "Class Size: Can School Districts Capitalize on the Benefits of Smaller Classes?" *Policy Report*, No. 1, Spring 2000.

Attachment B: Ivor Pritchard, "Reducing Class Size: What Do We Know," U.S. Department of Education, Office of Educational Research and Improvement, November 1999.

Attachment C: National Conference of State Legislatures, "Small Learning Communities," 2004.

I hope you find this information to be useful. Please do not hesitate to contact us if you have questions or need additional information.

Attachment A

ERIC Clearinghouse on Educational Management, "Class Size: Can School Districts Capitalize on the Benefits of Smaller Classes?" *Policy Report*, No. 1, Spring 2000; available online at
http://eric.uoregon.edu/pdf/policy_reports/Class%20Size%20Policy%20Report.pdf

Alternatives to Class-Size Reduction

By Lawrence O. Picus

The research shows that reducing class size can, and probably does, lead to improved student performance. It is, however, a very expensive option: In addition to hiring more teachers, schools need additional classroom space. Before embarking on a substantial CSR program, policymakers may want to consider whether more cost-effective alternatives exist. Current research suggests that such alternatives are available and should be considered, either instead of—or in addition to—class-size reduction. One range of options deals with teacher knowledge and skills, while others relate to the structure of the education program offered at individual schools.

Teacher Knowledge and Skills

Reducing class size gives students greater access to teacher resources. There is evidence this will help students learn. However, what the teacher knows and is able to do is at least as important in helping students learn.

Darling-Hammond (1998) argues that "teacher expertise is one of the most important factors in determining student achievement." She quotes Greenwald, Hedges, and Laine's work (1996), which demonstrated the relative impact of spending \$500 more per pupil on increased teacher education, increased teacher experience, and increased teacher salaries. All three of these appear to have a greater impact on student test scores than does lowering the pupil-teacher ratio. For an expenditure of \$500, the greatest gains in student test scores (measured in standard deviation units from a range of tests in 60 studies) were achieved through increasing teacher education. Lowering the "pupil-teacher ratio was the least cost effective of the four methods. Increasing teacher salaries and experience fell between lower pupil-teacher ratios and teacher education in terms of cost effectiveness."

Ferguson (1991) found that the effects of teacher expertise in Texas

were so great that after controlling for socioeconomic status, disparities in achievement between black and white students were virtually entirely explained by differences in teacher qualifications. He found that teacher qualifications explained 43 percent of the variation among the factors affecting math score test gains, whereas small classes and schools only accounted for 8 percent of the gain. Home and family factors were identified as explaining the remaining 49 percent of the variance.

Darling-Hammond (1998) summarizes these findings by stating that "teachers who know a lot about teaching and learning and who work in settings that allow them to know their students well are the critical elements of successful learning." Smaller classes are clearly desirable in her view, but given limited funds to invest, her work suggests policymakers should at least take a close look at improving access to high-quality professional development first.

Professional development is frequently poorly funded in school districts and often the first item to be cut when finances become tight. Darling-Hammond's research suggests this may be a mistake, and in fact, more resources should be put into professional development. Even if class size is reduced,

professional development still may be essential to help teachers maximize their skills and capitalize on the benefits of having a reduced number of children for whom they are responsible. Certainly investments in professional development would be complementary to class-size-reduction programs.

Reducing class size and providing greater training opportunities for teachers are not the only options available for improving student learning. There are many things school board members and site leaders themselves can do to restructure their schools for improved learning. Several of these are briefly discussed below.

VIEWPOINT

"If you make the class size smaller and the teacher isn't doing a good job in the first place, it won't make a difference."

**- Kathy Christle,
Education
Commission of
the States**

Reorganizing Schools

Many of today's educational reforms are restructuring how educational resources are used. A number of the reform designs supported by the New American Schools (NAS), for example, rely on using teaching resources differently, rather than purchasing more. While seven designs supported by NAS require some investment on the part of a school or school district, most are less expensive than dramatic reductions in class size or pupil-teacher ratios. Most also come with substantial teacher-training components.

Odden and Busch (1998) found substantial gains in student performance, often as high as one-third of a standard deviation, at NAS design schools. These schools reach these performance levels with relatively little additional expenditures, generally averaging around \$50,000 to \$250,000 a year for a school of 500 students (an extra \$100 to \$500 per pupil each year). Odden and Busch argue that any school can reorganize itself into one of the NAS designs by looking closely at its current allocation of teachers and aides and reassigning them as needed to meet the design specifications. In many instances this calls for eliminating aides in favor of more teachers. Results of the Tennessee STAR project show that spending for teacher aides may not be productive anyway.

Another option schools can consider is restructuring the use of time. The National Commission on Time and Learning (1994) reported on a number of successful schools and school districts that had improved student performance through different ways of organizing the school day to give students more access to, and time with, teachers. Models that provide more access to learning resources, particularly teachers, may also be substantially more cost-effective than class-size reduction.

In conclusion, class-size reduction is currently one of the most

popular—and most expensive—educational reforms today. At least 21 states have enacted mandatory or voluntary policies aimed at reducing class size in the primary grades, and one (California) has even created an incentive to reduce the number of students in ninth-grade English and math classes.

The question facing state policymakers is whether substantial investments in smaller classes should be made. The research shows that such investments will lead to improved student outcomes. However, the research also shows that attention to teacher training and expertise may have a bigger payoff per dollar spent. Moreover, as California's experience shows, states that jump into a major CSR program quickly may find they have a shortage of qualified teachers. Given the importance of high-quality teaching to student learning, investment in the quality of the teaching force first might be a better way to maximize the potential of the dollars that are used to reduce class size.

In short, few people appear to oppose class-size reduction. However, there are a number of things states and school districts can do to ensure that the substantial investment made in teachers and classrooms pays off to the maximum extent possible. Virtually all of them revolve around ensuring that the state has the highest quality teaching force possible.

Dr. Picus is Professor and Chair, Division of Administration and Policy, Rossier School of Education, and Director, Center for Research in Education Finance, University of Southern California. This article is excerpted from a forthcoming book on resource allocation to be published by the ERIC Clearinghouse on Educational Management, University of Oregon.

Other Proposed Alternatives

Is there a way to achieve some of the benefits of small classes without actually decreasing their size? Class-size reduction has the disadvantage of requiring more funding and more teachers, both of which are in short supply.

To avoid these problems of CSR, some policymakers, legislative analysts, and school officials have proposed alternative forms of instruction and grouping that may help to produce the same effects as reduced class size. These strategies, unlike the alternatives discussed by Dr. Picus in the accompanying article, have not been found by research to have benefits comparable to a reduced pupil/teacher ratio.

- The use of cooperative-learning groups, block groups, and other kinds of small groups to give students intensive small-group instruction in areas such as reading, writing, and math; these methods might be used in conjunction with large-class instruction.
- Scheduling changes that decrease the size of some targeted classes throughout the school day.
- Peer tutoring where students get one-on-one attention.
- Use of parent and community volunteers to provide enrichment and assistance in the classroom.
- Team teaching.
- Use of computers and other individualized aids, such as learning centers.
- Pullout programs for students with special needs.
- The use of teacher aides to work in an instructional capacity.

Addressing Professional Development

It is ironic that smaller class size has become a policy goal at a time when teachers, at least in some states and in some subject areas, are in short supply. Where will the teachers come from to fill the extra classrooms smaller size dictates? To hire the two million teachers the U.S. Department of Education estimates will be needed during the next ten years because of retirements and increasing enrollment, some of the nation's school districts may have to hire teachers who are only marginally well trained in the fields they are expected to teach. Enter the need for professional development

Excellent professional development that focuses on standards and sound instructional delivery can give inexperienced teachers the skills and knowledge they need to capitalize on smaller class size. Followup support and feedback can help teachers retain and refine those skills. Highly skilled and trained teachers also benefit from professional development that keeps them motivated and enthusiastic.

In California, many teachers have received emergency credentials to fulfill CSR requirements. Recent legislation in that state requires school districts to provide professional-development programs for all teachers who are assigned to smaller classes. The law specifies that professional development for these teachers must focus on individualized instruction, effective classroom management, and responsiveness to student needs.

A task force that recently conducted the first comprehensive examination of teacher quality in California in over ten years recommended that the state offer districts financial incentives of "up to \$250 per student to restructure the teaching day and year to enable teachers to participate in well-crafted programs of professional learning experiences" (Bradley 1999).

In North Carolina, the "Success Starts Small" study followed four teachers in a class-size-reduction

project. During the first year, the teachers received twenty hours of "staff development studying strategies for more active learning for six-year olds." They also visited small-size classrooms in surrounding districts and met on a weekly basis to debrief and plan. They attended seminars and were introduced to computer-based learning. These teachers focused on finding ways to work with all children.

Professional development must be flexibly designed to meet the needs of each school situation. One

of its primary goals is to create a professional community for teachers. Group work, peer tutoring, and mentor programs that match master teachers with new teachers are tactics that can be used. Professional development should also address the diverse needs of students as teachers learn to identify and respond to learning problems (McRobbie 1998).

Professional development should also provide an opportunity for inquiry and reflection. Some educators believe that the primary focus of professional development should be to enable teachers to gain practice in new methods and to apply and adapt those methods to their individual classroom settings (Evertson and Randolph 1992).

Other educators have explored different priorities. Some believe that teachers benefit from assistance that broadens their theoretical understanding of student learning based on current research. According to Evertson and Randolph, student gains resulting from small class size will be most likely to be maintained when professional development (1) is embedded in school culture, (2) is based on a systematic approach to actual problems specific to teaching, and (3) supports change in teachers' thinking and practice. CL

VIEWPOINT

For \$1.2 billion you could retrain today's teachers so they knew their subject. You could give each of the nation's 2.7 million teachers a \$1,000 tuition grant to go learn math or really effective techniques for teaching reading. The question the public needs to ask is: 'What else could the money be used for?' and 'Do you make a national policy change on the basis of a hunch?'

- Chester Finn, Hudson Institute

CLASS-SIZE-REDUCTION INITIATIVES, BY STATE

State (Date Began)	Policy Intent, Elements	Funding (1999-00 School Year)	Target	Level of Implementation	Implementation Issues
Alaska (1997, 1998)	Mandate. Enacted in 1997, amended in 1998. Legislation authorizes formation of smaller classes and provides funding for those schools choosing to do so.	\$1.58 million.	K-4	K-4—20 students per class	Approximately 20,000 new teachers were needed, so state relaxed teacher certification requirements. Other concerns include a surge of teachers moving from "less-advantaged" to more desirable districts to fill the newly created positions; a shortage of substitute teachers; supervision and training of noncertificated teachers.
California (1996)	Class Size Reduction Program. Goal is to improve early literacy by lowering K-3 class size to 20. Voluntary. Incentive dollars offered for each pupil in K-3 class of no more than 20. Professional development required, using existing funds.	\$1.53 billion.	All K-3 students, a total of approximately 1.3 million Implementation occurs in 1 st grade, then 2 nd , then K and/or 3 rd .	1997-98: 84%	Intense public pressure to implement quickly. Not enough qualified teachers (21% of 1996-7 new hires on emergency permits). Not enough classroom space. Enrollment boom. Equity.
Florida (1996)	Goal: 20 students per teacher.	\$100 million.	K-3 with a priority on K-1.		
Illinois (1981, 1988)	Initially a pilot program. Now statewide, mandatory.	\$5 million.	In 1988-89: K-1—18 students, 2-3 grade—20 students.		Teachers have reported improved student behavior, higher test scores, more efficient classrooms. Program evaluations, however, indicated a weak relationship between lower class size and student achievement, but significant improvement in teachers' morale and attitudes.
Indiana (1981)	Prime Time Program. Programs are decided at local level; funds are allocated at district level.	\$35.6 million.	For 1995-99: 18-20 students. For 1999-00: 15-18 students, depending on at-risk index.	Of 293 districts, only 3 do not participate.	
Iowa (1999)	Goal. Reduce K-3 class size to 17 for basic skills instruction. Great flexibility: districts can reduce class size, add kindergarten, hire paraprofessionals, provide professional development.	First year (1999-00) \$10 million, second year \$20 million, third year \$30 million, fourth year at least \$30 million.	K-3	All districts have established goals for the program.	Not enough dollars for some districts to hire new teachers. Lack of space in some buildings to add classrooms.
Louisiana (1986)	Districts that meet requirement not to exceed 20 students in K-3 classes can use CSR funds to hire certified teachers for other grades.	\$31.94 million.	K-3 classes not to exceed 20 (unless authorized in writing by superintendent).	All districts (except one small rural district) and all Type II charter schools are participating.	Difficulty locating and hiring certified teachers. Lack of classroom space.
Maryland (1999)	Learning Success Program. Goal is to reduce class size in grades 1 and 2 to 20 students, particularly in reading.	\$11.6 million.	Requires school systems to set performance targets; has a goal of hiring 1,000 teachers.	All districts will participate.	
Minnesota (1993)	Learning and Development Program. Goal is to reduce class size in grades K-6 to 17 students.	\$134.8 million, plus \$2.9 million from another program. Additional funding of \$98 million over 1999-00 and 2000-01 school years is directed at K-3 grades.	K-6 classes not to exceed 17 students.		
Nevada (1989)	Mandatory Phased-in program to lower early-grade size from average of 25 to 16.	\$82.9 million. Funding for 1998-99 could be used to reduce 3 rd grade to 19:1, or to adopt proven comprehensive programs for achievement. Funds teachers, not facilities.	Grades 1 & 2, at-risk K, and some 3.	Began with 1 st grade and some at-risk K, and expanded to 2 nd in 1991-2.	Not enough classroom space. Enrollment boom.
New York (1999)	Class Size Reduction Program. Goal is to reduce class size in grades K-3 to 20 students.	First year (1999-00) \$75 million; second year \$150 million; third year \$225 million.	Funds can be used for teacher salaries and benefits and for one-time startup costs for each new classroom; funds can't be used for professional development or for new buildings.		Few problems, the most pressing of which is lack of space for new classrooms.

