

teachers in the next 10 months. While some of the new blood may be good, education experts like Michael Kirst of Stanford University believe that the quality of many new hires is suspect--and the schools may be stuck with bad teachers for many years. Urban schools with a lot of tough-to-educate kids are suffering the most. Not only is it difficult to lure new teachers into the inner city but many of their best veterans are departing for openings created by the class-size initiative in often higher-paying and less stressful suburbs.

While students may be getting more attention, new teachers may be getting less. The California State University system, which trains 60 percent of the state's teachers, will start offering courses needed for teaching licenses over the Internet in January. Teachers-in-training will be able to earn a semester's course credit using a textbook and a 4 1/2-hour video of classroom techniques.

Some schools have resorted to steps that directly undermine the potential value of the class-size initiative. Last year many schools placed 40 students in single rooms with two teachers; in others, two teachers traded off teaching the entire group of 40 students. Some schools have even assigned three classes to two rooms, with each class rotating in and out during the day. "It was a nightmare," says Teri Ortt, a second-grade teacher at Hobart Elementary School in Los Angeles who was in such a "troika" system last year. "Teachers were constantly packing up their students and teaching materials, grabbing two hours of class time in the library or outside under a tree."

Breathing room. Smaller classes and more teachers require more classrooms than California schools can currently provide. Hundreds of schools have given up libraries and science labs for class space. Others have discontinued preschool and parent-education programs for lack of room. At Hancock Park, two third-grade classes are set up in the school's auditorium. Statewide, schools are parking portable classrooms on their playgrounds as fast as they can purchase them; more than 7,000 are already on back order. Several thousand of the portables in place are hastily constructed "temporary" structures that state law permits schools to use for only two years.

Many crowded inner-city schools--including 57 schools in Los Angeles--don't have room even for portables, however, and are thus unable to fully reduce class sizes. The state's richer suburban school systems, on the other hand, have room to expand and are reducing class sizes for a greater percentage of their students, officials say. Once the cost of new construction is considered, the true cost of the class-size initiative may be far higher than now projected.

Beyond the practical difficulties of introducing class-size cuts on a California-like scale, there is a more fundamental question: Is the effort to make this initiative broadly popular wasting money on students and schools where the impact will be minimal? All parents want their children

in small classes, but the Tennessee STAR study found that smaller classes helped disadvantaged students, many of whom were African-American, more than they helped affluent students. Black students in the larger first-grade classes scored 14 percent below whites on a key reading test, but the gap narrowed to 4 percent in the smaller classes. A major study of class size to be released this fall by Rand of Santa Monica, Calif., reaches a similar conclusion: Smaller classes benefit students from low-income families most, middle-class kids less, and those from upper-income backgrounds least of all.

Efforts to reduce class size are more cost effective if focused on certain subjects. It makes more sense, experts say, to have larger groups during instruction in subjects such as music and to create smaller groupings during the teaching of reading, the most important elementary school subject. Over 700 schools have done just that as part of a reading program called Success for All, and the achievement results have been impressive. Robert Slavin, the Johns Hopkins University professor who developed the approach, says California could have improved instruction in its elementary schools dramatically for a fraction of the money it has spent simply by hiring and carefully training retired teachers and other part-timers as reading instructors to reduce the size of classes during the time reading is taught.

States that shrink class size by only a few students across the board will probably be throwing their money down the drain. Studies have shown that benefits become measurable only if classes are cut by a third or more--and even then such cuts may make only a marginal difference in affluent areas. Yet the 141,000-student Palm Beach County, Fla., school system just spent nearly \$6 million hiring 220 teachers to reduce class sizes in kindergarten through 12th grade by about one student per class. Part of the reason Tennessee succeeded was that its schools got STAR classes down to the very low average of 15 (often low-income) students--and even then many researchers considered the actual improvements in test scores to be modest, given the reform's cost. The new Rand study also suggests that there's more benefit to reducing class sizes in early elementary grades than in middle schools and high schools.

Reducing class size seems to be most effective in combination with other reforms. Evidence comes from a study of 16 low-income schools in Austin, Texas. In the late 1980s, each of the schools was awarded an extra \$300,000 a year for five years as part of a desegregation case. Fourteen of the schools spent the money to reduce class size and yet in five years didn't manage to improve student attendance or test scores. But the other two schools reduced class size, set higher standards, provided intensive teacher training, and established health clinics on their grounds to address physical problems that were keeping students from learning. Test scores and attendance both improved significantly at those schools.

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their styles. Yet teachers in schools that have cut class sizes often continue to use large-class techniques like relying on textbooks, instead of working directly with students, says Nikola Filby, a researcher at WestEd, a San Francisco-based think tank.

Japanese style. In fact, schools can get many of the benefits of smaller classes, without the cost, by making classes seem small. In Japan, where classes often include as many as 40 students, teachers involve students without relying on one-on-one contact by frequently asking small groups of students to present their findings to the entire class. They build self-discipline among students by giving them responsibilities like calling the class to order after recess. Japanese schools work hard to build bonds between teachers and students, devoting as many as 30 days a year to hiking excursions, festivals, and other activities, says Catherine Lewis, author of *Educating Hearts and Minds*, a study of Japanese schools. (Japan is, however, concerned that its education system discourages creativity and independent thinking, and a government panel recently recommended that the average class size of 29 students be lowered to help teachers nurture students' talents.)

In this country, Catholic schools, which have earned a reputation for doing a good job educating disadvantaged urban students, often have classes of over 30 students. They compensate with high expectations, traditional teacher lecturing, and a strong sense of community that makes kids feel cared about. And P.S. 14 shows that bulging big-city schools can work: A sense of order pervades the school, and teacher morale is surprisingly high.

Educationally, using smaller classes selectively produces the biggest dividends. It frees up money to spend on other reforms that dollar for dollar have produced greater increases in student achievement, such as high-quality teacher training and peer tutoring. Unfortunately, a targeted approach may undermine the political effectiveness of reducing class size. An instructive analogy is Social Security. It is arguably an incredibly inefficient way of reducing poverty among the aged because so many middle-and upper-income families benefit. Yet because the program was designed to be universal--helping seniors regardless of background--it has enjoyed broad support for decades. The class-size initiative may prove to be similar. California's approach may be an inefficient but reasonable compromise between what's substantively ideal and what's politically possible.

Class size

States with largest and smallest average class sizes in 1993-94

LARGEST

SMALLEST

state	students per class	state	students per class
1. California	30.1	1. Vermont	20.4
2. Maryland	28.7	2. S. Dakota	20.7
3. Utah	28.7	3. Kansas	21.0
4. Washington	28.6	4. Montana	21.5
5. Florida	27.7	5. Arkansas	21.6

Source: U.S. Dept. of Education

Future shock

Enrollment in the nation's schools is expected to grow by 2 million students during the next decade, making smaller classes tougher to achieve. Students K-12 (Data for chart is not available.)

Number of teachers (Data for chart is not available.) Source: U.S. Dept. of Education

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SPECIAL FEATURES: photograph; illustration

DESCRIPTORS: Class size--Laws, regulations, etc.; Educational innovations
--Economic aspects; California--Schools

NAMED PERSONS: Wilson, Pete--Social policy

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6/9/7 (Item 7 from file: 47)
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Class conflict: an education reform goes awry.(California elementary school
class size-reductions)
Gearey, Robyn
The New Republic, v216, n16, p12(2)
April 21, 1997
ISSN: 0028-6583 LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 1304 LINE COUNT: 00104

ABSTRACT: Gov. Pete Wilson's crash program to lower 1st and 2nd grade classes to 20 students has backfired. Many schools were forced to convert cafeterias and other space to classrooms, and cut programs from higher grades, to comply. Few principals favor extending the program to other grades.

TEXT:

I hadn't been in California twenty-four hours when I began to realize that the schools were experiencing a few technical difficulties implementing Governor Pete Wilson's much hyped class-size reduction initiative. "Do you wanna teach second grade?" called a voice from the teachers' lounge. "I'll pay you fifty bucks myself." Startled, I looked around, then noticed a group of teachers sitting at a long table by the door. One of them was waving, trying to catch my eye. Thinking the offer a joke, I laughed. "I'm a journalist, not a teacher," I protested. "Babysitting is the closest thing I have to teaching experience." The teacher wasn't fazed. "Do you have a college degree?" she asked. "Yes," I replied. "Well, then," she said, satisfied, "you're perfectly qualified. When can you start?"

That was the first clue. The second came a few days later when I read a Los Angeles Times letter to the editor written by Lori Borcover, whose daughter's school was so tight on space that it closed the library in order to use it as a classroom. Soon after, the Times reported that an elementary school in Costa Mesa had turned its auditorium into classrooms--eliminating school plays and other activities. The school's principal told the Times, "This takes away a major part of our educational programs."

Like the teacher-hiring frenzy, the classroom-space crunch was part of a manic attempt by California schools to cash in on the governor's plan, unveiled last July, which promised a \$650 per child subsidy for every classroom in the first and second grades that met the twenty-students-per-teacher standard by February 16. (The program also applied to some kindergarten and third-grade classes.) Most did, in part by

holding classes in gyms and teachers' lounges, and hiring unqualified teachers. And how has Wilson responded to this chaos? This year he has decided to expand the program, throwing the schools into another round of turmoil.

Class-size reduction is, at least in theory, a great idea. Dozens of studies have shown it to be one of the most effective ways to raise classroom achievement. Prior to Wilson's initiative, California's classrooms were the most crowded in the nation, averaging about thirty kids. And so when Wilson discovered that, in 1994, 56 percent of the state's fourth-graders were rated "below-basic" on a nationwide reading exam, he made class-size reduction a crusade. The response was overwhelming. "This is the most exciting time in twenty or thirty years," gushed Delaine Eastin, superintendent of public instruction in California. "I think this is the start of a renaissance," effused Clovis Unified School District Superintendent Walt Buster. A headline in the Los Angeles Times declared: "smaller classes, big improvement."

But, as the saying goes, the devil is in the details. To get results quickly, Wilson set a deadline and offered a financial incentive. The schools began struggling to find space. Many were already overcrowded, with one in seven relying on a year-round academic schedule to accommodate the overflow. And that was before the governor's plan created a need for 20,000 new classrooms.

Wilson's initiative set aside \$200 million for new classroom space, but that space is not easy to come by. Portable classrooms, if the school has the land, are one option, but they are expensive (they cost up to \$54,000; the state is only allotting \$25,000 per new classroom) and rare. California manufactures only 2,500 portable classrooms a year; the 20-1 initiative has generated orders for some 15,000. The state's department of education estimates that the backlog now runs two to three years.

Construction is another option, but it also requires more land, money and time than most schools can spare. So, in the meantime, makeshift classrooms--libraries, cafeterias and music rooms--will have to suffice. Many schools have opted to squeeze two teachers (and forty kids) in one regular-size room, a decision that even the department of education, the initiative's most enthusiastic proponent, calls "inadvisable."

And if school administrators are desperate for space, they're even more desperate for teachers. California accredits fewer than 5,000 new teachers each year; to meet the 20-1 standard, the state needs 20,000. Even before Wilson announced his initiative, California had trouble attracting enough qualified teachers--in 1994, 11 percent of its teachers were working with either a temporary or an emergency license, or no license at all, already the highest percentage of non-credentialed teachers in the country. Since the initiative passed, one-third of the teachers hired to fulfill it have lacked traditional credentials. In California today, anyone with a bachelor's degree and a passing score on a basic skills test (which many

educators say is on a fifth-grade level) can teach. "We've reached so deep into the pool, we're now taking people we wouldn't have hired a year ago," said Douglas Mitchell, a professor at the University of California-Riverside.

The influx of unqualified teachers makes many people nervous. "I feel better having thirty-two students with an experienced teacher than I do with twenty and a totally inexperienced teacher," says Rebecca Ryan, president of the Pomona district governing board. In a Los Angeles Times op-ed, Dennis L. Evans, a professor at UC Irvine, said, "An elementary class of 20 taught by an ill-prepared 'instant' teacher will prove far worse for the students involved than if they were in a class of 40 taught by a highly qualified and dedicated teacher." Some fear that the teacher shortage is exacerbating the inequalities between urban and suburban schools. Wealthy suburban districts can afford to lure experienced teachers from other parts of the country, even Canada, to fill their classrooms. It is the poorer, urban schools that are forced to rely on inexperienced teachers.

And since Wilson's class-size initiative only applies to younger grades, many school officials admit they have had to shortchange older students to reduce class sizes in the lower grades. James A. Fleming, superintendent of the Capistrano Unified School District, said that his district had to take funds away from a middle-school English program to help pay for the initiative. There are long-range financial concerns as well. The state only provides a fraction of the funds for the new classes and teachers, and, while most communities successfully scrambled to meet this year's deadline, it's likely that they will begin to default in ever increasing numbers. Mike Fine, the chief financial officer of the Newport-Mesa Unified School District, told The Los Angeles Times, "I think at least one-third of the districts who instituted the class-size reduction won't be able to sustain it for more than three years."

So it was quite a surprise last January when Pete Wilson announced that his 1997-98 budget proposal allocated an additional \$304 million to expand the initiative to fully include both kindergarten and the third grade. Administrators who have spent the past six months struggling to cut first- and second-grade classes were hoping the new budget might provide additional money to help them cope with the financial strain incurred in meeting this year's deadline. But instead, they face the Sisyphean prospect of acquiring another 5,000 teachers and classrooms. No wonder many educators found it hard to share Wilson's enthusiasm. As one L.A. school official put it: "We are too busy trying to recover from the governor's last great idea."

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DESCRIPTORS: Education and state--California; Education--Finance; Public schools--California

NAMED PERSONS: Wilson, Pete--Social policy

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Does class size matter?

Toch, Thomas; Streisand, Betsy

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ABSTRACT: Many educators are fighting for class-size cuts, but most states do not have the resources to build new classrooms and hire new teachers. States that have reduced class size have found it is most effective with low-income students and when used for teaching reading.

TEXT:

Headnote:

The newest trend can transform schools-or waste billions of dollars

There are so many students crammed into P.S. 14 in Queens, N.Y., that lunch is split into three shifts beginning at 10:25 a.m. To manage the traffic of 1,700 students, many of them recent immigrants from Latin America and South Asia, each grade level has its own designated exit door. An art studio and a science lab have been sacrificed for use as regular classrooms. Until two years ago, many students spent exercise periods in their classrooms because the school's gym was being used for regular studies. Dancing the macarena at their desks counted as physical education.