State (Date Began)	Policy Intent, Elements	Funding (1999-00 School Year)	Target	Level of Implementation	Implementation Issues
Oklahoma (1990)	Mandate Fiscal and accreditation penalties for noncompliance. Physical education, music, vocational not subject to penalty.	Funding addressed through foundation program.	K, 1-3, 4-6. No more than 20 students in class.		
Ohio (1999)	To reduce class size in grades K-1.	\$131 million.	K-1	30% of school districts qualify for state funding.	Districts have complained of having difficulty locating classroom space and certified teachers.
South Carolina (1997)	Matching grant program (districts match state funds based on their ability to pay). Priority is given to districts with most critical needs and to districts with higher percentages of students qualifying for free or reduced-fee lunches.	\$34.16 million.	1-3. Goal is to reduce student-teacher ratio to 15-1 over time.	84 of 85 districts participating.	Facilities (state is addressing the issue through a \$750 million school facility bond bill for FY 2000).
Tennessee (1985)	Mandate: Class size in grades K-3 may not exceed 20. Districts have until 2002 to comply. Districts are allocated additional teachers to reduce pupil-teacher ratio to 15:1 for one-third of students on free and reduced lunch.	Total cost is state funded (no figure available).	K-3	In 1996-97, 98.2% of public school classes were at or below the class size maximums for individual classrooms.	Study showed greatest gains in inner-city small classes. Classes with teacher aides achieved slightly higher scores than regular classes, but differences were not statistically different.
Texas (1984, 1995)	Mandate Districts may not enroll more than 22 students per classroom, with a ratio of not less than 1 teacher to each 20 students in average daily attendance. Some exceptions apply.	Funds are not allocated specifically to CSR, which is required by law and funded through general aid to education.	K-4		
Utah (1990)	Goal: Focus on reading. Lower class size to 10 in K and to 15 in grades 1-3. Funding: Distributed: 80% per student, 20% to low income on a per-school basis. Evolving toward 100% allotment on per student basis.	\$67.03 million.	Initially K-4 (with half of district allocation to focus on K-2). 1996-7: Expanded to K-6. 1998-9: Expanded to K-8.	Most K-6 classes now number 21-25 students. Greatest reductions have taken place in K-4.	Not enough classroom space in nonrural areas. Enrollment boom (now leveling off).
Virginia (1996)	Voluntary	State funding, based on incremental cost of providing lower class sizes. Districts must provide matching funds.	K-3 schools with high or moderate concentrations of at-risk students.		
Washington (1986)	To enhance staffing in grades K-4 by funding an additional 4.2 certificated instructional staff (CIS) per 1,000 FTE students in grades K-3 (over the minimum of 49 CIS) and an additional 7.2 CIS in grade 4 (over the minimum of 46 CIS).	\$99 million.	K-4 (Prior to 1999-00, targeted grades were K-3).	In 1998-99, participation rate was 96.4%.	Most common reason districts give for not using the maximum available funding is lack of classroom space.
Wisconsin (1996)	Student Achievement Guarantee in Education (SAGE). Goal is to improve academic achievement through four methods, one of which is small classes of no more than 15 students in grades K-3. Originally limited to high-poverty schools, the SAGE law was changed this school year to allow any school to apply.	\$18.2 million. 2000-01: \$58.5 million.	K-3	Implementation takes place in waves. First wave of schools began in 1996-97 at K-1 grades, then added grade 2 in 1997-98 and grade 3 in 1998-99. Second wave began in 1998-99. Third wave will start in 2000-01.	
Wyoming	Education code says each district "shall endeavor to maintain when practicable" an average class size of no more than 20 students per teacher in grades K-3.	State funding mechanism encourages districts to achieve goal of reduced class size.	K-3		

Editor's Note: The Clearinghouse compiled the information contained in this table through telephone and email correspondence with contact persons in state departments of education in March and April 2000.

Designing a Policy

The wealth of information on class size can bewilder school board members when the time comes to sit down and design a policy for class-size reduction. No single policy fits the circumstances of all school districts. For example, a district that already has an average class size of 21 students in the elementary grades will have less work to do than a district whose classes average 27.

These guidelines, expressed in the form of questions board members and district officials can ask themselves, borrow from the recommendations of Joan McRobbie, Jeremy Finn, and Patrick Harman and other authorities whose works are cited.

Although the guidelines are offered with local school boards foremost in mind, the issues they address can also stimulate discussion among legislators who are designing state-level policy on class-size reduction.

Funding

Your district has applied for and received the funds to design a CSR policy, but how do you decide where it all goes?

McRobbie and colleagues suggest targeting minority and low-income children in primary grades. Because research across the board demonstrates these children stand the most to gain from smaller class size, allocating funds to them may prove to be the most effective use of resources.

What factors other than class size should govern the allocation of funds?

Don't lose sight of why class size is being downsized—to raise student achievement. Small class size is not an end in itself. Consider setting aside money for community meetings, teacher training, and curriculum planning. Flexibility is also important at the local as well as district level. Every school will be different in the way it needs to use funds.

If state and federal funding are inadequate to meet district

goals, can any other sources of funding be tapped?

In schools with a high proportion of low-income families, Title I funds have become a common means of reducing class size. In Burke County, North Carolina, the district decided to use state funds originally allocated for full-time teacher assistants to fund regular teaching positions instead.

Other districts have implemented creative scheduling so that class size is reduced for a portion of the day. For example, the Oak Park Plan requires all teachers in the school to teach 15 students in core academic areas for three hours a day. For the remaining 2.5 hours, students are taught in regular class sizes of approximately 25 students.

Achilles and Price (1999) recommend examining programs in the district to determine if all currently funded programs are still a high need, or if some could be reduced or eliminated altogether to free up funds. They also suggest increasing the size of some classes at the secondary level as a tradeoff for lowering class sizes in the early elementary grades.

Will the funding be flat or wealth-adjusted? In other words, does each student receive the same allocation of funds, or is the allocation adjusted by a formula?

California's program allows \$800 of incentive money for every student in a 20 to 1 primary class. Some districts already had smaller classes and did not have trouble meeting the 20:1 cap within the dollars allocated. Many urban districts, on the other hand, were forced to dig deeply into their own

VIEWPOINT

"I agree that reducing class size to no more than 15 would improve overall student achievement. It would enable teachers to better monitor and assess individual student performance for the purpose of selecting appropriate teaching and learning strategies. Practically speaking, however, building the required additional classrooms and staffing those classrooms from a decreasing pool of certified teachers would make implementation of this degree of class reduction difficult."

**- Julia P. Kron, Director, -
North Carolina Teacher
Academy**

funds to hire enough teachers and create classrooms, because the allocation of \$800 per student did not meet their needs. This across-the-board rate created some problems for districts that had a difficult time hiring qualified teachers, or for those that had no way of creating space for new classrooms.

Formula-based funding can help offset the kinds of inequities California's school districts encountered. For example, Utah's formula initially allotted 80 percent of the

state's K-6 CSR funding on a per-pupil basis, with 20 percent reserved for districts with rapid growth.

Facilities

Will existing facilities accommodate the number of new classrooms that will be needed?

School officials across the nation have said inadequate facilities are a big problem as they have tried to implement CSR policies. The shortage of facilities in California was the single most important deterrent to implementing CSR fully and quickly (Bohrnstedt and Stecher).

One solution to cramped space is to purchase portable classrooms, as many California schools have done. In a search for 18,000 new classrooms, California school districts also converted libraries, music rooms, computer and science labs, childcare centers, faculty lounges, and auditorium stages into primary classrooms, temporarily or permanently. California school officials used many other strategies to cope with a sudden shortage of facilities. They reconfigured some schools by moving sixth-graders to middle schools, switched to year-round scheduling, changed school boundaries, remodeled schools, cancelled inter- and intra-district transfers, and reopened schools previously closed.

Teaching

A hallmark of a successful CSR policy, according to McRobbie and colleagues, is to make better teaching and learning the cornerstone. Here are the key questions to consider:

Will there be enough qualified teachers for the number of new classrooms created?

Some districts have been able to fund a few extra full-time teaching positions by redistributing resources that had been designated for hiring other personnel. In cases such as California, these very stipulations were made within the legislation

WEBSITES

The following websites provide information and links to issues surrounding class-size-reduction initiatives.

www.classsize.org

Background information and research findings on California's class-size-reduction reform, by a consortium of six research organizations.

www.wested.org

Reports from WestEd, a nonprofit research and development service agency "dedicated to improving opportunities" for educators.

www.ed.gov/pubs/ReducingClass

www.ed.gov/pubs/ClassSize

Two reports from the United States Department of Education, and updates from proposed initiatives.

www.ed.gov/offices/OESE/ClassSize

Information about the federal Class Size Reduction Program.

www.aasa.org/SchoolAdmin

Information and insights from the American Association of School Administrators.

www.edweek.org

An online educational newspaper.

www.serve.org

Regional educational information from the Southeast states.

www.cascd.org

Website of the California Association for Supervision and Curriculum Development, "providing resources, indepth analysis, and practical, useable ideas."

www.edexcellence.net/library/size/html

Ideas in education from the Thomas B. Fordham Foundation.

www.ncsl.org/programs/educ/edu.htm

Links to state educational sites from the National Conference of State Legislatures.

www.ecs.org/ecswb.net

Information updates from the Education Commission of the States.

that authorized CSR (McRobbie and others 1998).

Are existing policies on emergency or alternative credentialing consistent with the district's goals?

Will there be a shortage of specially trained teachers, such as in the field of special education?

What new programs in professional development must be offered to equip teachers with the skills they will need to gain the greatest advantage from their smaller classes?

If the district will need to hire many new teachers, some of them inexperienced or unprepared, the policy ought to include provisions for training, mentors, and other resources. Even veteran teachers may need more knowledge and skills if the CSR initiative is accompanied by higher standards, new assessments, and/or accountability measures.

Other Issues

Will CSR be optional or mandatory?

A seemingly optional program can, in reality, be mandatory if districts are reluctant to reject money after experiencing cut after cut, or if CSR's great popularity creates a pressure to adopt class-size reductions.

Will there be a rigid cap on class size, or is the number of students per class flexible within a range?

Districts have options such as capping the number of students per teacher, specifying an average across a school or district, or creating differing levels of reductions for different types of schools, such as a requirement that class sizes be lower in high-poverty schools.

Will small classes be self-contained or team-taught?

In Nevada, state CSR policy allows the 16:1 ratio in first and second grades to be achieved by having two teachers in a classroom of 32 students. However, many

worry that team-taught classes are not as effective as self-contained classes.

What will determine the scale of CSR, that is, the span of grades that will be affected?

Studies indicate that smaller classes produce the maximum benefits in kindergarten and grade 1. Research on California's CSR initiative suggests that if class size is reduced in phases, such as first in grade 1, then 2, then 3, the transition will be less confusing than a large-scale approach or one that moves too quickly (Achilles, January 1999).

How will the school district evaluate the results of class-size reduction?

In seeking to determine whether the CSR policy is accomplishing what was intended, or whether the program needs to be revised, policymakers need to consider more than pupil-teacher ratios. Obtain data on achievement, attendance, and other outcomes. Are there more interactions between teachers and students? Do teachers have more time to plan and execute worthwhile learning activities?

Is the policy compatible with other district objectives?

Policymakers will naturally want to make sure that CSR is part of a coherent set of policies that seek academic achievement for all students. Researchers who are taking part in California's CSR Research Consortium (Bohrnstedt and Stecher 1999) urge policymakers to consider how CSR will interact with current education policies and reforms, as well as new ones. Will the policy benefit all students and schools equally? Some districts are wary of putting so many resources into CSR that they would find it difficult to implement other needed educational reforms.

The above set of questions, while far from comprehensive, should provide policymakers with a good starting point in creating dialogue with other administrators, teachers, parents, and the commu-

VIEWPOINT

Reducing the size of elementary classes can make a difference in student achievement, but it is only one of a number of reforms that need to be initiated and funded. Class size must not be allowed to be the latest 'silver bullet' that takes up a disproportionate amount of the time and resources needed to improve achievement. Teacher professional development, parental involvement, equitable access to effective instructional technology programs, alternative placement and programs for disruptive students, and clearly defined standards are equally as, if not more, important initiatives to improve student achievement."

- Miles E. Turner,
Executive Director,
Wisconsin Association
of School District
Administrators

nity about what their CSR policy should look like. EH

Bibliography

- Achilles, Charles M. *Let's Put Kids First, Finally*. Thousand Oaks, CA: Corwin Press, Inc., 1999.
- Achilles, Charles M., and William J. Price. "Can Your District Afford Smaller Classes in Grades K-3?" *School Business Affairs* 65,1 (January 1999): 10, 12-16. EJ 579 431.
- Bain, Helen Pate. *Small Class Size Once Again: An Experiment in Grade One, Metro-Nashville Public Schools*. San Francisco, California: American Educational Research Association, 1986. ED 271 196.
- Beall, Mary. *Class Size Reduction: A Golden Opportunity*. California Association for Supervision and Curriculum Development, 1998. <http://www.cascd.org/class.html>
- Black, Susan. "Less Is More." *The American School Board Journal* (February 1999): 38-41.
- Bohrnstedt, George W., and Brian M. Stecher, Eds. *Class Size Reduction in California: Early Evaluation Findings, 1996-98*. Palo Alto, California: CSR Research Consortium, 1999. 157 pages.
- Bourke, S. "How Smaller Is Better: Some Relationships Between Class Size, Teaching Practices and Student Achievement." *American Educational Research Journal* 23, 4 (1986): 558-71.
- Bradley, Ann. "'Quality' Crisis Seen in Calif. Teaching Ranks." *Education Week* 19, 15 (December 8, 1999): 1, 9.
- Darling-Hammond, L.; Linda Ball; and Deborah Loewenberg. *Teaching for High Standards: What Policymakers Need to Know and Be Able to Do*. Philadelphia: National Commission on Teaching and America's Future and the Consortium for Policy Research in Education, 1998. ED 426 491.
- Evertson, Carolyn, and Catherine Randolph. "Teaching Practices and Class Size: A New Look at an Old Issue." *Peabody Journal of Education* 67, 1 (Fall 1989): 85-105.
- Ferguson, R.F. "Paying for Public Education: New Evidence on How and Why Money Matters." *Harvard Journal on Legislation* 30 (Summer 1991): 465-97.
- Filby, N. *What Happens in Smaller Classes? A Summary Report of a Field Study—Class Size and Instruction Project*. San Francisco: Far West Laboratory for Educational Research and Development, 1980. ED 219 365.
- Finn, Jeremy. "Class Size and Students at Risk: What Is Known? What Is Next?" Washington, D.C.: National Institute on the Education of At-Risk Students, Office of Educational Research and Improvement, U.S. Department of Education, April 1998. www.ed.gov/pubs/ClassSize/title.html.
- Glass, G.V., and M.L. Smith. "Meta-analysis on Class Size and Achievement." *Educational Evaluation and Policy Analysis* 1, 1: (1979): 2-16.
- Greenwald, R.; L.V. Hedges; and R.D. Laine. "The Effect of School Resources on Student Achievement." *Review of Educational Research* 66, 3 (1996) 361-96.
- Gullo, D.F., and C.B. Buron. "The Effects of Social Class, Class Size and Pre-kindergarten Experience on Early School Adjustment." *Early Child Development and Care* 88 (1983): 43-51.
- Hanushek, Eric A. *The Evidence on Class Size*. New York: University of Rochester, Thomas B. Fordham Foundation, 1998. 4 pages. <http://www.edexcellence.net/library/size.html>
- Hanushek, Eric A. "Class Size Reduction: Good Politics, Bad Education Policy." *The High School Magazine* 6, 4 (January/February 1999): 44.
- Illig, David C. *Reducing Class Size: A Review of the Literature and Options for Consideration*. Sacramento, California: California Research Bureau, California State Library, 1996. 15 pages.
- Jacobs, R. "The Effect of Class Sizes of 1:15, 1:25 and 1:25 Plus Full-Time Aide on Kindergarten Reading Readiness Achievement." *Dissertations/Theses—Doctoral Dissertations* 41 (1987): 1-186. ED 326 863
- Johnston, J.M. *Relations Between Reduced Class Size and Reduced*
- Teacher/Pupil Ratio and Developmentally Appropriate Practice in Kindergarten Through Third Grades*. Boston: American Educational Research Association, 1990. ED 317 278.
- Joint Legislative Audit Committee. *California's Public Schools: A Needs Assessment*. Sacramento, California: Author, 1999.
- Kirst, Michael. *A Plan for the Evaluation of California's Class Size Reduction Initiative*. San Diego, California: Policy Analysis for California Education, Rand Corporation, American Institutes for Research, WestEd, April 1998.
- Lewis, Anne C. *Making Class Size Reduction Work: Stories from California's Public Schools*. Arlington, Virginia, and Sacramento, California: Educational Research Service and Association of California School Administrators, 1997. 81 pages.
- McGiverin, J.; D. Gilman; and C. Tillitski. "A Meta-analysis of the Relation Between Class Size and Achievement." *The El-*

HOW TO ORDER

Many of the items in this bibliography are indexed in ERIC's monthly catalog *Resources in Education (RIE)*. Reports in *RIE* are indicated by an "ED" number.