Most important, the size of P.S. 14's classes affects the way Rehana Longi teaches and the way her students learn. Angling her body to squeeze between desks, she struggles, unsuccessfully, to give each of her 34 fifth-grade students a few minutes of individual attention. During a 35-minute arithmetic lesson, she gets to check the answers of about 12 students. Creativity is limited. "There's a lot of emphasis on textbooks," she says. "It's got to be that way."

Not for many children in California. In Los Angeles's Hancock Park Elementary School, teacher Sandy Sutton spots one of the 20 students in her second-grade class struggling with a reading task. "Ssstticckk," Sutton says, helping the girl sound out the word. Sutton says the shy kids in her class don't fade into the background as they once did. She can pinpoint slow readers within the first days of school and give them special attention. She can cover more ground during each class period.

In the past, Sutton routinely taught classes of 31 or 32 students and

faced difficulties similar to Longi's. But last year the size of Sutton's class was cut under a wildly popular initiative pushed by Republican Gov. Pete Wilson to reduce the size of classes statewide in kindergarten through third grade. Sutton, for one, is thrilled at the change. "If I ever had to go back to that, I'd quit teaching," she declares.

(Photograph Omitted)

(Photograph Omitted)

Captioned as: Crowd control. Rehana Longi's fifthgrade class at P.S. 14 in Queens has 34 kids. Giving attention to individuals is difficult.

The class-size cuts have already changed the look and feel of California's schools, where nearly an eighth of the nation's students are enrolled. In slightly over a year, the state has created at least 17,000 new classes and over half of the state's 1.9 million eligible students have been placed in classes of no more than 20 students. (In recent years California has had classes averaging 30 students.) Parents overwhelmingly say that smaller classes have increased their children's reading and writing skills. Perhaps most amazingly, parents in Beverly Hills and other affluent enclaves have begun shifting allegiances to public schools, in part because they are now guaranteed small classes similar to those offered by private schools.

As a result of the class-size initiative, Wilson's approval ratings are now the highest he has enjoyed. Democrats in the state legislature are singing the reform's praises. Even the state's teachers' unions have been silenced by surveys showing that over 90 percent of their members believe the class cuts have improved instruction.

"Silver bullet." As President Clinton and Congress fight in Washington over the wisdom of using national exams to spur school improvement, California has found that this bold solution has forged a rare alliance of educators, Democrats, Republicans, unions, and taxpayers. And California's class-size trend seems to be spilling into other states. The Wisconsin Senate last month approved a plan to spend up to \$50 million to reduce average class sizes in poor areas to 18 students or fewer. The move is "a silver bullet, a sure-fire, proven way to improve the quality of education," says Democratic state Sen. Chuck Chvala. New York, North Carolina, and several other states also have passed classshrinking measures recently, and another half dozen are debating such steps. The issue is expected to be the center of discussion during a special session of the Florida legislature this fall.

But there is one catch: Reducing class size is expensive. California is spending \$2.5 billion over two years to cut class size, and the annual cost of sustaining the reform will start at about \$1.5 billion (a 7.5 percent increase in state-level education spending) and rise steadily as new teachers climb salary ladders. To reduce the average class size by 10 students nationally would cost on the order of \$85 billion for teachers alone. But while the California approach is politically popular,

across-the-board cuts in class size are not the most cost-effective way to spend education money. As the class-size crusade spreads to other states, the question of how the reform is implemented—who benefits and who doesn't—deserves scrutiny. Smaller classes could be one of the most important school reforms of recent years—or a colossal waste of money.

The popularity of the class-size initiative stems in part from the perception among parents that increases in education spending over the years haven't found their way into classrooms. On the one hand, public-education spending has increased by at least 61 percent beyond inflation during the past 30 years, and the bulk of the money has been spent on hiring new teachers. Yet the size of regular classrooms has dropped only slightly, largely because the majority of the new teachers work with small groups of disabled students and others with special needs. Wilson rallied support for his expensive initiative by saying he would give subsidies only to those schools that actually succeeded in reducing class size. To voters, smaller classes are "the single strongest rationale for spending more money on schools," says pollster Celinda Lake of Lake Sosin Snell Perry & Associates. Indeed, nearly 60 percent of parents surveyed in a new U.S. News poll say they'd be more likely to vote for a political candidate who wants to raise taxes if the money went to pay for smaller class sizes in kindergarten through third grade. The poll was designed for U.S. News by Democrat Lake with Republican pollster Ed Goeas.

(Photograph Omitted)

Captioned as: Close encounters. Sandra Kessler teaches her third-grade class at Carpenter Avenue Elementary School in Studio City, Calif. The class now has fewer than 20 students.

(Photograph Omitted)

In some regions, large classes are a serious problem. While the average elementary class size in the nation's public schools has declined from 30 to 25 over the past four decades, poor urban school systems continue to struggle with overflowing classrooms. So do schools in Florida and other booming Sun Belt states. The problem isn't likely to ease: Enrollment is expected to increase by 2 million students nationally during the next decade.

In deciding to invest so heavily in smaller classes, Wilson's advisers relied on the findings of an experiment in Tennessee called Project STAR, the nation's only large, long-term study of class size. In 1985, Tennessee put 6,500 kindergartners in 330 classes of different sizes. A third of the classes had between 13 and 17 students; a third had between 22 and 26 students, the typical size of classrooms in the state; and a third had enrollments of 22 to 26 students plus a full-time teacher's aide. The students in small classes stayed in them for four years and then returned to larger ones in the fourth grade. The test scores and behavior of students in the small classes were better than those of kids in the larger classes. For instance, 69 percent of first graders in smaller classes

passed the state's reading test, compared with 58 percent of students in larger groups. Teachers said students who had been in the smaller classes also paid closer attention, asked more questions, and had fewer discipline problems. They even participated more in school clubs and generally became more engaged in school life.

But the benefits that the Tennessee study found in smaller classes are easily squandered if implementation isn't handled properly. California, in reducing class size, might be lowering the quality of teaching. School districts have had to find teachers for the 18,000 new slots; as a result, nearly two thirds of the new hires have little or no teaching experience. In Los Angeles, new teachers have included Nordstrom clerks, a former clown, and several chiropractors. The state needs to hire 15,000 more teachers in the next 10 months. While some of the newblood may be good, education experts like Michael Kirst of Stanford University believe that the quality of many new hires is suspect and the schools may be stuck with bad teachers for many years. Urban schools with a lot of tough-to-educate kids are suffering the most. Not only is it difficult to lure new teachers into the inner city but many of their best veterans are departing for openings created by the class-size initiative in often higher-paying and less stressful suburbs.

While students maybe getting more attention, new teachers may be getting less. The California State University system, which trains 60 percent of the state's teachers, will start offering courses needed for teaching licenses over the Internet in January. Teachers-in-training will be able to earn a semester's course credit using a textbook and a 42-hour video of classroom techniques.

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(Photograph Omitted)

Captioned as: Teacher school. California has hired 16,700 new teachers, including chiropractors and a former clown. Here, some trainees get instruction at the Lanai Road Elementary School in L.A.

Breathing room. Smaller classes and more teachers require more classrooms than California schools can currently provide. Hundreds of schools have given up libraries and science labs for class space. Others have discontinued preschool and parent-education programs for lack of room. At Hancock Park, two third-grade classes are set up in the school's

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(Table Omitted)

Captioned as: Class size

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With Steven Butler in Tokyo

For more information, see U.S. News Online (<http://www.usnews.com>).

(Photograph Omitted)

Captioned as: A popular reform. Shrinking class size has proved wildly popular. But the reform is most effective when targeted to low-income students, and when used for teaching reading.

(Graph Omitted)

Captioned as: Future shock

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DESCRIPTORS: Education reform; Funding; Class size; Children & youth

SPECIAL FEATURES: Photograph Table Graph

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Adding and taking away in class
Wilby, Peter; Szreter, Simon
New Statesman (1996) (GNES), v10 n473, p20-21
Oct 3, 1997
ISSN: 0954-2361 JOURNAL CODE: GNES
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ABSTRACT: Wilby and Szreter give opposing arguments on the education system under Labour government in the UK. Wilby believes that class size is an increasingly irrelevant measure of effectiveness in education, while Szreter believes that more teachers and training will increase effectiveness in education.

TEXT:

Headnote:

New Labour made smaller class sizes the subject of one of its early pledges.

Peter Wilby argues this may be good politics but it is bad policy.

Simon Szreter, opposite, explains why size matters more than we realise

What do Kingston upon Thames, Solihull, Bromley, Redbridge, Bexley, Merton, Dorset and East Sussex have in common? All of them look like local authorities that serve relatively advantaged, middle-class areas. So why are they going to be among the main beneficiaries of one of Labour's five "core pledges" during the election campaign?

The answer is that these authorities all have more than 40 per cent of their five-, six- and seven-year-olds in classes of 30 or more. And Labour promised to use the 100 million or so it would save from abolishing the assisted places scheme to get rid of such classes. It was a brilliant piece of electioneering: a simple transfer of resources, from the over-privileged independent sector to the mass of the nation's children (governing for "the many, not the few"), presented in terms that voters could easily grasp.

A pity, then, that it doesn't seem to address the biggest problem in British schools: how to improve results in the inner cities and, in particular, how to attract better teachers to the most disadvantaged areas. Nearly all the most deprived London boroughs - Newham, Tower Hamlets, Hackney, Lambeth, for example - have fewer than 10 per cent of their infants in classes of more than 30. The figures for Lambeth, for example,

suggest that we are talking about no more than 11 classes in the whole of the borough. That, it can be agreed, is 11 too many, and about 380 Lambeth children will benefit if the government delivers on its pledge. But far greater numbers will benefit - 8,000 in leafy Solihull, 19,000 in rural Dorset, 10,000 in suburban Bromley, for instance - in the more privileged areas.

A report from the Office for Standards in Education published in 1995 allows us to look at the matter in another way. This found that the higher the attainment level of a school intake (as judged by the inspectors), the higher the average class size. Only 14 per cent of classes where inspectors judged the intake attainment to be "low" had more than 30 children, against 28 per cent overall.

None of this should be surprising. The grant system, both nationally and locally, is weighted so that children in poor areas get more resources. Many teachers would argue that it isn't weighted enough but, astonishingly, Labour's policy will favour the better-off areas.

Some local education officers argue that the situation is even more iniquitous than that. "The danger," said one, "is that local authorities that have kept their education funding to a minimum in the past will now be rewarded with extra government funds."

Equally some schools have deliberately chosen to keep classes above 30. The reasons may be perfectly legitimate: they may have decided that an extra 33,000 to 44,000-worth of books and equipment was a fair exchange for classes of 31 or 32. But why should they now benefit?

Another side-effect of the government's policy will be to deny many parents their choice of school. In the past an oversubscribed school could satisfy at least some parents by cramming a few extra children into each class. In future it will have to turn them away to keep classes below 30. This in itself may be no bad thing, because the pushier, more aspiring parents will be more evenly spread around the system. But ministers should understand that it may have the perverse effect of actually increasing the average class size in more deprived areas.

The truth is that class size, while it may play well on the hustings, is an increasingly irrelevant measure of effectiveness in education. Though the pupil-teacher ratio in schools deteriorated in the first half of the 1990s, the pupil-adult ratio actually improved (from 18.6:1 to 18.4:1). The growth of the classroom assistant, who can hear children read or give extra support to children with learning difficulties, under the direction of a professional teacher, is one of the most striking developments in contemporary schooling. Though the precise role of classroom assistants varies, Ofsted reported in 1995 that "their positive contribution to pupils' learning is almost universally reported by inspectors".

The biggest single problem for postwar schooling has been to restore the prestige of teaching as a profession, and thus both to raise morale within it and to attract higher-quality entrants. The long-term answer is

surely to have fewer, betterpaid teachers alongside more, bettertrained classroom assistants, as well as more administrative assistants to relieve teachers of growing bureaucratic burdens. Schools could also use "teaching associates" - business people, craftsmen, parents, pensioners, PhD students - who would make a regular commitment of a half-day or day a week to bring in outside expertise. Teachers would then be seen by themselves and others as learning managers or directors rather than as drudges who spend half their time shushing the class, moving furniture and wiping bottoms.

Ideas of this sort were explored by Professor Michael Barber in his book *The Learning Game*, published last year and now reprinted with an encomium from Tony Blair - "provocative and timely, illuminating and optimistic" emblazoned on the cover. After the election Barber became head of David Blunkett's Standards and Effectiveness Unit.

We must hope that Barber is pressing his case and that Blunkett is listening. The view that the assisted places "windfall" might be better used for other purposes - raising salaries for teachers in deprived areas or launching more effective training for classroom assistants, for example - has been put to Department for Education civil servants by a number of LEA officers. But all the signs from the department are that ministers intend to press ahead and redeem their election pledge to the letter.

If we wanted to be very cynical, we might deduce that the pledge was deliberately designed to benefit the middleclass floating voters that Labour targeted in the election campaign. But it is perhaps better seen as an example of how good politics often makes bad policy. Before the election one LEA chief officer raised doubts about the practicalities of the class sizes commitment with David Miliband, one of Blair's top advisers. "Sorry," Miliband replied, "it's all a matter of positioning."

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Should they stand for this?
Vetter, Kathy; Bekaert, Jerry; Glover, Doris; Dukes, Pamels; Endl, Kelly
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ABSTRACT: Teachers present their opinions on overcrowding in schools and what should be done about the growing problem and demand. They discuss some of their solutions to having more students than desks.

TEXT:

Headnote:

It's the start of a new year. What do you do when you have more students than chairs?

In the junior high school where I teach, the number of students in one room varies from period to period by as many as 15.

We don't have enough desks to keep the maximum number that may be needed in each classroom. So we have some of the students carry their desks from classroom to classroom when they're headed for a class that has a large enrollment.

Each student soon develops his or her own style of desk carrying. Some of them lift the desk over their heads, while others carry it on the side taking up most of the hallway.

Still others straddle the desk and carry it down the hall, pretending they're riding a horse-which does seem logical, since I teach in Wyoming!

Kathy Vetter

Middle school special ed teacher Wheatland, Wyoming

In industrial arts/tech ed, overcrowding presents special problems. More students than work stations means special safety concerns and material/equipment problems.

In my area, students complete written safety exercises before any use of machinery. This activity sorts and staggers the students' assignments, preventing an overload at any one station.

I also have to design smaller, quicker activities for each student.

Jerry Bekaert.

Middle school industrial arts teacher Coatesville, Pennsylvania

I try to create other sitting areas, if we can't use desks. I've

brought in beanbag chairs, and we've had class sitting in a circle on the floor.