Journal articles, indexed in ERIC's companion catalog, *Current Index to Journals in Education*, are indicated by an "EJ" number.

Most items with an ED number are available from ERIC Document Reproduc-

tion Service (EDRS), 7420 Fullerton Rd., Suite 110, Springfield, VA 22153-2852.

To order from EDRS, specify the ED number, type of reproduction desired—microfiche (MF) or paper copy (PC), and number of copies. Add postage to the cost of all orders and include check or money order payable to EDRS. For credit card orders, call 1-800-443-3742.

If publications are available on the Internet, we have provided their URLs.

- ementary School Journal 90, 1 (1989): 47-56.
- McRobbie, Joan; Jeremy D. Finn; and Patrick Harman. "Class Size Reduction: Lessons Learned from Experience." *Policy Brief No. 23*. August 1998. http://www.wested.org/policy/hot_top/csr/ht_hm_csr.htm
- Mitchell, D. *How Changing Class Size Affects Classrooms and Students*. Riverside, California: California Educational Research Cooperative, 1989. ED 315 841.
- Murnane, Richard J., and Frank Levy. "Evidence from Fifteen Schools in Austin, Texas." In *Does Money Matter? The Effect of School Resources on Student Achievement and Adult Success*, edited by Gary Burtless. 93-96. Washington, D.C.: Brookings Institution Press, 1996. ED 399 654.
- National Commission on Time and Learning. *Prisoners of Time*. Washington, DC: U.S. Government Printing Office, 1994. 59 pages. ED 366 115.
- Nye, Barbara A.; L.V. Hedges; and S. Konstantopoulos. "The Long-Term Effects of Small Classes: A Five-Year Follow-up of the Tennessee Class Size Experiment." *Educational Evaluation and Policy Analysis* 21,2 (Summer 1999): 127-42.
- Odden, A., and C. Busch. *Financing Schools for High Performance*. San Francisco, California: Jossey-Bass, 1998.
- Pate-Bain, Helen; C. M. Achilles; Jayne Boyd-Zaharias; and Bernard McKenna. "Class Size Does Make a Difference." *Phi Delta Kappan* (November 1992): 253-56.
- Perez, Katherine D. *The ABC's of Class Size Reduction: Where Are We?* California Association for Supervision and Curriculum Development, 1998. <http://www.cascd.org/class.html>
- Robelen, Erik W. "Department Unveils Guidance on Class-Size Initiative." *Education Week* 18, 27 (March 17, 1999): 20, 36.
- Sack, Joetta L. "GOP Teacher Bill Attracts Some Democratic Supporters." *Education Week* 18, 43 (August 14, 1999): 29, 31.
- Shields, Patrick M.; Camille E. Esch; Daniel C. Humphrey; Viki M. Young; Margaret Gaston; and Harvey Hunt. *Teaching and California's Future. The Status of the Teaching Profession: Research Findings and Policy Recommendations. A Report to the Teaching and California's Future Task Force*. Santa Cruz, California: The Center for the Future of Teaching and Learning, 1999. 158 pages.
- Smith, M.L., and G.V. Glass. "Meta-Analysis of Research on Class Size and Its Relationship to Attitudes and Instruction." *American Educational Research Journal* 17, 4 (1980): 419-33.
- U.S. Department of Education. *Reducing Class Size: What Do We Know?* Washington, D.C.: Author, 1998. 17 pages. www.ed.gov/pubs/ReducingClass/
- Varble, Mary Ellen, and David Alan Gilman. *A Study of the Relationship Between Class Size and Achievement*. Terra Haute: Indiana State University, 1988. ED 291 527.
- Word, Elizabeth. *Student/Teacher Achievement Ratio (STAR) Tennessee's K-3 Class Size Study. Final Summary Report 1985-1990*. Nashville: Tennessee State Department of Education, 1990. 35 pages. ED 320 692.
- Ziegler, Suzanne. "Class Size, Academic Achievement, and Public Policy." *Connections* 1, 1 (November 1997): 1-8.

WANT TO KNOW MORE?

For other resources on class size, visit the ERIC Clearinghouse on Educational Management website: <http://eric.uoregon.edu>

In addition to the full text of this *Policy Report*, you'll find abstracts of ERIC documents on class size, a set of website links, and an *ERIC Digest* titled "Capitalizing on Small Class Size."

UNIVERSITY OF OREGON



Clearinghouse on Educational Management

5207 University of Oregon
Eugene, Oregon 97403-5207

(800) 438-8841

Attachment B

Ivor Pritchard, "Reducing Class Size: What Do We Know," U.S. Department of Education, Office of Educational Research and Improvement, November 1999; available online at www.ed.gov/pubs/ReducingClass/Class_size.html

Reducing Class Size

What Do We Know?

Ivor Pritchard

National Institute on Student Achievement, Curriculum and Assessment

Office of Educational Research and Improvement

U.S. Department of Education

Introduction

Research and common sense suggest that smaller classes offer teachers the chance to devote more time to each student so as to improve their learning. A number of states have already implemented class size reduction programs, and others are in the process of development. Skeptics worry that reducing class size will increase costs without producing substantial benefits, however, and class size reduction programs certainly present challenging problems as well as opportunities. Does reducing class size really improve students' education? Should teachers hired to teach in smaller classes be prepared differently? Will hiring more teachers in order to reduce class size exhaust the supply of qualified teachers? The available research evidence contains some useful guidance for educators and policymakers who face these questions as they try to craft the most beneficial class size reduction strategies.

Research on Class Size

Researchers have used various techniques to study how class size affects the quality of education. They have looked at the relationship between class size and student achievement, and have conducted various kinds of studies related to class size and its possible influences on educational practice. In the last 20 years, enough research has been done for researchers to have taken the results of many experiments and data collections and synthesized the accumulated findings into general conclusions. In some analyses, the researchers have used data about student/teacher ratios as a means to examine the class size effects, because the original research lacked a direct measure of class size. Some of the statistical analyses in the last 10 years have been quite large in scale.

Several recent experimental studies have contributed substantially to the research knowledge about class size. Not all the questions about the impact of

class size reductions have been answered, nor have all the debates been settled. Overall, however, the pattern of research findings points more and more clearly toward the beneficial effects of reducing class size.

Research Syntheses

Several major analyses have used various analytical methods to draw conclusions through reviews of already existing research studies. The methods used and the studies included vary somewhat, but most of them have concluded that reducing class size is related to increased student learning:

- In 1978, Smith and Glass published a *meta-analysis* combining the results of 77 empirical studies pertaining to the relationship between class size and achievement, and soon followed it with a second meta-analysis analyzing the relationship between class size and other outcomes. Overall, they found that small classes were associated with higher achievement at all grade levels, especially if students were in the small classes for more than 100 hours, and if student assignment was carefully controlled. They found that the major benefits of reducing class size occurred where the number of students in the class was fewer than 20. In their second study, they concluded that small classes were superior in terms of students' reactions, teacher morale, and the quality of the instructional environment.¹
- In 1989, Slavin employed a *best evidence synthesis* strategy to analyze empirical studies that met 3 specified criteria: a study was included only if class size had been reduced for at least a year, classes of less than 20 students were compared to substantially larger classes, and students in the larger and smaller classes were comparable. Slavin found that reduced class size had a small positive effect on students that did not persist after their reduced class experience.²
- In 1986, Robinson and Wittebols published a review of more than 100 relevant research studies using a *related cluster analysis* approach. Similar kinds of research studies were "clustered" or grouped together, such as studies of the same grade level, subject area, or student characteristics. They concluded that the clearest evidence of positive effects is in the primary grades, particularly kindergarten through third grade, and that reducing class size is especially promising for disadvantaged and minority students. At the same time, they cautioned that positive effects were less likely if teachers did not change their instructional methods and classroom procedures in the smaller classes.³

Other research analyses have concluded that class size reduction does not have an appreciable effect. Tomlinson examined trend data from the 1950s to 1986 in the United States and did not find any consistent relationship between class size and standardized test scores; he concluded that the existing research did not justify a policy to reduce class size, in view of the costs involved and the potential negative impact on the quality of the teaching force.⁴ Critics pointed out that this

analysis combined students from all grade levels together, that the reliance on student/teacher ratios was an inadequate measure of class size, and that Tomlinson ignored a host of intervening factors and social changes which may have masked the relationship.⁵ Odden reviewed the existing research and argued that a system-wide class reduction policy would produce only modest gains in student achievement and incur an unjustifiably high cost. He opted instead for certain targeted class reduction strategies in conjunction with a series of other interventions, and claimed that his proposals could produce greater benefits with lower costs.⁶ An analysis of the relationship between class size and student achievement for Florida students using 1993-94 school level data found no relationship between smaller classes and student achievement; however, the study's authors expressed caution about drawing conclusions from the analysis, based on the limitations of the available data.⁷

More positive conclusions have been drawn from an analysis of a substantial database about the Texas education system. Using data from more than 800 districts containing more than 2.4 million students, Ferguson found significant relationships among teacher quality, class size, and student achievement. For first through seventh grades, using student/teacher ratio as a measure of class size, Ferguson found that district student achievement fell as the student/teacher ratio increased for every student above an 18 to 1 ratio. Measures of teacher quality (that is, teacher literacy skills and professional experience) were even more strongly related to higher student scores.⁸

Hanushek has repeatedly reviewed the available studies that permit a comparison of various school resource inputs—including class size reductions—and student outcomes and has concluded that reducing class size should not be expected to produce better student performance. His analyses have found that the relationships between various school expenditures—including class size reductions—and student achievement are remarkably weak, leading him to call for a drastic re-thinking of public education policy. Others⁹ have used somewhat different analytical techniques to examine the same data and have disputed Hanushek's conclusions, arguing that the data do show important effects for student achievement, including the influence of smaller classes.¹⁰ Still others have raised questions about the limitations of the basic analytical approach used here because it relies on student/teacher ratios as a measure for class size, it usually groups the data for all grade levels together, and the data represent student achievement at the level of school or school district average scores instead of representing individual students placed in larger or smaller classes.¹¹

A National Scale Analysis of Data Related to Class Size

In 1997, Wenglinsky published research findings concerning the relationship between class size and student achievement based on his analysis of data drawn from three national level databases. The study was designed to investigate the relationship between spending in education and student performance, and combined data from three different databases generated by the National Center for Education Statistics. Based on an analysis of data on

fourth-graders in 203 districts and eighth-graders in 182 school districts from across the United States, Wenglinsky found that class size served as an important link between school education spending and student mathematics achievement at both the fourth- and the eighth-grade levels, although in different ways:

- At the fourth-grade level, lower student/teacher ratios are positively related to higher mathematics achievement.
- At the eighth-grade level, lower student/teacher ratios improve the school social environment, which in turn leads to higher achievement.

For purposes of the analysis, Wenglinsky divided the school districts included in the study according to whether they served above-average or below-average socioeconomic status students, and whether they had above-average or below-average teacher costs. With respect to these four subgroups of districts, the largest effects for mathematics achievement gains occurred in districts where there were below-average socioeconomic status students, accompanied by above-average teacher costs.¹²

Recent Experimental Studies of Class Size

Data from several more recent initiatives have added considerably to the research evidence concerning class size reduction in the United States in the early primary grades. Efforts in Indiana, Tennessee, North Carolina, and Wisconsin have reported important data, with the Tennessee projects currently providing the most complete and well-designed study of class size reduction effects.

Indiana

Beginning in 1984, Indiana's *Prime Time* project allocated money to support the reduction of class size to 18 in first-, second-, and then kindergarten and third-grade classrooms. Implementation of *Prime Time* was not rigorously controlled, and the results were mixed. An evaluation of the *Prime Time* project analyzed achievement scores for first- and second-grade students, comparing mean class scores in reading and mathematics from 10 school districts for tests that were administered the year immediately preceding the project with tests administered in the first year of the project. In these districts, the average first-grade class size was reduced from 22 to 19 students, and in second grade from 21 to 20 students. Tests of student achievement found that for students in the smaller classes, the reading scores for first-graders showed the greatest improvement, with smaller gains in mathematics.¹³

Tennessee

Tennessee's *Project STAR* (Student-Teacher Achievement Ratio) and two associated data collections have made important contributions to the quality of research evidence concerning the reduction of class size. *STAR* was a 4-year longitudinal study of kindergarten, first-, second-, and third-grade classrooms in

Tennessee which began in 1985. *STAR* compared classes of 13-17 students with classes of 22-26 students both with and without an additional instructional aide in the larger classes. Participating teachers did not receive any professional training focusing on teaching in reduced size classes. *STAR* was unusual because it possessed essential features of a controlled research experiment designed to produce reliable evidence about the effects of reducing class size:

- *Study size.* *Project STAR* included 79 schools, more than 300 classrooms and 7,000 students, with students being followed through 4 years of experience in the given class size.
- *Random assignment.* Teachers and students were randomly assigned to the three different kinds of classes in order to ensure that the study was not biased by who was in which type of class.
- *In-school design.* All participating schools implemented at least one of each of the three types of classes in order to cancel out the possible influences coming from variations in the quality of the participating schools that might affect the quality of the classroom activity.

The evidence from student testing in *STAR* showed that the students in the smaller classes outperformed the students in the larger classes, whether or not the larger class teachers had an aide helping them. *Project STAR* found that:

- Smaller class students substantially outperformed larger class students on both standardized (Stanford Achievement Tests) and curriculum-based tests (Basic Skills First). This was true for both white and minority students in smaller classes, and for smaller class students from inner city, urban, suburban, and rural schools.
- The positive achievement effect of smaller classes on minority students was double that for majority students initially, and then was about the same.
- A smaller proportion of students in the smaller classes was retained in-grade, and there was more early identification of students' special educational needs.
- There were no significant differences in academic achievement for students in the larger classes with or without an additional instructional aide.¹⁴

Subsequent research efforts provided important additional evidence on the positive effects of class size reduction. In 1989, the *Lasting Benefits Study* began a follow-up study to examine whether the effects of the smaller class size experience persisted when students were returned to normal size classes. The study is still ongoing. To date, the research findings include:

- In fourth grade, students from the smaller classes still outperformed the students from the larger classes in all academic subjects.

- In fourth grade, students from the smaller classes were better behaved than students from the larger classes (i.e., student classroom effort, initiative, and disruptiveness).
- At least through eighth grade, a decreasing but still significant higher academic achievement level for the students from the smaller classes persists.¹⁵

In *Project Challenge*, Tennessee sought to put the *Project STAR* findings to use by implementing smaller class sizes in 16 of the state's poorest school districts. Beginning in 1990, the state phased in smaller classes at the kindergarten through third-grade levels in districts with the lowest per capita income and highest proportion of students in the subsidized school lunch program. The results of this effort were evaluated by examining the effect on the ranking of the school districts according to student performance on a statewide achievement test. The *Project Challenge* districts moved from near the bottom of school district performance in Tennessee to near the middle in both reading and mathematics for second grade.

<i>Project Challenge</i> districts' average rankings before and after class size reduction, according to second-grade student achievement in reading and mathematics		
Total number of districts in Tennessee: 138	Average ranking of <i>Project Challenge</i> districts before class size reduction (1990)	Average ranking of <i>Project Challenge</i> districts after class size reduction (1993)
Second-Grade Reading Achievement	99 th	78 th
Second-Grade Mathematics Achievement	85 th	57 th

In addition, in-grade retention of students was reduced in the *Project Challenge* districts when smaller classes were implemented.¹⁶

Taken together, the Tennessee studies have been viewed as landmark research. Finn concluded that "this research leaves no doubt that small classes have an advantage over larger classes in school performance in the early primary grades."¹⁷ Mosteller, Light, and Sachs called it "... one of the great experiments in education in U.S. History."¹⁸ Krueger, in an external re-analysis of the *Project STAR* data, re-confirmed the original finding that "students in small classes

scored higher on standardized tests than students in regular classes" even when the data analysis took into account adjustments for school effects, attrition, re-randomization after kindergarten, nonrandom transitions, and variability in actual class size.¹⁹ *Project STAR* and the associated Tennessee studies provide the strongest evidence available to date regarding the positive effects of class size reduction.

Burke County, North Carolina

A recent initiative to reduce class size in Burke County, North Carolina, has also produced noteworthy data. Beginning in 1990, Burke County pilot-tested and then phased in a class size reduction project in the county school district. In 1995-96, 1,193 first-graders and 1,125 second-graders participated in the initiative. The program's goal has been to reduce class size to 15 students in all first-, second-, and third-grade classes. The Burke County project also included professional development activities covering instruction and assessment, and so the effects are not necessarily simply a function of reducing class size. Evaluation of the initiative has produced the following findings:

- Compared to a matched group of students in classes that had not been phased into the smaller class initiative, students in the smaller classes outperformed the comparison group in first, second, and third grades on both reading and mathematics achievement tests.
- Based on independent observations of classroom activity, the percentage of classroom time devoted to instruction in the smaller classes increased from 80 percent to 86 percent compared to the larger classes, while the percentage of time devoted to non-instructional activities such as discipline decreased from 20 percent to 14 percent.²⁰

Wisconsin

Beginning in 1996-97, Wisconsin began a class size reduction program called the *Student Achievement Guarantee in Education (SAGE) Program*. The SAGE Program's objective is to phase in class size reduction in kindergarten through third grade in school districts serving students from low-income families. The SAGE Program reduced class sizes in kindergarten and first grade in 1996-97, added class size reductions in second grade in 1997-98, and added third grade class size reductions in 1998-1999. Its aim is to reduce class size in the appropriate grade levels to a student teacher ratio of 15 to 1 or less. SAGE program classroom arrangements in the first two years of implementation were several, including regular classrooms with 1 teacher and 15 students, 2 teacher teams with 30 students, and 4 other types of arrangements reflecting the constraints of existing classroom settings and teacher assignments. In the 1997-98 school year there were 30 schools from 21 school districts participating in the SAGE program, and 14 schools in 7 districts providing comparison student background and achievement data for an evaluation study of the program that is ongoing.

SAGE and comparison school students' academic learning was measured at the beginning and end of the first-grade year, and again at the end of the second-grade year. The students' scores were compared to those of students in matching comparison schools serving similar populations of students, with the following results:

- *SAGE* first-grade students performed consistently better than comparison students in mathematics, reading, language arts, and total scores for the Comprehensive Test of Basic Skills.
- The achievement gap lessened between white and African-American students in the *SAGE* smaller classes in the first grade, in contrast to a widening of the gap between white and African-American students in the larger classes of the comparison schools.
- Second-grade *SAGE* students' academic achievement remained higher than that of the comparison school second-graders, but the difference did not increase substantially.

These findings are consistent with the findings in *Project STAR*, but there are two important qualifications to make regarding the *SAGE* project data. First, these are second year evaluation data from an ongoing study, and so the findings of this research may change substantially as the program is phased in and additional data analyses are performed. Second, the *SAGE* project class size reductions were accompanied by other program initiatives: participating schools were also required to implement a rigorous academic curriculum, provide before and after school activities for students and community members, and implement professional development and accountability programs. Data analysis in the second year evaluation suggests that these other components of the *SAGE* program have not had an impact on student achievement, but it is still possible that the other components may exert some influence.²¹

Summary Research Conclusions

Overall, the pattern of findings drawn from the existing research leads to the following three conclusions:

1. A consensus of research indicates that class size reduction in the early grades leads to higher student achievement. Researchers are more cautious about the question of the positive effects of class size reduction in 4th through 12th grades. 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, and continue to increase as class size approaches the situation of a 1-to-1 tutorial.
2. The research data from the relevant studies indicate that if class size is reduced from substantially more than 20 students per class to below 20 students, the related increase in student achievement moves the average student from the 50th percentile up to somewhere above the 60th percentile. For disadvantaged and minority students the effects are somewhat larger.
3. Students, teachers, and parents all report positive effects from the impact of class size reductions on the quality of classroom activity.

State Initiatives

Large-scale efforts to reduce class size have not been limited to Indiana and Tennessee. Some states initiated targeted class size reduction policies some time ago, while others are only in the early stages of development and implementation. In 1984, Texas passed legislation requiring class size to be limited to 22 students in kindergarten through 4th grade, with the provision going into effect for kindergarten through 2nd grade in 1985-86 and for 3rd and 4th grade in 1988-89.²² Nevada began a class size reduction program in 1990-91, beginning with a target of a 15 to 1 student/teacher ratio for kindergarten and 1st grade, then applying that ratio in 2nd grade and 3rd grade, to be followed by efforts to reduce the ratio to 22 to 1 for 4th through 6th grade, and then 25 to 1 for 7th through 12th-grade.²³ In 1995, Virginia began an effort to reduce class size in kindergarten through 3rd-grade classes for at-risk students, using a strategy in which local systems that devote funds to the voluntary program may receive matching funds from the state.²⁴ Other states reported to be involved in or considering some sort of class size reduction initiative include Arizona, Connecticut, Florida, Georgia, Hawaii, Illinois, Iowa, Kansas, Kentucky, Louisiana, Massachusetts, Michigan, Minnesota, Nebraska, New Hampshire, New York, North Carolina, Oklahoma, and Utah.²⁵

In the 1996-97 school year, California began its *Class Size Reduction Program*, through which it is giving money to school districts for the purpose of reducing

the student/teacher ratio to 20 to 1 in kindergarten through third grade.²⁶ The California *Class Size Reduction Program* represents an important initiative whose implementation may provide instructive lessons. In the 1997-98 school year, 1.9 million children were assigned to smaller classes in California schools. California school districts hired 18,000 new teachers in 1996, and almost one-quarter of them had no teaching credentials. Districts also have had to use various means to create sufficient classroom space.²⁷ Class size reduction clearly increases the demand for more classrooms and qualified teachers. Implementation of class size reduction policies on a large scale require careful planning and attention.

The impact of class size reduction reforms, their cost, and their relationship to professional development are major questions facing current education reform in the United States. Only with information about these questions will policymakers be able to make knowledgeable decisions about the cost-effectiveness and feasibility of various reform options.

Discussion

Why Do Smaller Classes Make a Difference?

The higher student achievement brought about by class size reduction may result from some of the ways in which reducing class size naturally alters the classroom environment. On being assigned to smaller classes, teachers report that the classroom atmosphere is better, that students can receive more individualized attention, and that the teachers have more flexibility to use different instructional approaches and assignments.²⁸ One unanticipated result of the Burke County reduced class size initiative was that the teachers found themselves with more classroom space to work with, because they were using the same classrooms with smaller numbers of students.²⁹ Class size reduction also changes the educational opportunities beyond the classroom, insofar as teachers have a larger portion of time to devote to working with each of their students' parents.

Class size reduction changes numerous features of the classroom situation. There are fewer students to distract each other. Each student in a reduced size class gets more attention on average from the teacher, and more time to speak while the others listen. Reduced class size also reduces the level of noise in a class. One theory offered to explain the positive effects of class size reduction on student achievement simply argues that in smaller classes each student receives a larger portion of the educational resources represented by the teacher's instructional time, and consequently, learns more.³⁰

Other researchers have drawn attention to the *quality* of teaching in smaller classes, rather than the *quantity*. The *SAGE* evaluation study used teacher interviews, classroom observation, and other data-gathering techniques to study what happens in smaller classes, and these researchers suggest that students are benefiting from more *individualized* attention. The teachers know each of their students better, and can keep track of how each student is doing on the

learning task of the moment. This knowledge enables the teacher to intervene more effectively to help the individual student make progress.³¹

Researchers also have suggested that smaller classes are more likely to be "friendlier" places, where students develop better relationships with their classmates and with the teacher, encouraging students to become more engaged in classroom learning activities. The smaller the class, the harder it is to escape the positive influence of the classroom educational experience. The explanation for why reduced class size is especially beneficial in the early grades may derive from the fact that in the early grades children are learning how to be students in classrooms where the number of people is larger than the number of people in their families and students are learning a new routine.³² This socialization theory is also consistent with the research finding in both *Project STAR* and *SAGE* that the largest increase in student achievement occurs in the first year of a student's experience in a smaller class.³³

These various explanations for why class size reduction increases student achievement are not incompatible with each other, and they do not preclude other potential influences. It may be that class size reduction improves student achievement because there is more time for learning *and* more individualized attention *and* a better introduction to classroom routine. And if teachers were trained to adapt their teaching in other ways that are suited to smaller classes, such as initiating different kinds of student activities that are possible in smaller classes, this might produce an additional benefit.

The focus on class size reduction in the early grades also suggests that smaller classes represent a preventive, rather than a remedial, approach. If smaller classes help students start off on the right foot in learning how to adjust to the classroom situation and get engaged in learning activities, then students avoid the more difficult educational path of falling behind, finding help, and catching up to their schoolmates.

When is a Reduction Not a Reduction?

The question of class size is not simply a matter of less is more. The pattern of research evidence only favors class size reduction if it is substantial and brings the class size below a certain threshold. Reducing class size from 30 to 25, for example, may well have no effect whatsoever. The research evidence from *Project STAR* showed that students in smaller classes with fewer than 18 students did better when compared with students in larger classes. Given the variations among individual students and teachers and the way they interact, it is unlikely that there is a single "magic number" below which class size suddenly produces a beneficial effect. But it is fairly clear that class size must get somewhere below 20 in order to make a real difference.

Reducing the ratio of students to teachers does not necessarily mean a reduction in class size. This issue was a complicating factor in most of the research studies described earlier, where questions were raised about the adequacy of using the student/teacher ratio as a measure of class size. Policy initiatives may aim to

change the ratio of students to teachers, and if reduced class size is key, such initiatives may miss the mark. Some initiatives permit officials to include other education staff besides the classroom teachers in the calculation of the ratio, such as resource teachers in special education, music, and physical education. Consequently, school systems could increase the number of teachers without necessarily reducing class size; and particularly since the number of available classrooms is both a practical and a budget issue, officials may be tempted to solve the ratio problem by adding another teacher to a larger class. The research findings from *Project STAR* and *SAGE* are relevant here: In *Project STAR*, the larger classes with instructional aides did *not* produce the same benefits as the smaller classes; in the *SAGE* program, however, the increase in student achievement occurred in both the 15:1 and the 30:2 student/teacher classrooms.

Reducing class size does not necessarily reduce the teacher's workload, or even the number of students they teach each day.³⁴ If a teacher is assigned to teach more classes because the number of students in each class is reduced, the teacher spends more time teaching and has no fewer students. Such problems might be resolved by strategies such as year-round schooling, but this still implies either that teachers teach all year or that more teachers get hired. The common assumption is that smaller classes allow teachers to increase the time devoted to each student, either individually or in smaller groups, and thereby improve the quality of the students' education. If this assumption is true, successful class size reduction programs will have to attend to the impact on teachers' workloads.

School arrangements that reduce class size only for particular students or subjects may achieve greater results with lower costs, depending on how they are organized and what exactly makes the smaller class experience better. It may be more important to reduce class size for reading than for physical education, and the research suggests that minority and economically disadvantaged students benefit most from smaller classes. Educators and policymakers should not blindly assume that an across-the-board, across-the-school-day approach to class size reduction is best.³⁵

School officials and policymakers also have to face the problem of the effect of class size reduction on the supply of teachers. If the supply of teachers remains the same and class size reduction increases the demand, then it would seem that class size reduction policies will result in the hiring of less qualified teachers. Right now many states are having trouble finding qualified teachers to hire. With the current concerns about teacher quality in general, and the call for professional development focusing on teaching in smaller classes, policymakers want to strengthen teacher quality, not weaken it. It may be, however that class size reduction policies will not have such a detrimental effect on teacher quality. Currently, many teachers leave the classroom after only a few years to pursue some other profession. Class size reduction might lessen this problem of teacher attrition, because of its popularity. If teachers find teaching in a smaller class more personally rewarding, they may stay in the profession longer, decreasing

the frequency of the need to hire and train new teachers. Only the future will tell if this potential benefit of class size reduction will come to pass.

What Do Teachers Do or Not Do, and How Might They Do Better?

Effective professional training may augment the positive effects of reduced class size beyond whatever gains are generated by reduced class size alone. Reduced classes offer teachers the opportunity to teach differently from the way they teach in larger classes. They don't have to spend as much time lecturing, for example, or having all the students doing worksheets at their own desks. Having more time for students means that teachers can organize classroom learning activities differently and have students demonstrate their achievement through exercises that don't have to be read or corrected in the shortest time possible. In the Burke County project, for example, the reduced class size initiative was coupled with professional development activities designed to enable teachers to use different instructional strategies and different assessment methods. Wisconsin's *SAGE* Program also includes professional development efforts. If schools are going to devote substantial energy and resources to reducing class size, the extent of the benefits derived from such efforts may depend in part on how teachers take advantage of the smaller class size to improve the quality of students' educational experiences.

Teachers do not necessarily change their behavior when they move to smaller classes. In one observational research study, even though the teachers assigned to smaller classes thought they were teaching differently, the independent observers saw no discernable difference in teacher behavior.³⁶ Research studies suggest that teachers do not just automatically change their behavior to optimize the potential benefits of smaller class size,³⁷ and there is a considerable body of research that shows that creating substantial changes in teachers' classroom behavior is no easy feat. Both teachers who are used to teaching in larger classes and teachers newly hired due to the hiring needs associated with class size reduction initiatives will need to have professional training and support to enable them to utilize more fully the advantages of smaller classes. It is clear that many schools will face this challenge in the coming years. The best ³⁸ ways to meet that challenge remain to be found.