Sometimes we use alternate sites in the building for activities-for example, the media center or the cafeteria -and when it's possible, we'll go outside.

The desks belong to all of us, so I also rotate students based on the activities we're doing at the time. I'll have one group on the floor in a circle, and others working at the desks.

Kids don't need to sit at desks all the time anyway. Teaching is about being flexible. It's not about sitting in chairs.

Doris Glover

Elementary special needs teacher Atlanta, Georgia

I've gone around and begged for desks.

Pamela Dukes

Middle school teacher Dallas, Texas

At one point, I had 30 kindergartners in each of my classes. A very structured classroom worked really well, so the kids always knew where to be and where to go.

I set up subject-related activities in different areas of the classroom: science center, reading corner, listening center, math center, and others. When we sat to do full-group activities on the floor in a circle, we just had to keep making the circle bigger to include everyone.

Kelly Endl

Kindergarten teacher Beloit, Wisconsin

Got an Answer?

How do you balance competition and cooperation in the classroom?

Send your answer to NEA Today by regular mail, Fax 202/822-7206, or E-mail at dilemma2@neatoday.org. Include your name, educational position, and phone numbers.

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DESCRIPTORS: Educators; Teaching; Students; Class size

SPECIAL FEATURES: Illustration

teachers to fully implement CSR in three grades statewide. Adding a fourth grade would require the hiring of an additional 8,700 teachers, for a total of 16,500 new teachers next year (these are in addition to the new CSR teachers hired this year). With an average class size of 20, however, only 3,200 teachers would be needed to implement the program in three grades, 10,400 teachers would be needed to continue in four grades, or a difference of 59ápercent and 37ápercent fewer new teachers, respectively.

Providing Facilities for Class Size Reduction

Most new classrooms for CSR were created by installing portables. In addition, a significant number of facilities were converted from other uses, potentially curtailing other programs or services. New facilities to expand CSR next year to more classes and grades will be much more expensive on a per-classroom basis, suggesting that districts now have fewer options for creating CSR facilities than they did this year.

Along with the challenge of finding qualified teachers, CSR created the need for about 18,400 new classrooms this year. As Figureá12 (see next page) shows, districts took several different approaches to creating new classrooms for CSR. Fifty-six percent of CSR classrooms were created by purchase or rental of portable buildings. Most of the other 44ápercent of classrooms were created by reconfiguring existing space.

An unintended side effect of CSR has been conversion of some spaces used for other purposes into classrooms. As shown in Figureá12, about 8ápercent of classrooms for CSR were created by converting space from other uses. These facilities include libraries, computer and science labs, teacher lounges and prep rooms, gymnasiums and cafeterias, and child care facilities, among others. On a statewide basis, we estimate that about 3,400 facilities were converted on a temporary basis (that is, for less than one year) and an additional 1,400 facilities were converted on a permanent basis. Permanent conversions included about 200 to 300 each of computer labs, music rooms, and child care facilities. The full impact of these conversions is difficult to estimate because conversion of a facility does not mean that the service provided at the facility has been lost. For example, some districts combined their computer labs with their libraries and some child care programs were able to find other space in which to continue operating. Nevertheless, some programs and services have undoubtedly been curtailed due to CSR.

Figure 12 How Districts Created Classrooms

For CSR--1996-97 Means to Create New Classrooms Percent of CSR

Classrooms Purchase or rent portables 56 % Use existing unoccupied space 8 Share classrooms 8 Convert classrooms from other uses 8 a Reconfigure grade levels among schools 7 Divide classrooms 4 Other 9 Total 100 % a Includes only permanent conversions.

Facilities Costs of CSR. In addition to the ongoing costs of CSR, districts incurred significant one-time costs for providing new classrooms. Based on data in our survey, we estimate that total statewide expenditures for CSR facilities will be at least \$500 million in the current year or about \$28,000 per new classroom, on average. This figure is relatively low, primarily because many CSR classrooms were created by reconfiguring existing space (it also may underestimate actual costs, as some districts appear to have underestimated the full cost of portable classrooms in their responses to our survey). The state provided \$200 million of these funds as one-time facilities grants in 1996-97.

Future facilities costs of CSR depend on whether districts can average 20 children per class. Given current average class sizes of about 19, we estimate facilities to complete implementation in three grades (starting from where the state will be at the end of the current year) will cost about \$600 million or about \$73,000 per new classroom, on average. These costs would drop to about \$250 million for average class sizes of 20. We estimate an additional \$500 million would be needed to implement CSR in four grades, as proposed by the Governor, assuming average facilities costs of \$73,000 per new classroom and average class sizes of 20.

Districts May Have Few Options for Providing Additional CSR Facilities. We were not able to determine directly from the data in our survey whether districts have the space to add new classrooms or the land to build new schools. Both of these will be necessary to continue expansion of CSR to three grades, and even more so if a fourth grade is added. Nevertheless, the data suggest districts generally are hard-pressed to find enough space for new classes. In the current year, most new facilities were created with portables, which are expensive, or by converting other facilities, which is potentially damaging to other programs. As shown above, facilities to continue CSR implementation next year will be more than 2.5 times as expensive, on a per-classroom basis, as this year. This suggests that most districts now see new buildings as their only option for creating new CSR classrooms.

Other Results of the Survey

The survey provided information on other aspects of the CSR program besides costs, teachers, and facilities. These results include:

Transfers From Private Schools. We asked districts how many children, if any, transferred from private schools to public schools as a result of CSR. We estimate that at least 0.5ápercent of students in CSR classes transferred from private schools. This number may understate the actual rate, as many districts did not know whether any of their students had transferred from private schools. If more families choose to attend public school as a result of CSR, the increase in the Propositioná98 minimum guarantee could be substantial. For example, if CSR causes an 0.5ápercent increase in K-3 enrollment, the Propositioná98 minimum guarantee would increase by about \$50ámillion.

Teacher Morale. Districts generally reported that the morale of CSR teachers went up, while the morale of upper-grade teachers stayed the same or went down.

Parent Morale. Districts generally reported that parent morale went up.

How Would Districts Have Spent the Money Without CSR? We asked districts how they would have spent their CSR funds if they received the funds as general revenues with no strings attached. About one-third said they would have reduced class size to some extent, but not necessarily all the way to 20. Another third said they would have spent the funds in a range of other ways, such as technology, staff development, facilities improvements, increasing their reserve, etc. Finally, one-third said that the collective bargaining process would require them to spend substantial portions on salary increases for teachers.

Issues and Recommendations

Based on the data and analysis discussed above, we drew the following conclusions:

Staying Under the 20:1 Cap Pushes Up Costs Substantially. Districts have set CSR class sizes at a statewide average of about 18.8 primarily to avoid losing CSR funding, which occurs when any individual CSR class exceeds an annual average class size of 20. If CSR classes average 18.8 students instead of 20, however, the cost of the program is 21ápercent higher.

Insufficient Qualified Teachers Are Available to Staff CSR Classes. Twenty-four percent of teachers hired for CSR are not credentialed and are working under an emergency permit or waiver. School districts rate teachers hired for CSR as being less skilled, on average, than teachers hired in previous years. At the same time districts are hiring less qualified teachers, most are also experiencing difficulties in implementing staff development for those teachers.

New Facilities Will Be Expensive. Most new classrooms for CSR were created by installing portables. In addition, a significant number of facilities were converted from other uses, potentially curtailing other programs or services. New facilities to expand CSR next year to more classes and grades will be much more expensive on a per-classroom basis, suggesting that districts now have even fewer options for creating CSR facilities than they did this year.

Based on our analysis of the survey data detailed above, we believe the Legislature should take a number of steps to modify the Governor's proposed CSR plan.

Provide More Flexibility In Use of CSR Teachers

We recommend the Legislature provide districts with increased flexibility in the CSR program. Ideally, the Legislature should allow districts to choose other ways to deploy new teachers, such as small-group tutoring, in addition to CSR.

Last year, in our Analysis of the 1996-97 Budget Bill we recommended that the Legislature fund a more flexible program that would include reducing class sizes as well as other options. Under our proposal, districts would be required to hire the same number of teachers they would have hired to reduce class size to 20, but they would be allowed to deploy these teachers in a more flexible fashion. Our recommendation has two advantages, which we discuss below.

Flexibility to Choose the Best Educational Strategies. There are a number of educational interventions with demonstrated effectiveness that require additional teaching staff. Under our proposal, schools could direct staff resources to a wider range of activities that have been shown to increase student achievement, including (1) one-to-one or small group tutoring to supplement classroom instruction, (2) implementation of a structured reform program that requires additional teaching staff, or (3) any other purpose that involves direct instruction of students.

Mitigation of Problems Caused by Inflexibility in the Current CSR Program. The strict 20-student CSR cap creates a number of administrative and educational problems, including:

- * Substantial Increases in Statewide Costs. The Legislature intended to reduce class sizes to 20 and provided funding on that basis. But districts appear to be putting about 18.8 pupils in their CSR classes, on average, largely in order to be sure of staying under the 20:1 cap. This will result in substantial increases--as much as 21 percent--in the cost of the program. Some districts may even be forced into class sizes of 16 or 17, which further increases district costs.
- * Busing to Achieve Smaller Class Sizes. Some larger districts have resorted to busing children between schools to remain under the 20:1 cap in each class. Busing students out of the neighborhood school is disliked by parents and students and creates additional costs for districts. The disruption to students has unknown educational consequences.
- * Questionable Education Practices. Some very small districts have had to shuffle children between upper and lower grade combination classes in ways that may not be educationally sound, solely to stay under the 20:1 cap. Clearly, the Legislature did not intend CSR to create a worse educational environment for students.
- * No Space for Expansion. Some schools' participation will be limited due to lack of space for new classrooms.

For these reasons, we continue to recommend that the Legislature provide broad flexibility to schools in determining the best use of additional teacher resources in meeting student needs.

Provide More Flexibility Within the CSR Program

If the Legislature chooses not to adopt our recommendation for greater flexibility in how CSR teachers are deployed, we recommend that the Legislature enact greater flexibility in the 20:1 cap within the current CSR program. This will reduce costs and reduce the incidence of busing and inappropriate class assignment that have occurred due to inflexibility in the program

If the Legislature wants to continue the existing program, increasing the flexibility over the way it is implemented would go a long way towards helping districts administer and finance CSR.

Districtwide Averaging Would Solve Many Problems. Allowing districts to maintain average class sizes of 20 students over the whole district, with a maximum of up to 22 in any one class, would create substantial additional breathing room for districts. Such flexibility would not increase average class sizes from the level originally intended by the Legislature but would have a number of beneficial effects:

- * Reduction in Ongoing Costs. If districts average 20 per class, per-pupil costs would be reduced significantly below their likely level this year.
- * Reduction in New Teachers Hired. Implementation in three grades would require 4,600 fewer new teachers, reducing the pressure to hire less qualified teachers that CSR has created.
- * Reduction in Facilities Needs. Correspondingly, fewer classrooms would be needed, reducing pressure on already limited space at schools participating in CSR.

This simple change would greatly help most districts implement CSR. Because of the special problems for small districts, however, they may need additional flexibility.

Provide Flexibility for Schools That Do Not Have Room for Facilities. In addition to flexibility on class size, the Legislature should provide flexibility for schools that have no way to add new classrooms. Schools in this position could be allowed to certify to SDE that no space exists and be given greater flexibility in determining how the additional teacher resources should be used.

Schools need additional flexibility to meet the challenge of reducing class sizes. We recommend the Legislature adopt relatively modest changes to increase local flexibility in the CSR program. This would reduce the cost of CSR and avoid many of the implementation problems schools currently confront.

Delay Implementation Of a Fourth Grade

We recommend the Legislature delay expansion of CSR to four grades due to shortages of qualified teachers and potential lack of facilities. The Legislature should provide \$100ámillion on a one-time basis in the budget year for class-size facilities. By this action, the Legislature will reserve \$100ámillion in ongoing funds that can be spent on a fourth grade of CSR in subsequent years.

As we discussed above, teachers hired for CSR this year are less qualified than new teachers hired in previous years. The current three-grade CSR program will result in thousands more teachers being hired next year as districts continue implementation in the three grades that are already funded. Adding a fourth grade would create additional downward pressure on teacher quality as schools scramble to staff classrooms.

In addition, there is also evidence that many districts have exhausted existing spaces for expanding class sizes. This means further expansion will require adding portables or even new construction. This will create major district costs.

For these reasons, we recommend the Legislature delay expansion of the CSR program for at least one year. This will give districts time to continue implementing the existing program without creating the new pressure of expanding to additional grades. We will continue monitoring CSR implementation in order to provide information in the future on the status of the program.

We do think that extending the program to all of K-3 is warranted. For that reason, we recommend the Legislature signal its intent to provide expansion funds in the future. This will give districts a better understanding of the state's long-term plans for CSR. For this reason, we recommend the Legislature earmark \$100ámillion in the 1997-98 Propositioná98 "base" for support of class size reduction in subsequent years. This \$100ámillion can then be appropriated in 1997-98 as a one-time augmentation to the class size facilities grant.

This approach has three benefits. First, it provides additional support for class size facilities in 1997-98--when these monies are needed. Second, it clearly states the Legislature's long-term intentions for class size reduction. Finally, it works into the base \$100ámillion, or about one-third, of the approximately \$300ámillion needed to expand CSR to a fourth grade. The remaining funds needed for a fourth grade could be added to the base in future years, in step with districts' ability to implement CSR in all four grades.

Maintain Per-Pupil Funding Level for CSR

We recommend that the Legislature maintain CSR per-pupil funding at the original level (adjusting it only for cost of living, as the budget proposes for 1997-98). We further recommend that the Legislature direct any discretionary Proposition 98 funds to district revenue limits, which could be used to cover unfunded CSR costs (if any) or for any other locally determined priority.

Many districts have stated that CSR actually costs around \$750 to \$800 per pupil, and that, at a 1996-97 funding level of \$650 per pupil, CSR is "encroaching" on district general funds. In fact, many districts commented in our CSR survey that the state should set aside full per-pupil funding for the program. Some districts advocating higher per-student levels indicated that this would help the districts because the funds would not then be subject to collective bargaining. There are two main points to consider.

First, what does CSR cost? As discussed above, the cost of the program is around \$770 per pupil, on average, this year. The cost would go down to about the amount included in the budget next year if the Legislature provides districts additional flexibility so that they are able to average 20 pupils per class, rather than 18.8. Even at 20 students per class, about half of the districts would experience costs in excess of the budgeted amount. The factors driving these costs--including teacher salary levels and pre-CSR class sizes--result from past district choices regarding the use of funds. Conversely, about half the districts would experience savings. Increasing the CSR per-pupil amount would simply add to the "windfall" benefits experienced by these districts.