Conclusion

Reducing class size to below 20 students leads to higher student achievement. However, class size reduction represents a considerable commitment of funds, and its implementation can have a sizable impact on the availability of qualified teachers. Strengthening teacher quality also leads to higher student achievement. There is more than one way to implement class size reduction, and more than one way to teach in a smaller class. Depending on how it is done, the benefits of class size reduction will be larger or smaller.

Endnotes

1. Glass, Gene V., Leonard S. Cahen, Mary L. Smith, and Nikola N. Filby. 1982. *School class size: Research and policy*. Beverly Hills, CA: Sage.
2. Finn, Jeremy D. 1998. *Class size and students at risk: What is known? What is next?* Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Institute on the Education of At-Risk Students.
3. Robinson, Glen E. and James H. Wittebols. 1986. *Class size research: A related cluster analysis for decision-making*. Arlington, VA: Education Research Service.
4. Tomlinson, Tom. 1988. *Class size and public policy: Politics and panaceas*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
5. See Finn 1998 and Charles M. Achilles, 1996. "Students achieve more in smaller classes." *Educational Leadership* 53 (5): 76-77.
6. Odden, Allan. 1990. "Class size and student achievement: Research-based policy alternatives." *Educational Evaluation and Policy Analysis* 12 (2): 213-227.
7. Florida Department of Education. Office of Policy Research. 1998. "The relationship of school and class size with student achievement in Florida: An analysis of statewide data." www.firn.edu/doe/bin00048/home0048.htm.
8. Ferguson, Ronald F. 1991. "Paying for public education: New evidence on how and why money matters." *Harvard Journal on Legislation* 28 (2): 465-498.
9. Hanushek, Eric A. 1998. "The evidence on class size." Public Testimony, Washington, DC.
10. Greenwald, Rob, Larry V. Hedges, and Richard D. Laine. 1996. "The effect of school resources on student achievement." *Review of Educational Research* 66 (3): 361-396. See also Hanushek, Eric A. 1996. "A more complete picture of school resource policies." *Review of Educational Research* 66 (3): 397-409 and Greenwald, Rob, Larry V. Hedges, and Richard D. Laine. 1996. "Interpreting research on school resources and student achievement: A rejoinder to Hanushek." *Review of Educational Research* 66 (3): 411-416.
11. See Finn 1998 and Achilles 1996.
12. Wenglinsky, Harold. 1997. *When money matters: How educational expenditures improve student performance and how they don't*. Princeton, NJ: The Educational Testing Service, Policy Information Center.
13. Mueller, Daniel J., Clinton I. Chase, and James D. Walden. 1988. "Effects of Reduced Class Size in Primary Classes." *Educational Leadership* 45 (7): 48-50.

14. Achilles, Charles M., Barbara A. Nye, Jayne B. Zaharias, B. DeWayne Fulton, and C. Cain. 1996. "Education's Equivalent of Medicine's Framingham Heart Study." Washington, DC: ERIC Clearinghouse. ED 402677. See also Mosteller, Frederick. 1995. "The Tennessee Study of Class Size in the Early School Grades." *The Future of Children* 5 (2): 113-127.
15. Finn 1998. Nye, Barbara, B. DeWayne Fulton, Jayne Boyd-Zaharias, and Van A. Cain. 1995. *The Lasting Benefits Study, Eighth Grade Technical Report*. Nashville, TN: Center of Excellence for Research in Basic Skills, Tennessee State University.
16. See Mosteller 1995, Finn 1998, and Kickbusch, Ken. 1996. "Class Size." Madison, WI: Wisconsin Education Association Council, Professional Development Division.
17. Finn 1998. p. 8.
18. Mosteller, Frederick, Richard J. Light, and Jason A. Sachs. 1996. "Sustained Inquiry in Education: Lessons from Skill Grouping and Class Size." *Harvard Educational Review* 66 (4): 797-842.
19. Krueger, Alan. March 1998. *Experimental Estimates of Education Production Functions*. Princeton University and NBER.
20. Egelson, Paula, Patrick Harman and Charles M. Achilles. 1996. *Does Class Size Make a Difference? Recent Findings from State and District Initiatives*. Washington, DC: ERIC Clearinghouse. ED 398644. See also Finn 1998.
21. Molnar, Alex, Stephen Percy, Phillip Smith, and John Zahorik. December 1998. "1997-98 Results of the Student Achievement Guarantee in Education (SAGE) Program." Milwaukee, WI: University of Wisconsin-Milwaukee.
22. Texas Education Agency. 1998. "Update on Class Size Waivers, Bilingual Education Exceptions, and Waivers for English as a Second Language." www.tea.state.tx.us/sboe/schedule/9801/dppef010.html
23. Sturm, Pepper. 1997. "Nevada's Class-Size Reduction Program." Carson City, NV: Senate Committee on Human Resources. www.leg.state.nv.us/lcb/research/bkground/97-07.HTM. See also Egelson et al. 1996.
24. Egelson et al. 1996.
25. Achilles et al. 1996 and AIR, RAND, PACE, and EdSource. 1998. *Evaluating California's Class Size Reduction Initiative: The Year 1 Data Collection Component*. Grant proposal submitted to the Koret Foundation, Palo Alto, CA.
26. California. Senate. "Class Size Reduction." S.B. 804. Chaptered August 18, 1997.
27. AIR et al. 1998.
28. Mosteller 1995, Kickbusch 1996, and Maier et al. 1997.
29. Egelson et al. 1996.

30. Mitchell, Douglas, Christi Carson, and Gary Badarak. 1989. *How Changing Class Size Affects Classrooms and Students*. Riverside, CA: California Educational Research Cooperative, University of California.
31. Molnar et al. 1998.
32. Finn 1998.
33. Krueger 1998, Molnar et al. 1998.
34. Kickbusch 1996.
35. See Odden 1990 and Mitchell et al. 1989.
36. Wright, Edgar N., Stanley M. Shapson, Gary Eason, and John Fitzgerald. 1977. *Effects of Class Size in the Junior Grades: A Study*. Toronto, Ontario: Ontario Ministry of Education, Ontario Institute for Studies of Education. See also Molnar et al. 1998.
37. See Mitchell et al. 1989 and Robinson and Wittebols 1986.
38. One research study currently under way is being carried out by Brian Stecher and Cathleen Stasz of the RAND Corporation, with funding from the Field-Initiated Studies Program in the Office of Educational Research and Improvement, U.S. Department of Education. This study, entitled "The Effects of Class Size Reduction on Students Opportunities to Learn," is investigating whether reduced class size classes are related to changes in the various kinds of learning opportunities experienced by students.

Attachment C

National Conference of State Legislatures, "Small Learning Communities," June 2002; available online at www.ncsl.org/programs/employ/slc.htm.



Education

Small Learning Communities

June 2002

Summary

In the last fifty years, the average size of high schools has changed from having fewer than 1,000 students to now having over 1,500 students. Research overwhelmingly supports the notion that students in kindergarten through high school are more successful when they attend small schools. In fact, smaller learning environments positively affect grades, test scores, attendance rates, graduation rates, drug and alcohol use, and school safety. Moreover, smaller, more personalized learning structures seem to provide the setting for other high school reforms, perhaps because change is easier to implement in a smaller setting. In *Schools that Work: America's Most Innovative Public Education Programs*, the author suggests that making schools smaller is the first step toward enhancing school conditions and improving student outcomes (1992). Analysis of various high school reform efforts also underscores "scaling down" as a common contributor for success. Smaller schools can more readily provide students with mentors, tutors and advisors; make learning more meaningful by linking it to life-experiences and community; and provide adequate time and support for mastery of knowledge and skills.

Variations on Small Learning Communities

Schools-within-schools are small, autonomous programs housed within larger school buildings. Schools-within-schools are generally responsible to the district rather than to the host school's principal, and are formally authorized by the superintendent and/or board of education. Schools-within-schools have their own culture, program, personnel, students, budget and school space. Both students and teachers choose to affiliate with schools-within-schools.

Career Academies are "schools-within-schools" organized around career themes. They integrate academic and vocational instruction, provide work-based learning opportunities for students and prepare students for postsecondary education and employment, with the personalized learning environment of a small community. Teachers and students integrate academic and occupation-related classes as a way to enhance real-world relevance and maintain high academic standards. Local employer partnerships provide program planning guidance, mentors and work internships. Career academies place an emphasis on building relationships between students and adults—teachers as well as work-site supervisors and other employer representatives. The school-within-a school structure supports constructive relationships between and among students and teachers by grouping students together each year to take core courses with the same group of teachers, thus increasing the support students receive.

House plans divide students in a large school into groups of several hundred, including students from 9th or 10th through 12th grade. Students take some or all courses with their house members and from their house teachers. House arrangements may be yearlong or multi-year arrangements. House plans personalize the high school experience but usually have limited effect on curriculum or instruction. Each house usually has its own discipline plan, social activities and student government.

Magnet Programs use a specialty core focus such as math, science, creative arts, or a career theme or cluster, to attract students from the entire school district. Some magnet programs have competitive admission requirements while others are open to any interested student. Students in a magnet program stay together for their core classes and may take other courses with non-magnet students.

Small schools are the most independent model. They are created through restructuring the students, staff and space of an existing school. Even when they are housed within a larger school building, small schools are more like small freestanding schools than like "programs" within comprehensive schools.

What the Research Shows

Smaller schools support academic achievement. Student achievement in small schools is at least equal, and possibly higher, in small schools relative to larger schools. The findings on academic achievement are equally divided; approximately half the studies show that students do no worse in small schools than in larger ones; while the other half finds students in small schools do better on measures such as school grades, test scores, honor roll membership, subject-area achievement, and higher-order thinking skills assessments (Cotton, 1996).

Here are a few examples from *The Class-Size Reduction Program, Boosting Student Achievement in Schools Across the Nation: A First-*

Year Report, suggesting that small schools breed academic achievement:

- The 2000 RAND study entitled, *Improving Student Achievement: What State NAEP Test Scores Tell Us*, examined 1990, 1992, 1994 and 1996 National Assessment of Educational Progress (NAEP) data from representative samples of 2,500 students in 44 states to look at the effect of state characteristics, including class size, on student achievement. The study showed that, controlling for students' family backgrounds, states with the lowest pupil-teacher ratios in the early grades had the highest NAEP scores.
- The American Institutes for Research analyzed the performance of a national sample of schools on their respective state assessments. The study concluded that reduced class size is significantly related to higher academic performance, particularly in reading. The positive impact of smaller classes on reading achievement also was found in middle and high schools. This study showed that students benefited not only from small class sizes but gained additional benefit from attending high schools with lower enrollment overall.

Smaller schools promote academic equity. Smaller schools help close the achievement gap between students from higher income, mostly white and Asian-American families and students from lower-income, mostly African American and Hispanic-American families (Klonsky, 1998). For ethnic minority students and students of low socioeconomic status, the effects of small schools are especially positive, helping reduce the damaging effects of poverty on student achievement; conversely, large schools have an especially negative impact on those students relative to all students (Cotton, 1996; Howley and Bickel, 2000). In fact, the correlation between poverty and low achievement is as much as ten times stronger in larger schools than in small ones (Howley and Bickel, 2000).

Student attitudes and behavior are more positive in smaller schools, with minority and low socioeconomic status students most profoundly affected. Multiple studies have associated small schools with students' positive attitudes toward school, as well as the lower incidence of negative social behaviors such as truancy, classroom disruption, vandalism, aggressive behavior, theft, substance abuse and gang participation (Cotton, 1996). The Independent Educational Priorities Panel recently completed a study of the first year of the class-size reduction program in New York City. Among improvements reported as a result of smaller classes were:

- Noticeable declines in the number of disciplinary referrals;
- Improved teacher morale;
- A focus on prevention rather than remediation; and
- Higher levels in classroom participation by students (*The Class-Size Reduction Program, Boosting Student Achievement in Schools Across the Nation: A First-Year Report*).

Extracurricular participation rates are higher in smaller schools. Of all the research on small school impacts, the most well documented finding is that students in small schools participate in extracurricular activities to a greater extent and in a wider variety (Cotton, 1996). This is especially significant since extracurricular participation is associated with other desirable outcomes, such as positive attitudes and social behavior. Students in small schools generally enjoy participating in extracurricular activities more than students in larger schools.

Attendance is higher and dropout rates lower in smaller schools. Smaller schools have higher attendance rates than larger schools, and attendance improves for individual students who transfer from large to smaller schools. Small schools have a relatively greater impact on attendance of minority and low socioeconomic status students and have lower dropout rates and higher graduation rates than large schools; states with the largest school and school districts have the highest dropout rates (Cotton, 1996).

Students feel better about themselves and others in smaller schools. Students' perceptions of themselves academically and generally are higher in small schools, and they feel more connected to teachers and to each other. Interpersonal relations are better both among students and between students and teachers (Cotton, 2000).

Smaller schools prepare students for college as well or better than larger schools. Students from small high schools do as well or better than students from larger schools on college-related variables such as entrance examination scores, acceptance rates, attendance, grade point average and completion (Cotton, 2000).

Larger schools reach a point of diminishing returns on cost-effectiveness. Larger schools tend to have large, costly bureaucracies to manage and control their large numbers of students (Public Education Association, 1992) whereas smaller schools often save money by doing away with the complex large-school infrastructure. When measured against cost per student graduated, small schools are considerably less expensive to operate than either large or medium-sized schools because the dropout rates of small schools are so much lower (Raywid, 1999; Cotton, 2000).

State and Local Practices

At present, there are numerous initiatives in progress, both at the state and national level to reduce class size. Foundations and private organizations are also investing in smaller learning communities.

The Smaller Learning Communities Initiative is a federal Department of Education effort that grants money to local education agencies to plan, develop and implement smaller learning communities (goal of not more than 600 students) in large high schools (1,000 or more students). As of 2001, the program saw its budget nearly triple to \$145 million. Funds can be used to create schools-within-schools, career academies, restructure the day, institute personal adult advocates, develop teacher advisory systems and other innovations designed, create a more personalized high school experience for students and improve student achievement and performance.

Foundation support. The commitment of more than \$200 million to start new small schools nationwide or restructure large high schools into smaller schools-within-schools by the Bill & Melinda Gates Foundation. The teaming of the Gates Foundation with the Carnegie Corporation and the New York City-based Open Society Institute to form a new consortium in December of 2000. Together, they pledged \$30 million to create more small schools.

State Initiatives (Reducing Class Size, What Do We Know? 1999): States have taken legislative and administrative action to reduce class size.