The second issue is whether new Proposition 98 funds should be used to increase per-student CSR funding or to increase district revenue limits. By adding available funds into revenue limits, districts could then prioritize these funds for CSR if they so desired or spend them in other ways. Either way, districts would receive the same amount of revenue. The only difference would be in how much flexibility they would have in spending the funds.

Districts generally say they prefer local control, and complain of state micro-management when limitations are placed on local financial discretion. We think the Legislature should opt for local control over funds whenever possible. Local administrators and school board members have more information about specific local needs than do policymakers in Sacramento.

On the other hand, some districts would prefer to see more funds in the CSR program, rather than the revenue limit, because the funds would not be subject to collective bargaining or available to

other constituencies that would advocate using the funds for other purposes.

In effect, many districts would like to have it both ways. If the Legislature places additional funds in the revenue limit, districts could continue to complain that CSR encroaches on their general fund even though they would actually have greater flexibility over expenditures. If the Legislature places more funds in the CSR program, the Legislature would be unnecessarily directing the use of these funds, district discretion would be reduced, and the state would short-circuit the local process of determining how new revenues would best serve student needs.

Analyst's Recommendation. We recommend the Legislature maintain the current CSR per-pupil funding level, adjusted annually only for the cost of living. For 1997-98, this is the same as proposed by the Governor's budget, which provides \$666 per pupil. Based on our data, a per-student amount of \$666 for CSR adequately covers the statewide average costs of the program--if districts have the flexibility to keep class sizes at 20 students.

The budget contains at least a \$300ámillion increase in district revenue limits. In our K-12 Priorities section above, we recommend that \$149.7ámillion in additional funds be added to district revenue limits. Together, these discretionary funds would provide more than enough ongoing funding for the CSR program for virtually all districts. Districts with lower CSR costs could spend the funds for other purposes.

If new funds are added to districts' revenue limits rather than CSR, districts will continue to argue that CSR encroaches on their general funds. Despite that, the Legislature needs to send a signal to districts that they are responsible for prioritizing their revenues. Adding available funds to revenue limits instead of CSR would increase district responsibility for determining the local cost of CSR and prioritizing funds for that purpose.

Increasing per-pupil funds for CSR would free districts from having to prioritize these funds through the collective bargaining process. But, class size reduction should be part of collective bargaining because it represents a workload reduction for K-3 teachers. Just as teacher contracts often compensate teachers when class sizes exceed a certain level, contracts could recognize the workload reduction and improvement in working conditions when classes are small.

Provide Staff Development Funds

We recommend the Legislature broaden the allowable uses of the \$52ámillion in Goals 2000 funds proposed for staff development in reading to include the staff development needs of newly hired CSR teachers.

The Governor's budget proposes \$52ámillion in federal Goals 2000 funds for reading skills development for elementary school teachers. The federal funds are available for a wide variety of state school improvement activities. All of the funds would be devoted to reading skills training, with \$46.4ámillion allocated to training teachers in grades four through eight, and \$5.6ámillion to augment training programs for teachers in grades kindergarten through three. In the current year, \$39.4ámillion in Goals 2000 and General Fund monies are dedicated for K-3 teacher training in reading.

The amount proposed for teachers in grades four through eight represents about \$600 per teacher. The total amount provided to K-3 teachers--including both the \$39.4ámillion in the current year plus the additional \$5.6ámillion proposed for 1997-98--amounts to about \$500 per K-3 teacher. The DOF could not justify either the purpose or the amount of funds set aside for the intermediate and middle school teacher training.

Our CSR survey indicates a pressing need for providing staff training to new CSR teachers. As noted above, teachers hired for CSR are less qualified and have fewer teaching skills than typical new teachers. In addition, districts have had difficulty finding sufficient funds to provide staff development. If CSR is going to result in improved achievement, a qualified teaching force is essential.

For these reasons, we recommend the Legislature approve the proposal to use the Goals 2000 funds for staff development. Because CSR has created an acute need for new-teacher staff development, we further recommend the Legislature broaden the allowable uses of the funds so that districts may also use the funds for staff development of teachers hired for CSR.

This report was prepared by
Joel Schwartz, under the supervision of Paul Warren.

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CITATIONS/ABSTRACTS

Further Reading on Class Size

Readers who want to examine research and commentary on the subject of class size should consider the following studies and articles.

Research studies:

- * "Meta-Analysis of the Relationship of Class Size and Student Achievement," by Gene Glass and Mary Lee Smith, 1978. Available from WestEd, 730 Harrison St., San Francisco, Calif. 94107-1242, or by calling 415-565-3000.
- * "How Changing Class Size Affects Classrooms and Students," by Douglas F. Mitchell and Sara Ann Beach, Far West Laboratory, 1990. Available from WestEd.
- * "Class Size: A Summary of Research," by Glen Robinson, Educational Research Service, 1978. Available from ERS, 2000 Clarendon Blvd., Arlington, Va. 22209, or by calling 703-243-2100.
- * "Summary of Recent Class-size Research with an Emphasis on Tennessee's Project STAR and its Derivative Studies," by C.M. Achilles, 1996. Available from Center of Excellence for Research and Policy in Basic Skills, Tennessee State University, 330 Tenth Ave. North, Nashville, Tenn. 37203-3401, or by calling 615-963-7231.
- * "Answers and Questions About Class Size," by Jeremy Finn and C.M. Achilles, American Educational Research Journal, Fall 1990. Available from American Educational Research Association, 1230 17th St., N.W., Washington, D.C. 20036-3078, or by calling 202-223-9485.
- * "Using Research Results on Class Size to Improve Pupil Achievement Outcomes," by C.M. Achilles, Pat Harman and Paula Egelson, Research in the Schools, Fall 1995. Available from SouthEast Regional Vision for Education (SERVE), P.O. Box 5367, Greensboro, N.C. 27435, or by calling 800-755-3277.
- * "Does Class Size Make a Difference? Recent Findings from State and District Initiatives," by Paula Egelson, Patrick Harman and C. M. Achilles, SouthEastern Regional Vision for Education, 1996. Available from SERVE.
- * "When Money Matters: How Educational Expenditures Improve Student Performance and How They Don't," by Harold Wenglinsky, Educational Testing Service, 1997. Available from ETS, Mail Stop 04-R, Rosedale Road, Princeton, N.J. 08541-0001, or by calling 609-734-5694.

Articles:

- * "Synthesis of Research on the Effects of Class Size," by Glen Robinson, Educational Leadership, May 1990. Available from Association for Supervision and Curriculum Development, 1250 N. Pitt St., Va. 22314-1453, or by calling 800-933-ASCD.
- * "The Numbers Game Yields Simplistic Answers on the Link between Spending and Outcomes," by Michael Sadowski, Harvard Education Letter, March/April 1993. Available from Harvard Education Letter, 6 Appian Way, Cambridge, Mass. 02138, or by calling 800-513-0763.
- * "The Tennessee Study of Class Size in the Early School Grades," by Frederick Mosteller, The Future of Children, Summer/Fall 1995. Available from Packard Foundation, 300 Second St., Suite 102, Los Altos, Calif. 94022, or by calling 415-948-3696.

Resource site:

- * WestEd, a federal research lab, operates a web site (<http://www.WestEd.org>) that tracks the class-size reduction effort in California and provides an array of information on class size.

ED288921 UD025894

Effective Pull-out Programs for Students at Risk.

Madden, Nancy A.; Slavin, Robert E.

Center for Research on Elementary and Middle Schools, Baltimore, MD.

Apr 1987

34p.; Paper presented at the Annual Meeting of the American Educational Research Association (April 20-24, 1987, Washington, DC).

Sponsoring Agency: Office of Educational Research and Improvement (ED), Washington, DC.

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Geographic Source: U.S.; Maryland

Journal Announcement: RIEAPR88

This paper reviews research on effective pull-out programs for elementary students who are at risk for school failure. The emphasis is on programs that can be readily replicated by schools other than those that developed them. The focus is on programs provided to students who have been identified as in need of remedial services which are implemented outside of the regular classroom. The study found that effective pull-out programs for students fall into three broad categories: (1) diagnostic-prescriptive programs; (2) tutoring programs; and (3) computer-assisted instruction. Successful examples of each of these types are described and discussed. The most successful models completely adapt instruction to students' unique needs and provide plentiful direct instruction appropriate to their levels of readiness. Results of the study suggest that the achievement of at-risk students can be significantly increased, either by making relatively inexpensive but extensive modifications in the regular instructional program or by implementing relatively expensive but intensive interventions as pull-out programs. It is possible that a combination of these strategies would be more effective than either one by itself. An extensive list of references is included, along with descriptions of successful programs among each of the three types. (PS)

Descriptors: Academic Achievement; Class Size; *Compensatory Education; Computer Assisted Instruction; Elementary Education; *High Risk Students; *Individualized Instruction; *Instructional Design; *Program Design; Program Effectiveness; Remedial Instruction

Identifiers: Education Consolidation Improvement Act Chapter 1

2 Complete Record

EJ535201 CE530118

Sustained Inquiry in Education: Lessons from Skill Grouping and Class Size.

Mosteller, Frederick; And Others

Harvard Educational Review, v66 n4 p797-842 Win 1996

ISSN: 0017-8055

Language: English

Document Type: REVIEW LITERATURE (070); JOURNAL ARTICLE (080)

Journal Announcement: CIJMAY97

Review of tracking research reveals a small number of well-designed studies with equivocal results. The Tennessee Class Size Study demonstrates convincingly that student achievement is better in smaller K-3 classes and the effect continues later in regular-sized classes. More randomized, controlled field trials such as this are needed. (SK)

Descriptors: *Ability Grouping; Academic Achievement; *Class Size; Elementary Education; Longitudinal Studies; Research Needs; *Teacher Student Ratio; *Track System (Education)

Identifiers: Tennessee

3 Complete Record

EJ534580 PS525712

Center Size and Center Performance.

Helburn, Suzanne; Morris, John

Child Care Information Exchange, n108 p20,22-24 Mar-Apr 1996

ISSN: 0164-8527

Language: English

Document Type: RESEARCH REPORT (143); JOURNAL ARTICLE (080)

Journal Announcement: CIJAPR97

Examined the impact of child care center size on cost, quality, and profits per child. Examined centers ranging from 40 to 80 children and found total cost and revenue per child were similar for small, medium, and large centers. Found profits per child were highest in large centers and that there was no relationship between center quality and size. (AA)

Descriptors: *Class Size; Comparative Analysis; *Cost Effectiveness; *Day Care Centers; Economic Impact; Educational Facilities Planning; Educational Finance; *Educational Quality; Educational Trends; Enrollment; Expenditure per Student; Program Evaluation; Proprietary Schools; *School Space; Student Costs

Identifiers: *Day Care Quality; Proprietary Organizations; Return on Investment

6 Complete Record

EJ527500 EA532201

Class Size Makes a Difference, But....

Polansky, Harvey B.; Johnson, Donald R.

School Business Affairs, v62 n6 p50-52 Jun 1996

ISSN: 0036-651X

Available From: UMI

Language: English

Document Type: REVIEW LITERATURE (070); JOURNAL ARTICLE (080)

Journal Announcement: CIJDEC96

Target Audience: Administrators; Practitioners

Research indicates that it is strategic to have the smaller class sizes in the primary grades. Students who had smaller classes in the K-3 continuum continue to have better achievement than those students in regular size classes. (MLF)

Descriptors: *Academic Achievement; *Classroom Environment; *Class Size; Elementary Education; Primary Education; *Student Behavior

7 Complete Record

EJ522414 UD519072

The Tennessee Study of Class Size in the Early School Grades.

Mosteller, Frederick

Future of Children, v5 n2 p113-27 Sum-Fall 1995

Theme issue topic: "Critical Issues for Children and Youths." Funded in part by the Andrew W. Mellon Foundation.

ISSN: 1054-8289

Language: English

Document Type: REVIEW LITERATURE (070); RESEARCH REPORT (143); JOURNAL ARTICLE (080)

Journal Announcement: CIJAUG96

Discusses research (Tennessee Study of Class Size) that determined the effects of smaller class size in the earliest grades on short- and long-term pupil performance. The 4-year study assessed the performance of over 6,500 students who attended K-3 classrooms having differing numbers of students and found evidence of short- and long-term benefits from smaller class sizes. (GR)

Descriptors: *Academic Achievement; *Class Size; *Educational Research; *Elementary School Students; Grade 1; Grade 2; Grade 3; *Preschool Children; Research Methodology; *Small Classes; Teacher Student Ratio

Identifiers: *Tennessee

8 Complete Record

EJ517855 EA531588

Students Achieve More in Smaller Classes.

Achilles, Charles M.

Educational Leadership, v53 n5 p76-77 Feb 1996

ISSN: 0013-1784

Available From: UMI

Language: English

Document Type: PROJECT DESCRIPTION (141); JOURNAL ARTICLE (080)

Journal Announcement: CIJJUN96

Tennessee's Project STAR (Student Teacher Achievement Ratio) randomly assigned

7,000 K-3 students to small classes (13-17 pupils), regular classes (22-26 pupils), and regular-with-aide classes. Small classes ameliorate large schools' effects, reduce grade retention and discipline problems, benefit minority students substantially, allow students more individual attention, are friendlier, and encourage more active student participation. (MLH)

Descriptors: *Academic Achievement; *Class Size; Discipline; *Educational Benefits; *Influences; *Longitudinal Studies; Minority Groups; Primary Education; *Small Classes; Student Participation

Identifiers: *Project STAR: Tennessee

9 Complete Record

EJ514705 EA531296

Moving beyond Spending Fetishes.

Hanushek, Eric A.

Educational Leadership, v53 n3 p60-64 Nov 1995

ISSN: 0013-1784

Available From: UMI

Language: English

Document Type: EVALUATIVE REPORT (142); JOURNAL ARTICLE (080)

Journal Announcement: CIJAPR96

Enormous funding increases for U.S. public schools have not yielded improvements in student performance. Econometric research shows that neither smaller classes nor graduate teacher training affects performance. Since schools use resources inefficiently, incentives should be linked to performance. Magnet and charter schools and private school vouchers would help align rewards with performance. (10 references) (MLH)

Descriptors: *Academic Achievement; *Class Size; Competition; *Cost Effectiveness; *Econometrics; *Educational Finance; Educational Vouchers; Elementary Secondary Education; *Incentives; Public Policy; Rewards

Identifiers: *Return on Investment

11 Complete Record

EJ505783 SP524203

Synthesis of Research: Teaching Whole-Group Classrooms.

Ornstein, Allan C.

Peabody Journal of Education, v70 n2 p104-16 Win 1995

Theme issue title: "Teacher Effectiveness: A Look at What Works."

ISSN: 0161-956X

Available From: UMI

Language: English

Document Type: REVIEW LITERATURE (070); JOURNAL ARTICLE (080)

Journal Announcement: CIJOCT95

The article discusses the concept of whole-group instruction. After noting criticism of whole-group instruction, the paper examines research on the effects of class size and academic achievement, classroom tasks, altering instructional

variables, and ability grouping. Fifteen practical suggestions for teaching whole groups are included. (SM)

Descriptors: *Ability Grouping; Academic Achievement; Class Activities; *Classroom Techniques; *Class Size; Elementary Secondary Education; *Large Group Instruction; Teaching Methods

12 Complete Record

EJ501279 EA530564

Teaching Whole-Group Classrooms: What Principals Should Know.

Ornstein, Allan C.

NASSP Bulletin, v79 n570 p70-81 Apr 1995

ISSN: 0192-6365

Available From: UMI

Language: English

Document Type: EVALUATIVE REPORT (142); REVIEW LITERATURE (070);

JOURNAL ARTICLE

(080)

Journal Announcement: CIJAUG95

Explains pros and cons of whole-group instruction and ability grouping, based on research evidence. Whole-group instruction is convenient for teaching the same skills or subject to a class, making assignments, administering tests, setting group expectations, and making announcements. Critics contend that whole-group instruction fails to meet individual students' needs and interests. (37 references) (MLH)

Descriptors: *Ability Grouping; *Academic Achievement; *Classroom Techniques; *Class Size; Cooperative Learning; *Large Group Instruction; Secondary Education; *Teaching Methods

13 Complete Record

EJ498539 CE527390

The Effect of Class Size on Student Performance: Development and Assessment of a Process Model.

Scheck, Christine L.; And Others

Journal of Education for Business, v70 n2 p104-11 Nov-Dec 1994

ISSN: 0883-2323

Available From: UMI

Language: English

Document Type: RESEARCH REPORT (143); JOURNAL ARTICLE (080)

Journal Announcement: CIJJUL95

Responses from 379 of 944 students in introductory management courses included 312 in large (150 and over) and 72 in small (more than 39) classes. Large classes negatively affected teacher behavior and student performance. Past performance did not influence student motivation. Affective response to large classes influenced student satisfaction. (SK)

Descriptors: *Academic Achievement; *Class Size; Higher Education; Participant Satisfaction; *Student Motivation; *Teacher Behavior

Identifiers: Process Models

14 Complete Record

EJ490881 EA529825

Why Private Schools Are Rarely Worth the Money.

Topolnicki, Denise M.

Money, v23 n10 p89-106,108,110,112 Oct 1994

Journal available from Money Business Office, Time & Life Bldg., Rockefeller Center, New York, NY 10020-1393.

ISSN: 0149-4953

Available From: UMI

Language: English

Document Type: EVALUATIVE REPORT (142); JOURNAL ARTICLE (080)

Journal Announcement: CIJFEB95

A "Money" survey of U.S. public and private schools shows that private schools may not be worth the expense. Students attending the best public schools outperform most private school students. The average public school teacher has stronger academic qualifications than the average private school teacher. The best public schools have a more challenging curriculum and about the same class size as most private schools. (MLH)

Descriptors: *Academic Achievement; Admission Criteria; *Class Size; Comparative Education; Curriculum; *Educational Quality; Elementary Secondary Education; *Misconceptions; Parochial Schools; *Private Schools; *Public Schools; Surveys; Teacher Qualifications

15 Complete Record

EJ477468 EA528950

An Economic Analysis of Class Size and Achievement in Education.

Correa, Hector

Education Economics, v1 n2 p129-35 1993

ISSN: 0964-5292

Language: English

Document Type: EVALUATIVE REPORT (142); JOURNAL ARTICLE (080)

Journal Announcement: CIJJUN94

Statistical analyses of class size influences on student achievement generally lack a solid theoretical foundation. This paper uses the assumptions and methods of economic theory to study "rational" teacher behavior and prove that increasing class size reduces student achievement. Although the suggested model is elementary and simplified, it lays the groundwork for further empirical studies. (Contains 14 references.) (MLH)

Descriptors: *Academic Achievement; *Class Size; *Educational Economics; Education Work Relationship; Elementary Secondary Education; *Models; *Productivity; Statistical Analysis; *Teacher Behavior

16 Complete Record

EJ458139 PS520132

Instruction in Special Education Classrooms under Varying Student-Teacher Ratios.

Thurlow, Martha L.; And Others

Elementary School Journal, v93 n3 p305-20 Jan 1993

ISSN: 0013-5984

Available From: UMI

Language: English

Document Type: JOURNAL ARTICLE (080); RESEARCH REPORT (143)

Journal Announcement: CIJJUN93

Compared instructional variables for first through sixth grade special education students who received instruction under different student-teacher ratios. There were significant differences in measures of qualitative and quantitative aspects of instruction, with nearly all favoring lower student-teacher ratios. (BB)

Descriptors: *Class Size; Comparative Analysis; *Disabilities; Elementary Education; *Elementary School Students; *Elementary School Teachers; Instructional Effectiveness; *Special Education; Special Needs Students; *Teacher Student Ratio; Teacher Student Relationship

Identifiers: *Instructional Variables

17 Complete Record

ED400606 EA027996

The Nevada Class Size Reduction Evaluation Study, 1995.

Nevada State Dept. of Education, Carson City. Mar 1995

97p.

EDRS Price - MF01/PC04 Plus Postage.

Language: English

Document Type: RESEARCH REPORT (143)

Geographic Source: U.S.; Nevada

Journal Announcement: RIEMAR97

Government: State

A primary purpose for reducing the student-teacher ratio in the early grades is to make students more successful in their later years. This document contains two separate, but interrelated reports that examined two aspects of the 1989 Class Size Reduction (CSR) Act in Nevada. The Act called for a reduction in student-teacher ratios for selected kindergarten classes and for grades 1-3. The two studies evaluated the outcomes of CSR in all 17 Nevada school districts. The first study, which examined changes in Comprehensive Test of Basic Skills (CTBS) scores, concluded that the act was successful in reducing the student-teacher ratio within Nevada's second-grade classrooms. Team teaching helped to reduce the ratio for approximately 34 percent of the state's second-grade students. The effect of lower ratios, however, was mixed. Short-term success was reflected in higher reading and mathematics scores. However, special education status, English-Second-Language status, ethnicity, free-lunch eligibility, and class configuration were more important factors than class size in predicting a student's CTBS score. Although a portion of the differences between student scores were explained by class size and

student characteristics, approximately 90 percent of the differences were unexplained by the data. Recommendations include: (1) Fully fund the CSR program for the grades it covers; (2) fund programs that target preschools and early intervention programs for special populations; (3) fully fund a comprehensive evaluation of the program; (4) develop a longitudinal evaluation design that relies on existing state-mandated testing; and (5) provide funding to include teacher and staff development. The second study surveyed all Nevada elementary school principals, all first- and second-grade teachers, and parents of students in CSR classrooms. The surveys elicited generally favorable responses toward CSR. (Contains 29 references, 56 tables, and 6 figures.) (LMI)

Descriptors: *Academic Achievement; *Class Size; Primary Education; Scores; *Small Classes; Surveys; *Teacher Student Ratio; *Teacher Student Relationship

Identifiers: *Nevada

18 Complete Record

ED398644 EA027819

Does Class Size Make a Difference? Recent Findings from State and District Initiatives.

Egelson, Paula; And Others

Southeastern Regional Vision for Education (SERVE), Tallahassee, FL. 1996

40p.

Sponsoring Agency: Office of Educational Research and Improvement (ED), Washington, DC.

Contract No: RJ96006701

Available From: SERVE, 345 South Magnolia Drive, Suite D-23, Tallahassee, FL 32301 (Stock No. RDCSD; \$4 plus \$2.50 shipping and handling charge; check or purchase order to Serve, Federal ID #59-6000-821).

EDRS Price - MF01/PC02 Plus Postage.

Language: English

Document Type: REVIEW LITERATURE (070); PROJECT DESCRIPTION (141);

EVALUATIVE

REPORT (142)

Geographic Source: U.S.; Florida

Journal Announcement: RIEJAN97

Research has indicated that educators view class size as a factor in improving student learning. This publication summarizes findings about some recently implemented class-size initiatives. It highlights results from Tennessee's reduced class-size experiment of the 1980s; summarizes the efforts and results from other recent state-level initiatives (Florida, Nevada, Virginia, and Wisconsin); focuses on the efforts and results of a reduced class-size initiative in Burke County Schools, North Carolina; discusses the findings from and applications of these class-size initiatives; and provides an extensive reference section to enable educators to further explore issues surrounding class-size initiatives. Implemented in 1990, the Burke County initiative appears to have resulted in expanded classroom space, improved classroom management, strengthened instruction and assessment, enhanced

student concept and relationships with peers, and improved teacher-parent communication. Data also show that students in the reduced-size classrooms had higher standardized test scores in reading and mathematics than did students in the control group. Issues to be dealt with include cost, allocation of classroom space, and the loss of teaching assistants in primary grades. One figure and two tables are included. (Contains 94 references.) (LMI)

Descriptors: Academic Achievement; *Classroom Environment; *Class Size; Elementary Education; Outcomes of Education; Program Implementation; *School Organization; State Legislation; *Teacher Student Ratio

Identifiers: Burke County Schools NC

19 Complete Record

ED393151 EA027161

Analysis of Policy Application of Experimental Results: Project Challenge.

Achilles, C. M.; And Others

Nov 1995

35p.; Paper presented at the Annual Meeting of the Mid-South Educational Research Association (Biloxi, MS, November 8-10, 1995).

EDRS Price - MF01/PC02 Plus Postage.

Language: English

Document Type: CONFERENCE PAPER (150); RESEARCH REPORT (143)

Geographic Source: U.S.; Michigan

Journal Announcement: RIEAUG96

During the 1989-90 school year, Tennessee established Project Challenge in 17 of Tennessee's poor and educationally low-performing counties. The program applied the results of Project STAR, a longitudinal experiment causally linking class size to student achievement. This paper presents findings of a study that evaluated Project Challenge by analyzing the statewide rankings of the 17 participating systems. Reduced class sizes, with a 1:15 teacher/student ratio, showed positive results on reading and mathematics achievement in the Challenge counties. Mean ranks, calculated from second graders' Tennessee Comprehensive Assessment Program (TCAP) scores, improved from 99 for reading and 85 for math in 1992 to ranks of 79 and 57, respectively, in 1993. Tennessee has 138 systems, so a rank of 69 is average. In 1990, Challenge systems as a group were below average; by 1993, they were above average in math and 20 ranks closer to the average rank in reading. Average ranks for reading and math remained fairly constant for the years 1993-95. The Tennessee Value Added Assessment System (TVAAS) database was then used to evaluate the Challenge program. Class sizes of about 1:15 in the Challenge systems accompanied achievement results in reading and mathematics that paralleled those predicted from the STAR experiment. The TVAAS database offers a reasonable way to monitor Challenge-system progress. Six tables are included. Appendices contain statistical data and a summary article on the TVAAS. (Contains 35 references.) (LMI)

Descriptors: *Academic Achievement; Achievement Gains; *Achievement Rating; *Class Size; Data Analysis; Educational Assessment; Low Achievement; Mathematics Achievement; Primary Education; Reading Achievement; *School Effectiveness; Scores; State Programs;

*Teacher Student Ratio
Identifiers: *Tennessee

20 Complete Record
ED390913 TM024262

The Multiple Benefits of Class-Size Research: A Review of STAR's Legacy, Subsidiary and Ancillary Studies.

Achilles, C. M.; And Others
Nov 1994

30p.; Paper presented at the Annual Meeting of the Mid-South Educational Research Association (Nashville, TN, November 9-11, 1994).

EDRS Price - MF01/PC02 Plus Postage.

Language: English

Document Type: REVIEW LITERATURE (070); CONFERENCE PAPER (150)

Geographic Source: U.S.; Michigan

Journal Announcement: RIEMAY96

This review of research connected to Project Student Teacher Achievement Ratio (STAR) is a summary of the project's ongoing work in the form of a letter from researchers to a hypothetical colleague. Project STAR has investigated the effect on student achievement and development of small classes in the primary grades (K through 3). A research consortium of four universities and the State Education Agency was formed to conduct and monitor the study with the aid of an advisory panel and outside consultants. Forty-two districts and 79 schools (later 76) participated. Three major subsidiary studies have built on STAR: (1) the Lasting Benefits study that tracks students; (2) Project Challenge, a policy application of small classes in 16 low-performing school systems; and (3) the Grade 4 (and eventually Grade 8) participation study. The database established for STAR, which now includes about 9,000 students randomly assigned to small-class, regular-class, and regular-class with aide conditions, is serving as the basis for other research, including examinations of achievement, racial differences, the interaction of school size and class size, and other state initiatives. Three appendixes present tables of research design, analysis of variance for cognitive outcomes, and rankings of Challenge districts. (Contains 8 tables and 33 references.) (SLD)

Descriptors: *Academic Achievement; *Classroom Research; *Class Size; Databases; Educationally Disadvantaged; Low Achievement; *Primary Education; Racial Differences; Research Reports; *Research Utilization; School Districts; School Size; *State Programs

Identifiers: Project Challenge TN; *Student Teacher Achievement Ratio Project TN

21 Complete Record
ED385935 EA026963

Intraschool Variation in Class Size: Patterns and Implications. Working Paper #344.

Boozer, Michael; Rouse, Cecilia
Jun 1995

51p.

EDRS Price - MF01/PC03 Plus Postage.