- In 1984, Texas passed House Bill 72 requiring class size to be limited to 22 students in kindergarten through 2nd grade in 1985-1986 and for 3rd and 4th grade in 1988-1989.
- Also in 1984, Indiana began its *Prime Time* project that allocated money to support the reduction of class size to 18 in 1st, 2nd, and then kindergarten and 3rd grade classrooms.
- Nevada began a class reduction program in 1990-1991, beginning with a target of a 15 to 1 student/teacher ratio for kindergarten through 1st grade, then applying that ratio in 2nd grade and 3rd grade, to be followed by efforts to reduce the ratio to 22 to 1 for 4th-6th grade, and then 25 to 1 for 7th-12th grade.
- In 1990, Tennessee initiated *Project Challenge* to implement smaller class sizes in 16 of the state's poorest school districts. The state phased in smaller classes at the kindergarten through 3rd grade level in districts with the lowest per capita income and highest proportion of students in the subsidized school lunch program. The *Project Challenge* districts moved from near the bottom of school district performance in Tennessee to near the middle in both reading and mathematics for second graders.
- Beginning in 1990, Burke County, North Carolina pilot-tested and then phased in a class size reduction project. In 1995-1996 1,193 1st graders and 1,125 2nd graders participated in the initiative. The program's goal has been to reduce class size to 15 students in 1st-3rd grade classes. The Burke County project also includes professional development activities. Students in these classes outperformed the comparison group on both reading and math achievement tests.
- In 1995, Virginia began an effort to reduce class size in k-3rd grade classes for at-risk students, using a strategy in which local systems that devote funds to the voluntary program may receive matching funds from the state. SAGE phased in class size reduction in k-3rd grade in school districts serving students from low-income families. In 1997-98 there were 30 schools from 21 districts participating in the SAGE program and 14 schools in 7 districts providing comparison student background and achievement data for an evaluation study of the program that is ongoing. Current results indicate that the achievement gap lessened between white and African-American students in SAGE smaller classes in contrast to those in larger classes and that SAGE first graders consistently outperformed comparison students in math, reading and language arts.
- Wisconsin began a class size reduction program called the *Student Achievement Guarantee in Education (SAGE) Program* in 1996-97.
- In the 1996-1997 school years, California began its *Class Size Reduction Program*, through which it is giving money to school districts for the purpose of reducing the student/teacher ratio to 20 to 1 in k-3rd grade.
- Other states reported to be involved in or considering some sort of class size reduction initiative include Arizona, Connecticut, Florida, Georgia, Hawaii, Illinois, Iowa, Kansas, Kentucky, Louisiana, Massachusetts, Michigan, Minnesota, Nebraska, New Hampshire, New York, Oklahoma and Utah. State programs encouraging smaller learning communities are not limited to this list.

Business supported initiatives.

Career Academies

The concept of career clusters and small learning communities are joined together in the career academy approach that operates within high schools.

- The National Academy Foundation (NAF) describes its academies as a place where "students take classes around a career theme - Finance, Travel & Tourism or Information Technology - with the same team of teachers for two to four years. Partnerships with employers, the community, and local colleges bring resources from outside the high school to improve student motivation and achievement." NAF focuses energy on curriculum and staff development, local advisory boards that link with businesses, paid student internships and quality assurance. NAF program sites operate in 39 states.

The California legislature passed a law in 2001 (enter 709 for chapter number and 2001 for the year to find the statute at the link) that authorized the development of 100 new information technology NAF sites in their state. California has supported and funded the development of career academies for more than a decade. (Enter 574 for the chapter number and 1993 for the year at the link's prompt.)

- Henry Ford Academy's core mission is to develop graduates who are ready for the future-whether that means college, skilled-trade apprenticeships, or jobs in the global, technological workplace. Founded in 1997, by Ford Motor Company, the academy has fewer than 500 students, where enrollment is by lottery. According to the Academy the curriculum includes: mathematics, science, communication skills, and humanities; 'hands-on' learning experiences for students and teachers; worldwide linkages for students and teachers with information, mentors, scholars and peers; new ways of measuring student progress as well as traditional testing programs; and community involvement. The school is located on the grounds of Henry Ford Museum and Greenfield Village. Museum exhibits help students understand how innovations have shaped manufacturing and how principles of design can be used to communicate ideas to others. Industry partnerships provide job shadowing and internship experiences to further expand students' knowledge. Representatives from Learning Designs, Inc., Michigan State University, and Wayne County RESA, and others support curriculum development, which is academic/college-prep, with context-based business projects. The business partners are involved in a wide range of activities-playing a guiding role in defining the mission of the school, encouraging employees to act as mentors to students, and providing students with internship and job-shadowing opportunities in the workplace. They also give students access to the latest communications technologies and computers. The instructional day is divided into three two-hour blocks of time. The academic curriculum, which is aligned with state standards, is presented through the lens of manufacturing. In the morning, students study manufacturing arts (social studies and English). Mid-day activities include physical education, German and lunch. They also receive academic coaching during a 30-minute period in which Ford Motor Company employees visit the school to provide remediation and/or enrichment for individual students. In the afternoon, students focus on manufacturing sciences (math and science). Throughout the instructional day, teachers aim to link artifacts from the Henry Ford Museum to daily lessons.

Issues of Sustainability

Although smaller learning communities may lead to benefits for students, implementing and sustaining smaller school units is not always easy. For one, recruiting more teachers at a time when teacher shortages loom is a daunting task. Furthermore, research points to the need for professional development for teachers accustomed to teaching larger classes so that they may take full advantage of smaller classes (Reducing Class Size, What Do We Know? March 1999). (For more information about teach quality issues click here.)

Another study found that the lack of flexible procedures at the district and sometimes the state level stunted the successful implementation of smaller learning communities within large high schools. In fact, insufficient faithfulness to the small school concept (either in design or implementation), insufficient autonomy and separateness of the sub-unit or sub-school; and failure of cultural change to accompany structural change resulted in these schools failing to yield positive outcomes (Raywid, 1996).

Bibliography

Allen, Lili. *Wall to Wall, Implementing Small Learning Communities in Five Boston High Schools*. Northeast and Islands Regional Educational Laboratory and Jobs for the Future,

American Federation of Teachers. *Improving Low-Performing High Schools: Ideas & Promising Programs for High Schools*. July 1999.

Cotton, Kathleen. *School size school climate and student performance*. Northwest Regional

Educational Laboratory, School Improvement Research Series, Close-Up #20. 1996.

Cotton, Kathleen. *Summary of findings from the research on school size*. A fact sheet prepared for the American Youth Policy Forum. 2000.

Gewertz, Catherine. "The Breakup: Suburbs try smaller high schools". *Education Week*. May 2, 2001.

Gregory, Tom. *Breaking Up Large High Schools: Five Common (and Understandable) Errors of Execution*. ERIC Clearinghouse on Rural Education and Small Schools EDO-RC-01-6. December 2001.

Grissmer, D., Flanagan, A., Kawata, J. and Williamson, S. *Improving Student Achievement: What State NAEP Test Scores Tell Us*. Santa Monica, CA: RAND, 2000.

Haimson, L. (April 2000). *Smaller is Better: First-hand reports of early grade class size reduction in New York City Public Schools*. New York, NY: Educational Priorities Panel.

Howley, Craig and Bickel, Robert. *When it comes to schooling...small works: School size, poverty and student achievement*. Rural

School and Community Trust, Policy Program. February 2000. ([variation on ERIC available](#))

Klonsky, Michael. *Small schools: the numbers tell a story*. University of Illinois at Chicago, Small Schools Workshop. 1998.

Making the Case for Smaller Learning Communities. US Department of Education, Unpublished.

Raywid, Mary Anne. *Taking stock: The movement to create mini-schools, schools-within-schools, and separate small schools*. Hofstra University. April 1996.

Raywid, Mary Anne. *Current Literature on Small Schools*. ERIC Clearinghouse on Rural Education and Small Schools, EDO-RC-98-8. January 1999.

Reducing Class Size, What Do We Know? U.S. Department of Education, March 1999.

Smaller Learning Communities Fact Sheet. U.S. Department of Education, 2000.

The Class-Size Reduction Program, Boosting Student Achievement in Schools Across the Nation: A First-Year Report. United States Department of Education, September 2000.

Wood, George. *Schools that work: America's most innovative public education programs*. New York: Penguin Books, 1992.

This issue summary was a collaborative effort between NCSL's Learn, Work and Earn Project and the Institute for Educational Leadership's Center for Workforce Development. It was made possible by a grant from the U.S. Departments of Education and Labor.

© 2004 National Conference of State Legislatures, All Rights Reserved

Denver Office: Tel: 303-364-7700 | Fax: 303-364-7800 | 7700 East First Place | Denver, CO 80230 | [Map](#)

Washington Office: Tel: 202-624-5400 | Fax: 202-737-1069 | 444 North Capitol Street, N.W., Suite 515 | Washington, D.C. 20001

POLICY REPORT

Number 1

REPORTING ON POLICY ISSUES IN K-12 EDUCATIONAL MANAGEMENT

Spring 2000

INSIDE

When Does Small Class Size Help Student Achievement? 2

Teachers Report on the Benefits of Small Classes 3

Teaching Practices in Small Classes 5

The Costs of Reducing Class Size 8

Alternatives to Class-Size Reduction 11

Addressing Professional Development 13

Class-Size-Reduction Initiatives, by State 14

Designing a Policy 16

Class Size

Can School Districts Capitalize on the Benefits of Smaller Classes?

More than 20 states and the federal government have initiated efforts to reduce class size. Class-size-reduction (CSR) initiatives enjoy enormous public support and appeal to the common sense of parents and educators alike.

Until recently, class size in U.S. public schools averaged about 25 students. This is too large, some say, for teachers to give students the individualized attention they need to succeed. Initiatives at the state and federal levels have sought to lower the average class size to 15 to 18 pupils.

The Clinton Administration's Class Size Reduction Program is helping school districts hire 100,000 new teachers to reduce class sizes in the elementary grades to a nationwide average of 18 students. Congress raised the program's funding from \$1.2 billion this school year to \$1.3 billion in the 2000-01 school year, and the Department of Education estimates that 29,000 teachers have already been hired through the program.

States are spending an additional \$2.3 billion on their own CSR initiatives during the 1999-00 school year, and several states plan to spend more on CSR in the future.

Why the sudden interest in class size? The issue's political appeal is certainly one reason, but many states have turned to CSR as one strand of their efforts to raise standards for student

achievement. Research has found that smaller classes in the early grades promote effective teaching and learning.

While initiatives to reduce class size have been praised by many, others remain skeptical. Some policymakers and researchers believe the costs of reduction are prohibitively high and the money would be better spent to support other proven types of school reform. If districts hire the most qualified teachers and support them with ongoing professional development, class size becomes an irrelevant issue, say skeptics of the push toward smaller classes.

Other questions relate to how CSR initiatives are implemented, how to deal

This Policy Report seeks to help policymakers:

- understand the benefits of CSR
- assess realistically its costs
- consider research-based alternatives
- make sure, when CSR is undertaken, that its benefits are realized in the classroom

with shortages of qualified teachers and classroom space, what teachers must do to take advantage of smaller classes, and what student outcomes can be expected from the reform.

Policy and fiscal issues aside, in many states the debate is no longer over whether class-size reduction makes a difference, but how and under what circumstances (Perez 1998, McRobbie 1998). How can your state or district best design a successful CSR policy?

Policy Report

Number 1, Spring 2000

Reporting on Policy Issues in K-12
Educational Management

ERIC Clearinghouse on Educational Management

Professor and Director: Philip K. Piele

Editorial Director: Stuart C. Smith

Authors: Elizabeth Hertling

Courtney Leonard

Linda Lumsden

Stuart C. Smith

Contributing Author:

Lawrence O. Picus

Designer: Leeann August

CLEARINGHOUSE NATIONAL ADVISORY BOARD

Terry A. Astuto, Vice-President,
Division A, American Educational
Research Association

George Babigian, Executive Director,
American Education Finance Associa-
tion

Anne L. Bryant, Executive Director,
National School Boards Association

Vincent Ferrandino, Executive
Director, National Association of
Elementary School Principals

Patrick Forsyth, Executive Director,
University Council for Educational
Administration

Paul Houston, Executive Director,
American Association of School
Administrators

John T. MacDonald, Director, State
Leadership Center, Council of Chief
State School Officers

Philip K. Piele (Chair), Professor and
Director, ERIC Clearinghouse on
Educational Management, University of
Oregon

Gerald Tirozzi, Executive Director,
National Association of Secondary
School Principals

Additional copies of this publication
will be available while supplies last.
Copies are \$3.00

Address orders to:

Publications Department
ERIC/CEM
5207 University of Oregon
Eugene, OR 97403-5207

Telephone (541) 346-5044
(800) 438-8841
Fax (541) 346-2334

This report is in the public domain and
may be freely copied and reprinted in
whole or in part with proper credit. The
full text is also available at
eric.uoregon.edu.

When Does Small Class Size Help Student Achievement?

Studies over the last twenty years have provided researchers and educators with the opportunity to observe reduced-size classrooms and gather data on student achievement. Class-size reduction has been deemed successful when students show marked improvement in learning through formal evaluations.

Success is most likely for students in smaller classes under the following conditions:

- When the student-teacher ratio is reduced significantly.

No one is completely sure how small classes should be to maximally benefit students. Project STAR, a leading study from Tennessee, defined small classes as those with 13-17 students. Regular-sized classes were defined as those with 22 or more students. When tested, students in small classes consistently outperformed students in regular-sized classrooms (Pate-Bain, Achilles, and others 1992). The most notable student gains came from low-achieving students with impoverished socioeconomic backgrounds (McRobbie 1998; Illig 1996). In light of these results, many states have begun shrinking class size to 17-20 students per teacher.

Clearly, a drop from 35 students to 18 students is dramatic, and some specialists believe class-size reduction must be this substantial before significant student gains will be evident. Merely reducing class size from 25 down to 20 is an ineffective form of implementation.

- When reduction initiatives are implemented in grades K-3.

The most effective class-size reduction initiatives have focused

Class-size reduction has been deemed successful when students show marked improvement in learning through formal evaluations.

on the early grades. Project STAR focused on grades K-3. Similarly, California's Class-Size Reduction (CSR) initiative targets kindergarten through third grade.

When reduction initiatives are implemented in early grades, young students are more likely to get the extra attention they need to learn basic skills in reading, writing, and math. These students, research is now showing, will carry the effects of a small class with them throughout the remainder of their academic careers. Tennessee's Lasting Benefits Study, a followup to Project STAR, has found that the gains due to small classes were still evident in reading and math through grade 8. (Nye with Hedges and others 1999).

- When certain services and technologies are available to achieve the small-class effect.

When well-trained teachers employ effective instructional techniques, students achieve more. No organizational reform, smaller class size included, will substitute for high-quality teaching, as many studies have documented (McRobbie and others 1998). If

professional development that guides teachers in small-class instruction is used in conjunction with effective teaching practices, a strong curriculum, and smaller classes, researchers will be more able to examine the true effects of class-size reduction (Beall 1998; U.S. Department of Education 1998).

Teachers and students must have sufficient classroom space and access to materials and services. Some schools seeking to reduce class size have struggled with this issue, whereas others already have the resources available. In California, with the implementation of CSR, school districts have scrambled to accommodate more classes with fewer students, some-

VIEWPOINT

With [California's] class-size reduction program, and the fact that the waiting room of the marketplace of educators is languishing with dusty seats, you can bet the Sunday tihe that many poor, inner-city children are suffering through the dubious blessing of being taught in smaller classes by less-experienced teachers.... Poor teaching by the underqualified nullifies any potential benefits of smaller classes."

- Randy Ross,
Vice President, Los
Angeles Annenberg
Metropolitan Project

TEACHERS REPORT on the benefits of small classes

Teachers from around the nation who teach in smaller classes report the benefits of having fewer students in their classrooms. Overwhelmingly, they observe the following characteristics of smaller classes:

Within the curriculum, teachers...

- find that learning can take on more variety, breadth, depth, and richness.
- have more time for covering additional material and use more supplementary texts and enrichment activities.

When instructing, teachers...

- have a better handle on teaching materials, more organization, and more forms of creative instruction.
- have more opportunity for indepth teaching of basic content.
- use concrete materials to engage students in authentic learning experiences.
- have more opportunities for individualized interaction with students.
- complete basic instruction more quickly as students participate more and spend more time on task.
- devote more time to instruction and have to spend less time on classroom management.

While assessing, teachers...

- can use meaningful assessment tools.
- spend less time on paperwork and grading.

While in a smaller class, teachers...

- experience a greater sense of personal satisfaction.
- feel a greater sense of achievement.
- enjoy teaching more.
- deal more individually with misbehavior problems and diagnose causes before major problems occur.

Overall, both students and teachers have better attitudes toward smaller classes. The atmosphere is one of less anxiety and tension. Studies of smaller classrooms have found a climate of warmth, reduced levels of frustration, and positive attitudes toward teaching and learning.

times having to schedule classes in hallways or in portable classrooms.

Class-size reduction should be viewed not as an end but as a means to an end. Teachers still need access to specialists, special programs, and other schoolwide services. Although there is evidence that the need for special services and programs is reduced in smaller classrooms, class-size reduction is a reform that should be used in conjunction with a variety of other practices.

A major advantage of small classes, teachers uniformly report, is that they can devote more time to instruction because they do not need to spend as much time on classroom management. These possibilities are realized when all

the conditions for a positive small-class experience are in place and a teacher can truly take advantage of a reduction in student numbers.

Wise policymaking seeks to produce the greatest student gains from finite education dollars. To reach this goal while attempting to reduce class size, policymakers must pay particular attention to the conditions noted above (a target of 13-17 students per class in the primary grades, with adequate training and support for teachers). Although specific scenarios may differ from state to state, research has shown these basic elements to be of utmost importance in the implementation of class-size-reduction initiatives. CL

PR

BEYOND ACADEMICS:

What Students Gain From Smaller Classes

Much attention has been paid to the cognitive and academic benefits students obtain in smaller classes. Other benefits abound.

Students in smaller classes...

- learn basic skills and subject matter better, more easily, and faster.
- think more creatively and divergently.
- develop more positive attitudes, perceptions, and human relationships.
- function more effectively as members and leaders of groups.
- achieve higher attention and lower absence rates.
- are more fluent and proficient in writing, listening, and speaking skills.
- demonstrate less aggressive behavior such as fighting, shoving, pushing, or crowding.
- have fewer fears about being ridiculed or bullied.
- are more motivated and have a better self-concept.
- participate promptly, eagerly, and enthusiastically.

What should be the focus of district-level class-size policy?

Gaining the benefit from smaller classes begins with a districtwide policy that establishes concrete goals (such as a maximum of 18 students in K-3 classes) and sets clear priorities on use of funds. Consider the following points when creating a policy:

- Target money and other resources to minority and low-income students who stand the most to gain from CSR.
- Make better teaching and learning the cornerstone of CSR. "No organizational arrangement, including small class size, can compensate for poor teaching" (McRobbie, Finn, and Harman 1998). Use some funding for training inexperienced teachers.
- Assess facility needs and plan for reconfiguration of existing physical plants or for new construction. Decide whether CSR is worth displacement of other programs or activities.
- Apply for waivers to leverage federal and state funds in pursuit of district priorities. Set aside funds for activities such as community meetings, teacher training, and curriculum planning.
- Continually evaluate the results of CSR. Monitor not just changes in pupil-teacher ratios but teachers' classroom practices, the unforeseen displacement of other programs, and unexpected costs.

SOURCE: "Capitalizing on Small Class Size," by Jessica O'Connell and Stuart C. Smith, *ERIC Digest*, Number 136, April 2000, ERIC Clearinghouse on Educational Management.

Teaching Practices in Small Classes

Do teachers change their instructional practices when their classrooms have fewer students? Do we know which teaching practices make a difference in smaller classrooms? What issues should professional development address?

It could be assumed that effective teachers would be successful in any classroom, whether large or small. Research during the past couple of decades has brought a consensus on a handful of traits that characterize effective teaching:

- Gifted teachers hold high expectations for their students.
- They give clear and focused instruction in a highly efficient classroom setting.
- Good teachers monitor their students' learning and reteach students when necessary.
- They set high behavioral standards and also maintain personal interactions with their students.
- They are characterized as motivated and enthusiastic.

These characteristics are necessary in any classroom setting. To get the most out of smaller classes, however, policymakers must ensure that these practices actually occur in small-class settings.

Teachers in a variety of studies have identified the following advantages of small class size:

- More time for teaching and learning, and more space in which to do so.
- A greater ability to monitor and evaluate their students.
- An enhanced atmosphere that leads to tailored instruction at each student's ability level.
- Better classroom management with fewer students (Pate-Bain, Achilles and others).
- More time to assist individual students in a relaxed, interactive environment.
- Better use of teaching methods and materials through increased small-group work and more varied, imaginative, and organized activities (Perez 1998).

A reduction in class size doesn't automatically ensure that classrooms will be characterized by these elements. Research in fact has shown that

most teachers do not change their teaching practices when they move to smaller classes (Ziegler 1997). Evaluation findings from the California CSR initiative's first three years found only slight differences in the ways teachers covered curriculum and the types of activities they employed (Bohrnstedt and Stecher).

Wisconsin's SAGE program found that although teachers assigned to smaller classes thought they were teaching differently, observers saw few discernible differences between large-class and small-class instruction.

Must teachers change their teaching practices for a reduction in class size to benefit student achievement? Many people seem to assume so, but the research offers little guidance. As Bohrnstedt and Stecher point out, "no well-developed theory suggests why teaching in smaller classes should be different than in larger classes."

Instead of focusing on specific teaching techniques that work best in

VIEWPOINT

If you aren't working harder, you probably aren't doing it right. You now have fifteen, not one big class. If all you are going to do is pass out work sheets, go back to a bigger class."

-Janice McMahan,
Principal, North
Carolina

Teachers with smaller classes report that their students enjoy school more and have fewer absences, and that they are able to cover material more thoroughly with greater student comprehension. Smaller classes also give teachers more time to spend on students who need extra help, plan enrichment and remedial activities, or check work during class to provide immediate feedback."

- Jane Walters,
Tennessee
Commissioner of
Education

VIEWPOINT

While the research evidence on the effects of class size suggests no real effects, the research does show dramatic differences in the performance of teachers. The research confirms some teachers are much better than others and differences in teacher effectiveness completely dwarf any possible differences due to class size variations. Given this, it seems much more productive to channel money toward attracting and retaining particularly effective teachers than toward continuing to pursue a failed policy."

-Eric A. Hanushek
Professor of
Economics and
Political Science,
University of
Rochester,
New York

smaller classes, most studies look at effective teaching practices in general and examine whether teachers engage in more of these practices in smaller classes. Smaller class size may simply enhance the instructional strategies already employed by effective teachers.

Bohrnstedt and Stecher recommend that school officials pay careful attention to teaching practices in

small classes so they can design professional-development programs to equip teachers with suitable new skills.

Charles M. Achilles (1999), a principal researcher in the Tennessee STAR project, asserts that teachers may not need to change their teaching strategies to obtain the benefits of CSR. He contends that teachers may be able to do more with fewer kids using the same strategies educators

Smaller class size may simply enhance the instructional strategies already employed by effective teachers.

have long known to be most effective, such as the following:

- Instruction is guided by a preplanned curriculum.
- Students are carefully oriented to lessons.

California and Tennessee

The early success of Tennessee's widely known "STAR" program spurred similar CSR initiatives, including California's. Here is how the two states' efforts compare.

Tennessee

- A controlled experiment in a limited number of schools, with teachers and students randomly assigned.
- Class size reduced from 22-26 to 13-17 students.
- Adequate space for smaller classes.
- Credentialed teachers.
- Nearly all students spoke English.
- Standardized objectives for English and math.
- Existing test scores aligned with standards.

California

- Statewide implementation in four grades (K-3), beginning with 1st and 2nd grades.
- Class size reduced from an average of 28.8 (max. 33) to a maximum of 20 students.
- Extremely limited space due to rapidly growing enrollment.
- Existing shortage of teachers, some hired with credentials.
- Nearly one-third of students were English-language learners.
- Standards and objectives under development.
- No statewide test until 1998; it was not aligned with new standards.

Improvements in our schools will occur in small steps with a lot of hard work. Reducing class size in the early grades—particularly in urban schools—is a small step, but a real step in this direction. Small classes have a broad spectrum of benefits."

- Jeremy D. Finn, Professor, State University of New York, Buffalo

Iwould rather have my child in a classroom with 35 children and an excellent teacher than in a classroom with only 20 children and a teacher who was below par."

-Edward Fry (retired), Department of Learning and Teaching Rutgers University

- Instruction is clear and focused.
- Learning progress is monitored closely, and when students do not understand, they are retaught.
- Class time is used for learning, not discipline.
- Personal interactions are positive.
- Instructional groups formed in classrooms fit instructional needs.

In smaller classes, Achilles reasons, classroom management is easier and basic instruction can be completed quicker, allowing teachers additional time to practice effective teaching techniques, such as planning for lessons and dividing the class into groups. Additional time is also available to cover additional materials.

Pointing to data from Project STAR and other studies, Achilles asserts that smaller class size automatically guarantees that teachers will use effective teaching practices, regardless of whether they have small-class experience or not.

Effective teachers are skilled teachers. In smaller classes, the key to teachers' success with student achievement is the know-how to be effective with fewer students. Conditions that foster good teaching will lead to improved learning for students. Small classes can facilitate these favorable conditions, but only with well-planned implementation guidelines. CL

PR

California Study May Offer New Insight into Teaching Practices

California is undertaking a study mandated by the legislation that authorized that state's CSR initiative. The RAND Corporation and the American Institutes for Research (AIR) are taking lead roles in this study. Other partners in the CSR Research Consortium are WestEd, EdSource, Policy Analysis for California Education (PACE), and the University of California at Riverside.

The study will address four main issues: the effects of small-class size on student achievement, its effects on special populations, the staffing requirements districts face, and what state teaching qualifications will be affected. The main focus of the study will be the practices teachers can use to improve small-class instruction.

According to George Bohrnstedt at AIR, researchers will look at achievement gains as a function of CSR, the number of new teachers hired because of CSR and the credentials they do or do not have, the kinds of districts where teachers work, and whether per-pupil expenditures rise or fall. This evaluation is expected to last until March 2002.

The consortium's first report (Bohrnstedt and Stecher 1999) is available at www.classsize.org

The Costs of Reducing Class Size

Class-size-reduction initiatives have spurred discussion about their effects on student achievement, teacher quality, school facilities, and the organization of the educational system. But no reform can take place without one key element—money, and in the case of CSR, lots of it.

A major consideration for state legislators and for school and district officials who are deciding whether to undertake CSR is, of course, its cost. Much of the debate revolves around the issue of whether reducing class size is cost-effective.

Although some aspects of the financial impact of CSR can be readily calculated, an avalanche of other unanticipated financial and nonfinancial costs may devastate CSR efforts.

Currently, California is confronted with a teacher-quality crisis of huge proportions that is in large part a result of recent class-size-reduction requirements. Implementation of that state's 1996 Class Size Reduction program "has arguably created the greatest immediate need for personnel and facilities in the history of California public education," stated the Joint Legislative Audit Committee (1999), a nonpartisan watchdog unit of the state's government. (See sidebar on page 10 for details.)

Another recent study, *Teaching and California's Future: The Status of the Teaching Profession*, sponsored by the Center for the Future of Teaching and Learning and conducted by SRI International, found that more than 10 percent of public school teachers in California have not met the state's minimum requirements (Shields and others 1999). In addition, over 1 million of the state's 5.7 million students are enrolled in schools that have such a large percentage of underqualified teachers that the schools are effectively "dysfunctional" (Shields and others).

According to the task force that guided the study, correcting the problem of unqualified and underqualified teachers in California will cost between \$1.3 and \$1.8 billion (Shields and others).

The following are among recommendations made by the 20-member task force, which consisted of educators and policymakers:

- raising beginning wages from \$32,000 to \$40,000
- phasing out waivers and emergency permits in the next five years
- providing 100 percent "forgivable" loans of at least \$20,000

to students who complete a teacher licensure program and teach in hard-to-staff schools for at least four years (Shields and others)

Despite the overwhelming costs California will incur to ensure that all students are taught by qualified teachers, some argue that CSR can actually save costs in the long run. For example, if—as claimed by its proponents—small class sizes result in improved student behavior in school, there will be a reduction in vandalism costs and less need for corrective measures such as Saturday school (Achilles and Price).

Expenditures on Class-Size Reduction, 1999-2000 School Year

Federal Class Size Reduction Program \$1,200,000,000

State Initiatives and Programs*

Alaska	Indiana	Minnesota	South Carolina
\$1,582,594	\$35,609,520	\$137,700,000	\$34,158,671
California	Iowa	Nevada	Utah
\$1,534,254,000	\$10,000,000	\$82,900,087	\$67,027,003
Florida	Louisiana	New York	Washington
\$10,000,000	\$31,939,287	\$75,000,000	\$99,000,000
Illinois	Maryland	Ohio	Wisconsin
\$5,000,000	\$11,600,000	\$130,995,486	\$18,200,000

Total state expenditures: \$2,284,966,648

Total state and federal expenditures: \$3,484,966,648

The Clearinghouse verified these figures with state departments of education in March 2000.

*Only state expenditures that have been allocated as part of a legislated state initiative or program are listed here. As the table on pages 14-15 indicates, several states (such as Tennessee, Texas, Virginia, and Wyoming) mandate or encourage maximum student-teacher ratios and expect districts to meet the targets with general education dollars (state and local).

Students in smaller classes in primary grades may continue on a path that reduces the need for special education, makes grade retention less likely, and increases the likelihood of high school graduation—all cost savers (McRobbie and others).

Making Sure CSR Pays Off on Its Promise

Few would disagree with the assertion that CSR is not worth the cost if it does not bring about its intended benefits. But to attain those benefits, school districts may need to do more than simply hire more teachers and put them in classrooms with fewer students. A Texas study highlights this issue.

Researchers Richard Murnane and Frank Levy (1996) describe an experiment in Austin, Texas, where the school district, as part of a desegregation plan in the late 1980s, allocated an extra \$300,000 per year for five years to each of 15 low-income elementary schools, with the hopes of raising student achievement and attendance. All schools used their funds to hire extra teachers to reduce class size. In 13 of the 15 schools, student achievement and attendance remained extremely low. The two other schools experienced a soaring increase in both attendance and student achievement.

The difference between those two schools and the other 13? The 13 schools "went about business as usual," retaining the same curriculum and teaching methods. The two succeeding schools raised standards, revised curriculum, set up health clinics, and invested in teacher training in addition to hiring new teachers. The key to successfully funding CSR, some believe, is doing more than pouring in large amounts of money and "hoping for the best." Policymakers must ensure that funds are put to the best possible use (Black 1999).

Federal Funding of Class-Size Reduction

Early in 1999, the Clinton Administration pledged \$1.2 billion to support class-size reduction. This money was released to states on July 1, 1999, as a "down payment" on the administration's plan to ensure a "world-class education" to America's children, thereby ensuring "America's future prosperity."