Language: English

Document Type: RESEARCH REPORT (143)

Geographic Source: U.S.; Connecticut

Journal Announcement: RIEJAN96

Economists attempting to explain the widening of the black-white wage gap in the late 1970s by differences in school quality have been faced with the problem that recent data reveal virtually no gap in the quality of schools attended by blacks and whites. This paper reexamines racial differences in school quality. It begins by considering the effects of using the pupil-teacher ratio, rather than the school's average class size, in an education-production function, because the pupil-teacher ratio is a rough proxy, at best. Second, the importance of using actual class size rather than school-level measures of class size is considered. Two data sets were analyzed: (1) a 1994 telephone survey of a random sample of 500 New Jersey teachers; and (2) the National Education Longitudinal Survey of 1988 (NELS). The data show that although the pupil-teacher ratio and average class size were correlated, the pupil-teacher ratio was systematically less than or equal to the average class size. Mathematically, part of the difference was due to the intraschool allocation of teachers to classes. As a result, while the pupil-teacher ratio suggests no black-white differences in class size, measures of the school's average class size suggest that blacks were in larger classes. Further, the two measures result in differing estimates of the importance of class size in an education-production function. Another conclusion was that school-level measures may obscure important within-school variation in class size due to the small class sizes for compensatory education. Because black students are more likely to be assigned to compensatory-education classes, a kind of aggregation bias results. The data found that not only were blacks in schools with larger average class sizes, but they were also in larger classes within schools, depending on class type. The intraschool class-size patterns suggest that using within-school variation in education production functions is not a perfect solution to aggregation problems because of nonrandom assignment of students to classes of differing sizes. However, once the selection problem has been addressed, it appears that smaller classes at the 8th grade lead to larger test score gains from 8th to 10th grade and that differences in class size can explain approximately 15 percent of the black-white difference in educational achievement. Eight tables are included. Appendices contain methodological notes and statistical tables. Contains 20 references. (LMI)

Descriptors: Academic Achievement; *Black Education; *Class Size; *Educational Quality; Elementary Secondary Education; Racial Differences; *Teacher Distribution; *Teacher Student Relationship

22 Complete Record

ED385626 UD030516

Reduced Class Size in ESEA Chapter 1: Unrealized Potential?

Hiestand, Nancy I.

Apr 1994

14p.; Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 4-8, 1994).

Report No: TACB-445

EDRS Price - MF01/PC01 Plus Postage.

Language: English

Document Type: RESEARCH REPORT (143); CONFERENCE PAPER (150)

Geographic Source: U.S.; Illinois

Journal Announcement: RIEDEC95

The Augmented Staffing model of the Chicago Public Schools (Illinois) is a reduced class size, full-day program that includes almost 6,500 elementary school students served under Chapter 1 of the Elementary and Secondary Education Act (ESEA). The effects of this program were studied, examining the level of teacher knowledge about the program and its implementation, the achievement of the program's students, and program characteristics. Data are from the school system's overall report on Chapter 1 programs, which incorporated 660 observations, and questionnaires completed by 192 teachers in 1990, 441 in 1991, 99 in 1992, and 164 in 1993. Results suggest that reduced class size in itself is not sufficient to improve student test scores, but that achievement levels can rise when teachers employ more techniques associated with higher order thinking skills even though teachers relieved of the pressure of large classes do have an opportunity to diagnose their students' needs more carefully. Three tables present study data. (Contains 11 references.) (SLD)

Descriptors: Academic Achievement; *Class Size; *Compensatory Education; Disadvantaged Youth; Educational Change; *Educationally Disadvantaged; Elementary Education; Elementary School Teachers; Knowledge Level; Program Evaluation; *Teacher Effectiveness; Teacher Student Ratio; Thinking Skills; *Time Factors (Learning); Urban Schools

Identifiers: *Chicago Public Schools IL; Education Consolidation Improvement Act Chapter 1; *Elementary Secondary Education Act Title I

23 Complete Record

ED384088 CS508954

Learning Lessons from Large Classes: Student Attitudes toward Effective and Ineffective Methods in Large Classes.

Litke, Rebecca A.

Feb 1995

28p.; Paper presented at the Annual Meeting of the Western States Communication Association (Portland, OR, February 10-14, 1995).

EDRS Price - MF01/PC02 Plus Postage.

Language: English

Document Type: RESEARCH REPORT (143); CONFERENCE PAPER (150)

Geographic Source: U.S.; California

Journal Announcement: RIENOV95

To solicit students' views on teaching and learning in large classes, surveys were distributed to 143 students enrolled in an upper division general education and major course in communication theory in the fall of 1993. The survey consisted of 17

questions, 10 of which were closed-ended questions concerning demographics. The remaining seven were open-ended questions focusing on student likes and dislikes in large classes and their ideas for improving teaching and learning in large classes. The closed-ended portions of the survey were tabulated; the open-ended portions were analyzed through content analysis. Results showed that most students prefer small classes, but about one-third were favorable to large classes. The results also comment on a number of assumptions held by faculty about large classes. First, if many faculty believe that increased class size leads to decreased student learning and satisfaction, student assessment of their experiences of large classes clearly show that not all students share this belief. Second, if faculty believe that large classes cannot be taught like small classes implying that quality teaching is not possible in large classes, the data in this study suggests, nevertheless, that quality teaching is possible in large classes. Third, if faculty believe that student ratings of large classes (and large-class instructors) are lower than those of small classes, the close-ended question in which student ranked the communication class (at 8.05 of 10) suggest that ratings of large classes can be high. (Contains 35 references and 6 tables.) (TB)

Descriptors: *Class Size; Content Analysis; Higher Education; Speech Communication; *Student Attitudes; *Student Evaluation of Teacher Performance; *Student Needs; Student Surveys; *Teacher Effectiveness; *Teaching Conditions; Teaching Styles; Undergraduate Students

Identifiers: Student Preferences

24 Complete Record

ED377548 EA026275

Class Size.

Underwood, Siobhan; Lumsden, Linda S.

ERIC Clearinghouse on Educational Management, Eugene, Oreg.; National Association of Elementary School Principals, Alexandria, VA.

Research Roundup, v11 n1 Fall 1994 1994

5p.

Sponsoring Agency: Office of Educational Research and Improvement (ED), Washington, DC.

Contract No: RR-93002006

Available From: National Association of Elementary School Principals, 1615 Duke Street, Alexandria, VA 22314-3483 (\$2.50, single copy; orders of 10 or more, \$2 each; Virginia residents add 4.5 percent sales tax).

EDRS Price - MF01/PC01 Plus Postage.

Language: English

Document Type: ERIC PRODUCT (071); SERIAL (022); BIBLIOGRAPHY (131)

Geographic Source: U.S.; Oregon

Journal Announcement: RIEMAY95

Target Audience: Administrators; Practitioners

The items featured in this annotated bibliography touch on several aspects of the multifaceted class-size debate. Allen Odden reviews the literature and contends that

class-size reduction should be used "sparingly and strategically." C. M. Achilles and colleagues examines two different class-size situations and find student test performance in the smaller classes is significantly better than in the larger ones.

B. A. Nye and others describe the processes and results of three related longitudinal class-size initiatives. Douglas E. Mitchell and Sara Ann Beach review the history of class-size research, then pose and answer four questions relevant to policy issues or classroom practices. Tommy M. Tomlinson notes the political nature of the class-size debates. Helen Bain and others study the teaching practices and characteristics of 50 first grade teachers who participated in Tennessee's Student Teacher Achievement Ratio (STAR) Project. (MLF)

Descriptors: *Academic Achievement; Annotated Bibliographies; *Class Size; Cost Effectiveness; Elementary Education; *Learning Strategies; Politics of Education; Teaching Methods

Identifiers: *Student Teacher Achievement Ratio Project TN

25 Complete Record

ED370680 PS022325

Class Size and Student Achievement: Tennessee's Star and Indiana's Prime Time Projects.

Sanogo, Youssouf; Gilman, David

Apr 1994

40p.

EDRS Price - MF01/PC02 Plus Postage.

Language: English

Document Type: EVALUATIVE REPORT (142)

Geographic Source: U.S.; Indiana

Journal Announcement: RIEOCT94

This study investigated the possible causes of the contradiction between the results of two projects. Indiana's Prime Time project compared the achievement of students in large (averaging 26 students) and small (averaging 19 students) classrooms in grades 1 through 3. Results indicated that 3 years in smaller classes had little effect on student achievement. Tennessee's Student Teacher Achievement Ratio (STAR) project was a longitudinal study of class-size effects on student achievement in kindergarten through grade 3. The study concluded that small classes (13-17 students) had an advantage over large classes (22-26 students) in reading and mathematics. The present study examined whether students in the small classes in the STAR program really learned more than students in the large classes, and offered four hypotheses: (1) there was a relationship between the methodologies of the two projects and the contradictions in their results; (2) a Hawthorne effect occurred in the STAR program, according to which students in experimental groups tried harder than students in control groups; (3) a John Henry effect occurred in the STAR program, according to which students in control groups did not try harder than students in experimental groups; and (4) the research methodology of the STAR project was no better than that of the Prime Time project. The present study collected information about both projects' methodologies, designs, and circumstances. The

study concluded that evidence did not definitively confirm a Hawthorne or John Henry effect, and that the STAR methodology was not better than the Prime Time methodology. (TM)

Descriptors: *Academic Achievement; *Class Size; Elementary School Students; Evaluation Problems; Longitudinal Studies; Primary Education; Program Evaluation; Research Design; *Research Methodology; *Small Classes; *Teacher Student Ratio
Identifiers: Hawthorne Effect; Indiana; John Henry Effect; *PRIME TIME Project IN; Project STAR; *Student Teacher Achievement Ratio Project TN; Tennessee

26 Complete Record

ED369207 EC302936

Special Education Program Standards Study. Commonwealth of Virginia. Final Technical Report.

Keith, Timothy Z.; And Others

Virginia Polytechnic Inst. and State Univ., Blacksburg.; Virginia State Dept. of Education, Richmond. 25 Aug 1993

261p.

Sponsoring Agency: Department of Education, Washington, DC.

Contract No: N159A10002

EDRS Price - MF01/PC11 Plus Postage.

Language: English

Document Type: RESEARCH REPORT (143); TEST, QUESTIONNAIRE (160)

Geographic Source: U.S.; Virginia

Journal Announcement: RIESEP94

Government: State

This federally funded study investigated Virginia special education program standards, focusing on local applications of the standards for class size and class mix and the effect of varying class size and class mix on student outcomes. The study concentrated on students with educable mental retardation, severe emotional disturbance, and specific learning disabilities. The research model involved interviews, observations, and document reviews at three local education agencies and a survey of over 1,000 special education teachers and administrators. The study found that: (1) Directors of Special Education and special education teachers consistently recommended smaller resource classes than current standards allow; (2) teachers believed that manageable class sizes with paraprofessionals were not much larger than manageable class sizes without paraprofessionals; (3) students in larger classes achieved at a lower level than students in smaller classes, with reading achievement affected more than mathematics and with elementary students affected more than secondary students; (4) smaller classes had no effect on students' self-concept, behavior, level of motivation, work habits, or interpersonal skills; (5) Directors supported mixing students with different disabilities in the same class while teachers did not; (6) mixing students with different disabilities had no effect on academic achievement, motivation, self-concept, work habits, or interpersonal skills; and (7) most Directors support noncategorical placement and integration into regular education. Appendices provide copies of the survey forms and various program

administration materials. (JDD)

Descriptors: Academic Achievement; *Administrator Attitudes; Classroom Environment; *Class Size; *Disabilities; Elementary Secondary Education; Emotional Disturbances; Learning Disabilities; *Mainstreaming; Mild Mental Retardation; Outcomes of Education; Special Education Teachers; *State Standards; *Teacher Attitudes; Teacher Student Ratio

Identifiers: *Virginia

27 Complete Record

ED369177 EA025796

To Retain or Not? There Is No Question.

Harvey, Barbara H.

Feb 1994

26p.; Paper presented at the Annual Meeting of the American Association of School Administrators (San Francisco, CA, February 1994).

EDRS Price - MF01/PC02 Plus Postage.

Language: English

Document Type: CONFERENCE PAPER (150); RESEARCH REPORT (143)

Geographic Source: U.S.; North Carolina

Journal Announcement: RIESEP94

Student retention has been a divisive educational question since the turn of the century. And although early educators found that retention was not particularly effective, they continued using it because their options were limited. Today, educators have many options to retention. Using the database from Project STAR, a study explored the common demographic characteristics and school types of retained kindergartners and first graders. Also, the study examined the effect of class size on the academic achievement of retained kindergartners and first graders. Retained students' achievement scores in reading and math on the Stanford Achievement and the Basic Skills First tests were analyzed in three class sizes: small (13-17 students), regular (21-25 students), and regular with an aide. The average kindergarten and first grade retainee was poor, white, male, and attended a rural school. Class size was unsuccessful in remediating student achievement despite the fact that new enrollees in small classes outscored their peers in larger classes. It is clear that retention does not achieve its goals and is more expensive than remedial services. (Contains 16 references.) (JPT)

Descriptors: *Academic Failure; *Class Size; *Grade Repetition; Primary Education; *Program Effectiveness; Public Schools; *Student Development

Identifiers: Student Teacher Achievement Ratio Project TN

28 Complete Record

ED369172 EA025790

The Effect of Class Size on Achievement and Retention in the Primary Grades: Implications for Policy Makers.

Harvey, Barbara H.

18 Mar 1994

37p.; Paper presented at the Annual Meeting of the North Carolina Association for Research in Education (Greensboro, NC, March 1994).

EDRS Price - MF01/PC02 Plus Postage.

Language: English

Document Type: RESEARCH REPORT (143); CONFERENCE PAPER (150)

Geographic Source: U.S.; North Carolina

Journal Announcement: RIESEP94

Target Audience: Policymakers

Retention of students began soon after the introduction of graded elementary schools in the mid-1800s. As early as 1911, research started to show that retention failed to remedy the difficulties of academic achievement and social adjustment exposed through graded schools. Educators today have a number of options other than retention designed to help students who are not meeting grade-level standards. One of those options is enrolling students in smaller classes. Using the Project STAR database, this study examined whether class size remediates achievement scores of kindergartners and first graders once they have been retained. The study examined data on retained kindergartners and first graders to determine common demographic characteristics and school type and the effect of class size on academic achievement. Retained students' achievement scores in reading and math on the Stanford Achievement and the Basic Skills First tests were analyzed in three class sizes: small (13-17 students), regular (21-25 students), and regular with an aide. The average kindergarten and first grade retainee was poor, white, male, and attended a rural school. The study found that there was no significant difference among retainees at either grade level between or among classes. Also, class size did not remediate poor academic achievement. (Contains 31 references.) (JPT)

Descriptors: *Academic Achievement; *Academic Failure; *Class Size; *Grade Repetition; Primary Education; Program Effectiveness; Public Schools; *Student Development

Identifiers: Project STAR

30 Complete Record

ED368196 FL021962

Effects of ESL Time and Class Size on the Achievement of LEP Students.

Oberg, Robin

Nov 1993

59p.

EDRS Price - MF01/PC03 Plus Postage.