The administration's long-range goal is to spend more than \$12 billion on class-size reduction by 2005 to help school districts hire 100,000 new teachers and reduce class sizes in the elementary grades to a nationwide average of 18 students.

In November 1999 Congress appropriated \$1.3 billion for the program's second year, a \$100 million increase over fiscal 1999. At the insistence of Congress, the new legislation also gives school districts more flexibility in use of the funds. In the 2000-01 school year, districts will be able to spend up to 25 percent of the aid on professional development, up from 15 percent in the original legislation.

Other provisions of the new law likewise place a premium on teacher quality. Federal funds can no longer be used to hire teachers with emergency certificates, and teachers previously hired under the program must become certified within one year. Small school districts and districts with a shortage of teachers now have more flexibility in using the money for training.

The U.S. Department of Education, in a report released in November 1999 that was based on

preliminary data from nearly 46 percent of the nation's school districts, gave these estimates about the program's effectiveness:

- 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 has been reduced by more than five students in the grade levels and schools where the vast majority of teachers hired with these funds teach.
- 42 percent of the teachers are teaching in first grade. In their schools, average class size fell from approximately 23 students to approximately 17 students.
- 23 percent of the teachers are teaching in second grade. In their schools, average class size fell from 23 students to less than 18 students.
- 24 percent 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.
- To strengthen teacher quality, school districts are using approximately 8 percent of the funds they received to support professional development for teachers.

SOURCE: <http://www.ed.gov/offices/OESE/ClassSize/localsuccess.html>

Questions to Ask When Calculating the Cost of CSR

As California's experience makes clear (see accompanying sidebar), estimating the cost of CSR is an inexact science that must take into account not only personnel and facilities but administrative requirements and displacement of other mandated programs. Here are several questions policymakers can ask when trying to calculate CSR's actual costs:

1. What is the initial class size?
The greater the drop to a smaller class, the larger the cost.
2. Is there a rigid cap or is there flexibility in the number of students per teacher? A rigid cap increases the cost by decreasing the final average class size.
3. What is the cost of teachers who must be hired for CSR? The number of teachers needed, the salary scale of each district, and the experience level of the teachers hired will determine this cost. Teacher costs will increase with time as teachers move up the salary ladder. In addition, teachers will require professional development and support, which adds up to additional costs.
4. How many new classrooms are needed? Additional facilities to house new classes will be needed. Some schools have rented vacant space in nearby retail shopping malls or other commercial buildings, which can be converted to early childhood centers (Achilles and Price 1999).
5. What costs will be incurred when a once-closed school is reopened? Examples are the need for potential renovation, utilities hookups, and resumption of custodial and clerical services.
6. What are the potential savings of CSR? Some districts may

Impact of CSR on Personnel and Facilities in California

When California's nonpartisan Joint Legislative Audit Committee surveyed school districts to discern the effects of the CSR program on personnel and facilities, it found a hodgepodge of consequences, some anticipated, others not. Here are a few of the findings:

- An estimated 142,000 students in grades K-3 are being taught by teachers who have not completed a state-certified training program.
- There is a shortage of at least 21,312 classroom teachers in the state, and a shortage of 1,116 administrators.
- California's public schools have an immediate need for at least 11,310 new classrooms at an estimated cost of \$760.6 million.
- "Facility shortages have translated into a marked reduction of specialized programs and mandated student services such as special education, childcare, libraries, and computer labs. School districts have reported no other option but to displace many of these programs

and services in order to fulfill the facilities demands of the CSR Legislation."

- Many districts, especially in urban settings, reported a lack of available land for constructing new schools.
- "The administrative requirements of CSR are time consuming and restrictive and cause many school districts to lose CSR funding."
- "Many districts are losing playgrounds to portables."
- "CSR may not be a viable approach in the smallest school districts which only have one or two classrooms and cannot break down the classes into smaller sizes due to a lack of funding for staff."
- Even though small school districts have fewer administrative staff members and receive less funding from the program, "they are required to perform the same administrative duties and submit just as much paperwork."

SOURCE:
Joint Legislative Audit Committee (1999)

experience cost reductions due to reduced grade retention, less vandalism, and so forth.

7. Will the program be equally cost-effective for smaller and larger districts? Will smaller districts need supplemental funding to cover administration of CSR?
8. Will CSR demand so many resources of districts that they are forced to terminate or reduce other programs and services? What level of funding

will be required to prevent displacement of other programs?

For examples of CSR program costs, see the table on pages 14-15 on current state initiatives. There are ways to reduce the costs associated with class-size reduction. (For more information, see "Designing a Policy.") EH

PR

Education
Committee

April 18, 2006

HB 228
Representative Holm

Pupil-Teacher Ratio
Grades K-3

1

2

3

4

Current
Pupil-Teacher
Ratios

5

6

7

Representative Jim Holm
Alaska State Legislature
District 9

Session

Capitol Building, Room 513
Juneau, AK 99801
Phone: (907) 465-3466
Fax: (907) 465-2937



Interim

119 N. Cushman St.
Fairbanks, AK 99701
Phone: (907) 456-7423
Fax: (907) 451-9293

April 12, 2006

House Education Committee Members:

Attached are current pupil-teacher ratios for grades K-3 for the following school districts in Alaska:

ANCHORAGE

FAIRBANKS

JUNEAU

KETCHIKAN

ANCHORAGE

From: Patricia McRae [mailto:mcr_ patricia@asdk12.org]
Sent: Wednesday, March 22, 2006 2:48 PM
To: Rep. Jim Holm
Cc: Comeau_Carol; Christensen_Jan; Wiget_Larry; Siegfried_Robin
Subject: Information request

Dear Representative Holm,

Yesterday I received a copy of your letter in which you asked about the pupil teacher ratio in the primary grades in the Anchorage School District. Your interest in this important area is appreciated.

Our budgeted figure (that is, the figure that we use to budget staff positions) for class sizes are as follows:

Kindergarten 20.75

First grade 21.25

Second grade 24.25

Third grade 24.25

We have been fortunate to be able to add an additional 44 teaching positions in our 60 elementary schools in kindergarten and first grades as a part of "class size reduction" which is funded through the NCLB Title IIa grant. This allows for class sizes of 18 in numerous kindergarten and first grade classrooms throughout our school district.

Every year in October we complete a "class size report" that details the sizes of classrooms in our district. Our class size report for October, 2005 contained the following information about class sizes in the kindergarten through third grades:

642 total classes

Of these: 99 or 16% were under 18 students (this occurs because of the 44 "class size reduction" positions)

174 or 27% were in the 18-20 student range

225 or 35% were in the 21-23 student range

123 or 19% were in the 24-26 student range

21 or 3% were in the 31-32 student range

As you can see, 43% of our classes this year are in the 18-20 student range (273 classrooms), and 57% (or 369 classrooms) are not. I hope that this is helpful information. I'm happy to assist if you have any additional questions.

Thank you again,
Patricia

Patricia McRae, Executive Director
Elementary Education
(907)742-4254

FAIRBANKS

From: Ann Shortt [ashortt@northstar.k12.ak.us]
Sent: Tuesday, March 21, 2006 8:27 AM
To: Rep. Jim Holm
Cc: royce.chapman@gci.net; rchapman@alaska.com; ahkriska@fairbanksnative.org;
jennifer_schmidt@health.state.ak.us; jschmidt@mosquiconet.com; raad@acsalaska.net;
alan.wieder@eielson.af.mil; hull@gci.net; lhajdukovich@gci.net;
SharonMcConnellGillis@hotmail.com; ronald.johnson@wainwright.army.mil; ringstj@bp.com; Nick
Stayrook; Mike Fisher
Subject: Information you requested

Hi Jim,

Per your request, here's our pupil teacher ratios for K-3. I've broken it down in a number of ways for you:

K-3 - PTR 23.4

Grades 1,2,3 - 22.4

Kindergarten - since we flex with a small morning group and small afternoon group and large group for 2.5 hours in the middle of the day. PTR - 27.3 The approximate size for the AM group is 14 - 15 and the afternoon 12 - 13. The school board's budget for 2006/2007 has a kindergarten PTR at 25.5

First Grade PTR 21.4

Second Grade 23.3

Thrid Grade 23.2

We do have this information on our website, if you would like additional information or to check other grade levels, etc.

Hope this helps.

Sincerely,

Ann

Dr. Ann Shortt, Superintendent

Fairbanks North Star Borough School District

ph: 907-452-2000, ext. 401

fax: 907-451-0541

JUNEAU



JUNEAU SCHOOL DISTRICT CITY AND BOROUGH OF JUNEAU

10014 CRAZY HORSE DRIVE • JUNEAU, ALASKA 99801-8529 • (907) 523-1700

Via Facsimile (907-465-2937) & U.S.P.S. - One-Page Document

April 6, 2006

Representative Jim Holm
Alaska State Legislature
Capitol Building, Room 513
Juneau, Alaska 99801

Dear Representative Holm:

Superintendent Cowan passed your March 20, 2006 letter requesting information on the pupil-teacher ratios for grades kindergarten through third grade, to me.

At the present time, the Juneau School District has targeted grades kindergarten to two with a pupil-teacher ratio of 22 to 1. Grade three has a targeted ratio of 25 to 1.

The Governor's proposed base student allocation of \$5,352 for FY 2007 is not enough for the District to maintain these ratios in future years. Unless more money is forthcoming, next year the ratios will change to 25 to 1 for kindergarten through second grade, and third through fifth grade will become 26 to 1.

Please let me know if I can be of any further assistance.

Sincerely,

David L. Means
Director of Administrative Services
Phone: (907) 523-1770
Facsimile: (907) 523-1772
E-Mail: david_means@jsd.k12.ak.us

C:\Winword II\ DLM-L-06-4-6

KETCHIKAN



**KETCHIKAN GATEWAY BOROUGH SCHOOL DISTRICT
BUSINESS OFFICE
333 SCHOENBAR ROAD
KETCHIKAN, AK 99901**

March 21, 2006

Representative Jim Holm
Capitol Building, Room 513
Juneau, AK 99801

Dear Representative Holm,

Below is the information requested about pupil-teacher ratios for grades K-3 for the Ketchikan Gateway Borough School District:

FOR YEAR ENDING 2004

	K	1	2	3
HOUGHTALING	20/19/19	20/20/20/20	18/18/19	16/16/14
WHITE CLIFF	17	21	20	17
POINT HIGGINS	24	25	15/16	14/13
KETCHIKAN CHARTER SCHOOL	23	25	20	22
TONGASS SCHOOL OF A & S	22	12/13	11/10	10/10

FOR YEAR ENDING 2005

	K	1	2	3
HOUGHTALING	25/24/25	18/20/18	20/22/20/22	19/19/20
WHITE CLIFF	20	14	15	18
POINT HIGGINS	22	20	12/5*	20
KETCHIKAN CHARTER SCHOOL	24	20	22	23
TONGASS SCHOOL OF A & S	19	10/10	14/14	11/10

* 12 2nd and 5 third graders

FOR YEAR ENDING 2006

	K	1	2	3
HOUGHTALING	20/20/20	22/21/22/21	18/18/17	21/17/18/20
WHITE CLIFF	16	22	19	21
POINT HIGGINS	21/20	23	19/19	14/14
KETCHIKAN CHARTER SCHOOL	25	26	17	21
TONGASS SCHOOL OF A & S	21	12/11	10/11	14/16

Let me know if I can be of any other assistance to you.

Sincerely,


Lance R. Mertz, CPA
Business Manager

MAT-SU

From: Nancy Munoz [Nancy.Munoz@matsuk12.us]
Sent: Friday, April 14, 2006 12:36 PM
To: Rep. Jim Holm
Subject: Pupil teacher ratios

I just received a copy of your March 20th memo requesting information on class size for our district.

We are currently using the following ratios:

Kindergarten is 20:1

First grade is 21:1

Second grade is 22:1

Third grade is 26:1

Sorry for the delay, but this just reached my desk.

Nancy Chiappinelli Munoz
Supervisor of Finance & Budget
Matanuska-Susitna Borough School District
501 N Gulkana
Palmer, AK 99645
Phone: 907-746-9235 FAX: 907-761-4077

"Great minds talk about ideas.
Average minds talk about events.
Weak minds talk about people."
Eleanor Roosevelt

Education
Committee

April 18, 2006

HB 228
Representative Holm

Pupil-Teacher Ratio
Grades K-3

1

2

3

4

5

6

7

Fiscal
Notes

FISCAL NOTE

STATE OF ALASKA
2005 LEGISLATIVE SESSION

Fiscal Note Number: _____
 Bill Version: HB228-EED-TLS-05-03-05
 () Publish Date: _____

Revision Date/Time (Note if correction): _____ Dept. Affected: Education & Early Development
 Title "An Act imposing a maximum pupil-teacher ratio for grade RDU TLS
student discipline and safety, of student health Component Student and School Achievement
 Sponsor Rep. Holm
 Requester _____ Component No. 2796

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	*	*	*	*	*	*

CAPITAL EXPENDITURES						
-----------------------------	--	--	--	--	--	--

CHANGE IN REVENUES ()						
-------------------------------	--	--	--	--	--	--

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	*	*	*	*	*	*
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
TOTAL	*	*	*	*	*	*

Estimate of any current year (FY2005) cost: 0.0
 Mark this box (X) if funding for this bill is included in the Governor's FY 2006 budget proposal: ☐

POSITIONS

Full-time						
Part-time						
Temporary						

The costs related to this bill are indeterminate at this time.

Prepared by: Barbara Thompson, Director Phone 465-8727
 Division Teaching & Learning Support Date/Time 5/3/05 9:34 AM
 Approved by: Karen Rehfeld, Deputy Commissioner Date 05/03/2005
 Agency Education & Early Development

FISCAL NOTE

STATE OF ALASKA
2006 LEGISLATIVE SESSION

Fiscal Note Number:

Bill Version:

HB 228

() Publish Date:

Revision Date/Time (Note if correction):

Title An Act imposing a maximum pupil-teacher ratio
for grades kindergarten through three in public schools

Dept. Affected: Education & Early Development

RDU K-12 Support

Component Foundation Program

Sponsor Representative Holm

Requester Health, Education & Social Services

Component No. 141

Expenditures/Revenues

(Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims	*	*	*	*	*	*
Miscellaneous						
TOTAL OPERATING	*	*	*	*	*	*

CAPITAL EXPENDITURES						
----------------------	--	--	--	--	--	--

CHANGE IN REVENUES ()						
------------------------	--	--	--	--	--	--

FUND SOURCE

(Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	*	*	*	*	*	*
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
TOTAL	*	*	*	*	*	*

Estimate of any current year (FY2006) cost: 0.0

Mark this box (X) if funding for this bill is included in the Governor's FY 2007 budget proposal: ☐

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)

*The department cannot determine the fiscal impact of this proposed legislation.

In grades Kindergarten through 3rd, the per pupil teacher ratio must not exceed 20 to 1.
This bill may impact the pupil teacher ratios at higher grade levels.

Prepared by: Eddy Jeans, Director

Division: School Finance

Approved by: Roger Sampson, Commissioner

Agency: Education & Early Development

Phone 465-8679

Date/Time 3/13/06 1:48 PM

Date 03/13/2006