Language: English

Document Type: RESEARCH REPORT (143)

Geographic Source: U.S.; Texas

Journal Announcement: RIEAUG94

A study investigated the relative effect of 45-minute and 90-minute daily instruction in English as a Second Language (ESL) on limited English proficient (LEP) first-graders' language and overall achievement. The subjects were two groups of pupils from different schools: (1) 13 pupils from 7 language backgrounds, receiving

45 minutes of instruction daily; and (2) 17 pupils representing 5 native languages, receiving 90 minutes of instruction. Data used for analysis included reading and language test scores, oral language proficiency test scores, and teacher-provided information on overall grades. Results indicate that the pupils in shorter ESL class, which was also smaller, made higher grades in the regular classroom than did the other group. The short-class group also had higher oral proficiency test scores, but not significantly higher reading and language test scores. It is concluded that class size and time may have some significant effect on regular classroom achievement and oral language achievement but may not affect scores on standardized achievement tests. (MSE)

Descriptors: Academic Achievement; *Achievement Gains; *Class Size; Comparative Analysis; *English (Second Language); Grade 1; *Limited English Speaking; Primary Education; Reading Skills; *Scheduling; Speech Skills; *Time Factors (Learning)

31 Complete Record

ED368077 EA025720

Class Size as an Early Intervention Strategy in White-Minority Achievement Gap Reduction.

Bingham, C. Steven

Feb 1994

51p.; Paper presented at the Annual Meeting of the American Association of School Administrators (San Francisco, CA, February 1994).

EDRS Price - MF01/PC03 Plus Postage.

Language: English

Document Type: CONFERENCE PAPER (150); RESEARCH REPORT (143)

Geographic Source: U.S.; North Carolina

Journal Announcement: RIEAUG94

Target Audience: Policymakers

A reanalysis of norm- and criterion-referenced achievement test data from Tennessee's Student Teacher Achievement Ration Project builds on research utilizing class size and student achievement as an independent and a dependent variable, respectively. The study examined patterns of achievement among minority and white students in small, regular, and regular-with-aide class-size treatments over varying lengths of time and at varying startup years, grades K, 1, 2, and 3. The major differences between the minority and white patterns was the magnitude of the between-treatment subsample means. Differences for white subsamples tended to be compressed relative to differences between minority subsamples; that is, class size appeared to make a bigger difference for minority students than for white students. The findings of this reanalysis support the following conclusions: (1) small class size may be an effective strategy for reducing the achievement gap between whites and minorities in the primary school years; (2) benefits accrue initially in greater measure to minorities than to whites; (3) optimally beneficial treatment begins no later than grade 1; (4) optimally beneficial treatment lasts at least 2 years; (5) the major benefit of small classes for minorities appears to be in preventing rather than remediating achievement disadvantages; (6) the differential effect of small class

size for minorities appears to "fade" following 2 years of treatment; and (7) the "fade" phenomenon of early treatments can be neither confirmed nor contradicted by reanalysis. (Author/KDP)

Descriptors: Academic Achievement; Achievement; *Achievement Rating; Black Students; *Class Size; Cost Effectiveness; *Early Intervention; *Minority Group Children; Primary Education; *Small Classes; *White Students

33 Complete Record
ED356559 EA024822

The Lasting Benefits Study (LBS) in Grades 4 and 5 (1990-1991): A Legacy from Tennessee's Four-Year (K-3) Class-Size Study (1985-1989), Project STAR. Paper #7.

Achilles, C. M.; And Others

Tennessee State Univ., Nashville. Center of Excellence for Research in Basic Skills. 14 Jan 1993

20p.; Paper presented at the Annual Meeting of the North Carolina Association for Research in Education (Greensboro, NC, January 1993).

EDRS Price - MF01/PC01 Plus Postage.

Language: English

Document Type: CONFERENCE PAPER (150); RESEARCH REPORT (143)

Geographic Source: U.S.; North Carolina

Journal Announcement: RIESEP93

A 4-year longitudinal experiment conducted in Tennessee examined class-size effects on student achievement in kindergarten through grade 3. The Student Teacher Achievement Ratio (STAR) project included more than 7,000 students per year in 79 schools in 42 school systems. Class size categories were: small class (13-17 students), regular class (22-26 students), and regular class with full-time teacher aide. Students and teachers were randomly assigned to class categories. The study found that students in small classes made significantly (statistically and educationally) greater gains than other students. In addition, minority students in small classes benefitted more than minority students in other class categories. It was also determined that gains achieved in kindergarten were maintained through third grade. Analyses showed a continuing, powerful class-size effect in all locations. However, no consistent teacher-aide effect was evident in the study. The Lasting Benefits Study (LBS) had already analysed data from a sample of STAR pupils through grades 4 and 5 in an attempt to determine whether gains STAR students achieved in small classes carried through to those grades. The LBS found that students who were in STAR small classes at least in grade 3 were statistically and educationally ahead of other STAR students. Three appendices include STAR data collection instruments, primary and extended analyses designs, and analysis of variance for cognitive outcomes. (Author/JPT)

Descriptors: *Academic Achievement; Analysis of Variance; *Class Size; Elementary School Students; Elementary School Teachers; Minority Group Children; Primary Education; Public Schools; *Small Classes; Student Development; *Teacher Student Ratio

Identifiers: *Lasting Benefits Study TN; *Student Teacher Achievement Ratio Project

TN; Tennessee

35 Complete Record
ED355708 EC301956

Investigating the Influences of Class Size and Class Mix on Special Education
Student Outcomes: Phase One Results.

Keith, Patricia B.; And Others
18 Feb 1993

7p.; Paper presented at the Annual Meeting of the Eastern Educational Research
Association (Clearwater, FL, February 18, 1993).

Sponsoring Agency: Office of Special Education and Rehabilitative Services (ED),
Washington, DC.

Contract No: M159A10002
EDRS Price - MF01/PC01 Plus Postage.

Language: English

Document Type: CONFERENCE PAPER (150); RESEARCH REPORT (143)

Geographic Source: U.S.; Virginia

Journal Announcement: RIEAUG93

This study investigated students with specific learning disabilities (SLD), serious emotional disturbances (SED), and educable mental retardation (EMR) to determine if class size and class mix influence educational outcomes. A total of 110 students in 12 classrooms were included in the sample, which included classes with waivers (classes out of compliance with Virginia standards) for class size or class mix; waived classes with SLD, SED, and EMR students; and classes in compliance with Virginia standards (non-waivered classes). Four academic achievement areas and nine affective areas were used as educational outcomes in the quantitative and qualitative research. Results indicated that student achievement is affected by class size; students in single disability classes appeared to have higher reading, math, and social studies achievement than students who were mixed with other disabilities; students in non-waivered classes had better general behavior and were making more progress toward their educational goals than students in waived classes; student self-concept, motivation level, time on task, educational aspirations, liking of special education classes, and awareness of special education placement were not significantly different in waived versus non-waivered classes; and teaching methods were not significantly different. (JDD)

Descriptors: Academic Achievement; Affective Behavior; *Class Size; Elementary
Secondary Education; *Emotional Disturbances; *Grouping (Instructional Purposes);
*Learning Disabilities; *Mild Mental Retardation; Outcomes of Education; *Performance
Factors; Student Behavior

Identifiers: Virginia

2 Complete Record
EJ535201 CE530118

Sustained Inquiry in Education: Lessons from Skill Grouping and Class Size.
Mosteller, Frederick; And Others

Welcome to DIALOG

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6/5/1 (Item 1 from file: 47)

DIALOG(R)File 47:Magazine Database(TM)

(c) 1997 Information Access Co. All rts. reserv.

05012568 SUPPLIER NUMBER: 19978584

Class size: a cutting edge issue? (the political appeal of promising
smaller class sizes in elementary schools is thought to have helped
elected Republican James Gilmore governor of Virginia)(Brief Article)

Jenkins, Kent, Jr.

U.S. News & World Report, v123, n19, p5(1)

Nov 17, 1997

DOCUMENT TYPE: Brief Article ISSN: 0041-5537 LANGUAGE: English

RECORD TYPE: Citation

SPECIAL FEATURES: photograph; illustration

DESCRIPTORS: Class size--Political aspects; Education and state--

Political aspects; Politics and education--Analysis

NAMED PERSONS: Gilmore, James S.--Social policy

FILE SEGMENT: MI File 47

6/5/3 (Item 3 from file: 47)
DIALOG(R)File 47:Magazine Database(TM)
(c) 1997 Information Access Co. All rts. reserv.

04830233 SUPPLIER NUMBER: 19796883 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Class-size warfare: some New York parents try to hire an extra fourth-grade teacher. Is this unfair public schooling?
Ratnesar, Romesh
Time, v150, n14, p85(1)
Oct 6, 1997
ISSN: 0040-781X LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 582 LINE COUNT: 00048

ABSTRACT: The New York, NY, school district fired a fourth-grade teacher, which brought the size of the classes from 26 to 32. Outraged parents collected the funds to pay the salary for the teacher, who was reinstated. The school district agreed to this exception, but says it can cause disparity.

SPECIAL FEATURES: photograph; illustration
DESCRIPTORS: New York, New York. Board of Education--Management; Education and state--Social aspects; Public schools--Management; New York, New York--Education
FILE SEGMENT: MI File 47

6/5/5 (Item 5 from file: 47)
DIALOG(R)File 47:Magazine Database(TM)
(c) 1997 Information Access Co. All rts. reserv.

04759332 SUPPLIER NUMBER: 19481667
California scrutinizes class size program.(The Council Chronicle: The National Council of Teachers of English)
English Journal, v86, n4, pS1(2)
April, 1997
ISSN: 0013-8274 LANGUAGE: English RECORD TYPE: Abstract

ABSTRACT: The policy report of California's Legislative Analyst's Office suggests more adaptability and funding for the state's Class Size Reduction effort. The funding will be used for providing staff development, increasing classroom space and hiring substitute teachers.

DESCRIPTORS: California. Legislature. Joint Legislative Budget Committee --Social policy; Class size--Laws, regulations, etc.; Education--Finance
FILE SEGMENT: MI File 47

6/5/14 (Item 14 from file: 47)
DIALOG(R)File 47:Magazine Database(TM)
(c) 1997 Information Access Co. All rts. reserv.

04367588 SUPPLIER NUMBER: 17525542
Huge rise in primary classes of 40-plus.
Carvel, John; Wintour, Patrick; Ward, David
The Guardian, p6(1)
Oct 25, 1995
ISSN: 0261-3077 LANGUAGE: English RECORD TYPE: Abstract

ABSTRACT: Official figures released by Liberal Democrat education spokesman Don Foster on Oct. 24, 1995, reveal that the number of primary school children in England being taught in classes of more than 40 rose by 30% in the last academic year. The figures, provided by Education and Employment Secretary Gillian Shephard, also reveal that the number of children taught in classes of 36 or more rose by 11% between Jan. 1994 and Jan. 1995. Peter Hogg, a teacher at the Ridge primary school in Lancaster, England, feels that he is being asked to do the impossible in delivering the national curriculum to a class of 40.

SPECIAL FEATURES: illustration; photograph
DESCRIPTORS: Class size--Statistics; England--Schools
FILE SEGMENT: MI File 47

6/5/16 (Item 16 from file: 47)
DIALOG(R)File 47:Magazine Database(TM)
(c) 1997 Information Access Co. All rts. reserv.

04347496 SUPPLIER NUMBER: 17575757
Revealed: how 10,000 teachers disappeared. (many teaching posts cut or not filled)
Berliner, Wendy
The Independent, n2791, p2.12(2)
Sep 28, 1995
ISSN: 0951-9467 LANGUAGE: English RECORD TYPE: Abstract

ABSTRACT: Many schools across the UK are having to increase class sizes as budget cuts make it necessary to make teachers redundant or leave teaching posts vacant. Teaching standards are suffering as teachers have to cope with the larger numbers, and children with special educational needs are not getting the attention they require. Teachers' unions are now threatening industrial action if the situation is not resolved.

SPECIAL FEATURES: illustration; photograph
DESCRIPTORS: Class size--Analysis
FILE SEGMENT: MI File 47

6/5/22 (Item 22 from file: 47)
DIALOG(R)File 47:Magazine Database(TM)
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04265648 SUPPLIER NUMBER: 17050914
Official: class size is irrelevant.
Scott-Clark, Cathy
The Sunday Times, n8907, p1.1(2)
May 14, 1995
ISSN: 0956-1382 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

ABSTRACT: A study by the Office for Standards in Education has revealed that class size is not important in pupils' achievement. The quality of teaching and teaching methods were much more important. Children who have already gained proficiency in the 'three Rs' are not affected by large classes. Three teaching unions plan industrial action over class size.

DESCRIPTORS: Class size--Surveys
FILE SEGMENT: MI File 47

6/5/29 (Item 29 from file: 47)
DIALOG(R)File 47:Magazine Database(TM)
(c) 1997 Information Access Co. All rts. reserv.

04178800 SUPPLIER NUMBER: 16652150
Class size - does it really matter?
Judd, Judith; Berliner, Wendy
The Independent, n2599, p27(1)
Feb 16, 1995
ISSN: 0951-9467 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

ABSTRACT: Recent studies indicate that parents, teachers and headteachers are all very concerned about rising class sizes. However, the government believes that research evidence indicates that large classes do not lead to lower standards. Many of the UK's leading economic competitors have introduced legislation on maximum class sizes, and observers now believe that class size is important for the youngest children, although there is no clear indication about its impact on older children.

SPECIAL FEATURES: illustration: photograph
DESCRIPTORS: Class size--Research
FILE SEGMENT: MI File 47

6/5/33 (Item 33 from file: 47)
DIALOG(R)File 47:Magazine Database(TM)
(c) 1997 Information Access Co. All rts. reserv.

03843611 SUPPLIER NUMBER: 13636906
Small not always beautiful. (school class size)
Anthony, Vivian
The Times, n64604, p33(1)
March 29, 1993
ISSN: 0140-0460 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

ABSTRACT: Many experts claim that class size directly affects school examination results. A variety of class sizes are necessary for different situations. Situations vary according to ability, subject, school type and social aspects. Larger classes can reduce overall school costs. High-ability children benefit from larger classes because they can compete and react more efficiently. A wider range of abilities needs smaller classes. Teachers usually prefer smaller classes because they are less demanding and they can spend more time with individual pupils.

SPECIAL FEATURES: illustration; photograph
DESCRIPTORS: Class size--Research
FILE SEGMENT: MI File 47

6/5/34 (Item 34 from file: 47)
DIALOG(R)File 47:Magazine Database(TM)
(c) 1997 Information Access Co. All rts. reserv.

03840938 SUPPLIER NUMBER: 13578928
How well do large classes measure up? (many factors affecting progress clouds class size issue)
Judd, Judith
The Independent, n1988, p16(1)
March 4, 1993
ISSN: 0951-9467 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

ABSTRACT: Research from the US indicates that pupils taught in smaller classes early in their school lives have a considerable advantage over others. The investigation covered 79 schools and 7,000 pupils and at every

stage those in small classes did better than those in larger classes in reading and mathematics. Staff from London University's Institute of Education have argued that other factors such as school intake can cloud the results of such surveys. Popular middle class schools are usually full while inner-city schools may have small intakes and therefore smaller classes.

SPECIAL FEATURES: illustration; photograph

DESCRIPTORS: Class size--Research; Academic achievement--Research

FILE SEGMENT: MI File 47

6/5/38 (Item 4 from file: 484)

DIALOG(R)File 484:Periodical Abstracts Plustext

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03426739 SUPPLIER NUMBER: 97337382

New study says smaller is better

Anonymous

American School & University (IASU), v70 n1, p3

Sep 1997

ISSN: 0003-0945 JOURNAL CODE: IASU

DOCUMENT TYPE: News

LANGUAGE: English RECORD TYPE: Abstract

AVAILABILITY: UMIACH CATALOG NO.: 1631.00

ABSTRACT: A new study released by the Educational Testing Service states that smaller class sizes boost achievement, but controversy about how the conclusion came about has developed.

DESCRIPTORS: Schools; Academic achievement; Class size

COMPANY NAMES: Educational Testing Service

SPECIAL FEATURES: Illustration

6/5/45 (Item 11 from file: 484)

DIALOG(R)File 484:Periodical Abstracts Plustext

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03225071 SUPPLIER NUMBER: 97135714 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Class conflict

Gearey, Robyn

New Republic (GTNR), v216 n16, p12-14

Apr 21, 1997

ISSN: 0028-6583 JOURNAL CODE: GTNR

DOCUMENT TYPE: Commentary
LANGUAGE: English RECORD TYPE: Fulltext; Abstract
AVAILABILITY: Full text online. UMIACH CATALOG NO.: 815.00
WORD COUNT: 1199

ABSTRACT: Gearey comments on some of the problems California faced when trying to implement Gov Pete Wilson's hyped class-size reduction initiative. In theory, class-size reduction is a great idea. California is desperate for space and qualified teachers.

Copyright New Republic, Inc. 1997

DESCRIPTORS: Education reform; Governors; Class size; Educators
NAMED PERSONS: Wilson, Pete
GEOGRAPHIC NAMES: California

6/5/50 (Item 16 from file: 484)
DIALOG(R)File 484:Periodical Abstracts Plustext
(c) 1997 UMI. All rts. reserv.

03140254 SUPPLIER NUMBER: 97050897
Big doubts over small classes
Budge, David
Times Educational Supplement (ITES), n4204, p13
Jan 24, 1997
ISSN: 0040-7887 JOURNAL CODE: ITES
DOCUMENT TYPE: News
LANGUAGE: English RECORD TYPE: Abstract
AVAILABILITY: The Times Supplements Ltd., Priory House, St. John's Lane,
London EC1M 4BX, England

ABSTRACT: A re-analysis is casting doubts on the findings of the huge Tennessee research project that supposedly proved conclusively that preschoolers did better in small classes. Class size had a negligible effect on most children.

DESCRIPTORS: Preschool education; Class size; Quality of education;
Research
GEOGRAPHIC NAMES: Tennessee
SPECIAL FEATURES: Photograph

6/5/55 (Item 21 from file: 484)
DIALOG(R)File 484:Periodical Abstracts Plustext
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03096687 SUPPLIER NUMBER: 97007330
Primary pay 'among the highest in world'
Budge, David
Times Educational Supplement (ITES), n4198, p6
Dec 13, 1996
ISSN: 0040-7887 JOURNAL CODE: ITES
DOCUMENT TYPE: News
LANGUAGE: English RECORD TYPE: Abstract
AVAILABILITY: The Times Supplements Ltd., Priory House, St. John's Lane,
London EC1M 4BX, England

ABSTRACT: A new report reveals that primary teachers in the UK now have salaries that are among the highest in the developed world. The downside is that they have relatively low starting pay, work long hours and have large classes.

DESCRIPTORS: Reports; Wages & salaries; Educators; Working hours; Class size
GEOGRAPHIC NAMES: United Kingdom; UK
SPECIAL FEATURES: Graph Photograph

6/5/57 (Item 23 from file: 484)
DIALOG(R)File 484:Periodical Abstracts Plustext
(c) 1997 UMI. All rts. reserv.

03095847 SUPPLIER NUMBER: 97006490
Smaller does mean better
Galton, Maurice; Hargreaves, Linda; Pell, Anthony
Times Educational Supplement (ITES), n4197, p19
Dec 6, 1996
ISSN: 0040-7887 JOURNAL CODE: ITES
DOCUMENT TYPE: Feature
LANGUAGE: English RECORD TYPE: Abstract
AVAILABILITY: The Times Supplements Ltd., Priory House, St. John's Lane,
London EC1M 4BX, England

ABSTRACT: The results of a study commissioned by the National Union of Teachers supports teachers' long-held view that smaller classes provide greater opportunities to work with individual children, provide more challenge, allow more feedback and enable longer sustained interactions with individual students.

DESCRIPTORS: Studies; Schools; Students; Educators; Class size
GEOGRAPHIC NAMES: United Kingdom; UK
SPECIAL FEATURES: Photograph Graph

6/5/59 (Item 25 from file: 484)
DIALOG(R)File 484:Periodical Abstracts Plustext
(c) 1997 UMI. All rts. reserv.

03085090 SUPPLIER NUMBER: 96454310 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Size matters
Mosle, Sara
New Republic (GTNR), v215 n20, p38 Nov 11, 1996
ISSN: 0028-6583 JOURNAL CODE: GTNR
DOCUMENT TYPE: Commentary
LANGUAGE: English RECORD TYPE: Fulltext; Abstract
AVAILABILITY: Full text online. UMIACH CATALOG NO.: 815.00
WORD COUNT: 590

ABSTRACT: Mosle asserts that Pres Clinton should make reducing class and school sizes, especially in poorer, overcrowded schools, a priority. Smaller classes facilitate learning and academic achievement.
Copyright New Republic, Inc. 1996

DESCRIPTORS: Education policy; Academic achievement; Learning; Schools;
Class size
NAMED PERSONS: Clinton, Bill

6/5/60 (Item 26 from file: 484)
DIALOG(R)File 484:Periodical Abstracts Plustext
(c) 1997 UMI. All rts. reserv.

03082560 SUPPLIER NUMBER: 96451780 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Sustained inquiry in education: Lessons from skill grouping and class size
Mosteller, Frederick; Light, Richard J; Sachs, Jason A
Harvard Educational Review (GHER), v66 n4, p797-842 Winter 1996
ISSN: 0017-8055 JOURNAL CODE: GHER
DOCUMENT TYPE: Feature
LANGUAGE: English RECORD TYPE: Fulltext; Abstract
AVAILABILITY: Full text online. UMIACH CATALOG NO.: 2267
WORD COUNT: 13634

ABSTRACT: Mosteller et al examine the nature of the empirical evidence that can inform school leaders' key decisions about how to organize students within schools. It is suggested that education would benefit from

a commitment to sustained inquiry through well-designed, randomized controlled field trials of education innovations.

Copyright President and Fellows of Harvard College 1996

DESCRIPTORS: Education; Schools; Students

SPECIAL FEATURES: References Table

6/5/65 (Item 31 from file: 484)

DIALOG(R)File 484:Periodical Abstracts Plustext

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03009053 SUPPLIER NUMBER: 96378273 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Small high schools

Tice, Terrence N

Education Digest (GTED), v62 n2, p44

Oct 1996

ISSN: 0013-127X JOURNAL CODE: GTED

DOCUMENT TYPE: Feature

LANGUAGE: English RECORD TYPE: Fulltext; Abstract

AVAILABILITY: Full text online. UMIACH CATALOG NO.: 218.00

WORD COUNT: 229

ABSTRACT: Restructuring efforts in secondary schools has led to the creation of small high schools in some places or a division into several wings or sectors within large high schools. These efforts are discussed.

Copyright Prakken Publications, Inc. 1996

DESCRIPTORS: Secondary schools; Class size; Education reform

6/5/73 (Item 39 from file: 484)

DIALOG(R)File 484:Periodical Abstracts Plustext

(c) 1997 UMI. All rts. reserv.

02941397 SUPPLIER NUMBER: 96310617

Parents insist class sizes are important

Young, Susan

Times Educational Supplement (ITES), n4181, p5

Aug 16, 1996

ISSN: 0040-7887 JOURNAL CODE: ITES

DOCUMENT TYPE: News

LANGUAGE: English RECORD TYPE: Abstract

AVAILABILITY: The Times Supplements Ltd., Priory House, St. John's Lane, London EC1M 4BX, England

LENGTH: Medium (10-30 col inches)

ABSTRACT: Classroom size is becoming a key election issue in the UK. Almost 80% of parents say that class size affects educational achievement, and they have not been swayed by the Major government's pronouncements to the contrary.

DESCRIPTORS: Class size; Public opinion surveys; Education policy;
Academic achievement

GEOGRAPHIC NAMES: United Kingdom; UK

6/5/80 (Item 46 from file: 484)

DIALOG(R)File 484:Periodical Abstracts Plustext

(c) 1997 UMI. All rts. reserv.

02262060 (USE FORMAT 7 OR 9 FOR FULLTEXT)

The effect of class size on student performance: Development and
assessment of a process model

Scheck, Christine L; Kinicki, Angelo J; Webster, James L

Journal of Education for Business (IJEB), v70 n2, p104-111

Nov 1994

ISSN: 0883-2323 JOURNAL CODE: IJEB

DOCUMENT TYPE: Feature

LANGUAGE: English RECORD TYPE: Fulltext; Abstract

AVAILABILITY: Full text online. UMIACH CATALOG NO.: 866.01

WORD COUNT: 4823 LENGTH: Long (31+ col inches)

ABSTRACT: Research investigating the relationship between class size and student performance has met with mixed results. The purpose of this study is to clarify that relationship by introducing mediators of the linkage between class size and student performance.

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DESCRIPTORS: Research; Business education; Learning

SPECIAL FEATURES: References Illustration Table

EJ454395 EA527416

Preventing Early School Failure: What Works?

Slavin, Robert E.; And Others

Educational Leadership; v50 n4 p10-18 Dec-Jan 1991/1993

ISSN: 0013-1784

Available from: UMI

Language: English

Document Type: JOURNAL ARTICLE (080); REVIEW LITERATURE (070)

Journal Announcement: CIJAPR93

Target Audience: Practitioners

Summarizes conclusions from a review on the effects of programs intended to prevent early school failure. Examines the effects of birth-to-three programs, preschool, kindergarten, grade retention, class size and instructional aides, nongraded primary programs, one-to-one tutoring, and others. Research on prevention and early intervention indicates that early school failure is fundamentally preventable. (38 references) (MLF)

Descriptors: *Academic Failure; Class Size; *Early Childhood Education; *Early Intervention; Educational Research; Grade Repetition; *High Risk Students; Politics of Education; Preschool Education; *Prevention; *Program Evaluation; Reading Failure; Tutoring

EJ431933 SP520602

Class Size and Student Achievement: Is Smaller Better?

Slavin, Robert

Contemporary Education; v62 n1 p6-12 Fall 1990

ISSN: 0010-7476

Available from: UMI

Language: English

Document Type: JOURNAL ARTICLE (080); REVIEW LITERATURE (070)

Journal Announcement: CIJJAN92

Discusses the effects of reducing class size on student achievement. Studies indicate smaller classes have more positive effects than larger ones, but the effects are small. Reduced class size may improve school tone and morale, but it is not an adequate policy alone for significantly accelerating student achievement. (SM)

Descriptors: *Academic Achievement; Classroom Environment; *Class Size; Educational Policy; Elementary Secondary Education; *Instructional Improvement; Literature Reviews; *Teacher Student Ratio; *Teaching Conditions

ED340475 PS020159

Preventing Early School Failure: What Works? Report No. 26.

Slavin, Robert E.; And Others

Center for Research on Effective Schooling for Disadvantaged Students,
Baltimore, MD.

Nov 1991

23p.

Sponsoring Agency: Office of Educational Research and Improvement (ED),
Washington, DC.

Contract No.: R117R90002

EDRS Price - MF01/PC01 Plus Postage.

Language: English

Document Type: REVIEW LITERATURE (070); GENERAL REPORT (140)

Geographic Source: U.S.; Maryland

Journal Announcement: RIEMAY92

This report summarizes research on the impacts of alternative early intervention programs to prevent school failure. Also considered are the magnitude of estimates of program effects and policy implications of using the programs. The nine principal types of early schooling programs reviewed are those involving: (1) substantial reductions in class size; (2) provision of instructional aides in the early grades; (3) preschool for 4-year-olds; (4) extended-day kindergarten; (5) retention in kindergarten and first grade; (6) provision of transitional first grade, developmental kindergarten, and other extra-year programs for immature or at-risk children; and (7) one-to-one tutoring; and (8) IBM's Writing to Read Program; and (9) Success for All program. The review concludes that among the nine strategies, the most effective by far for preventing early school failure are those that involve one-to-one tutoring in reading for first graders, especially in structured models that use well-trained certified teachers as tutors. Such programs not only have the greatest immediate effects on reading achievement, but they are also the only programs known to have lasting effects, at least through the third grade. Appended are 62 references. (Author/GLR)

Descriptors: *Academic Achievement; Academic Failure; Class Size; *Disadvantaged Youth; *Early Intervention; *Early Reading; Educational Media; Grade 1; Grade Repetition; Kindergarten; Low Income; Preschool Education; *Prevention; Primary Education; *Reading Failure; Teacher Aides; Tutoring

Identifiers: Reading Recovery Projects; Success for All Program; Writing to Read

EJ431934 SP520603

Class Size and Public Policy: The Plot Thickens.

Tomlinson, Tommy M.

Contemporary Education; v62 n1 p17-23 Fall 1990

ISSN: 0010-7476

Available from: UMI

Language: English

Document Type: JOURNAL ARTICLE (080); PROJECT DESCRIPTION (141)

Journal Announcement: CIJJAN92

Discusses Tennessee's Project STAR and other research on class size, student achievement, and public policy. Findings provided no support for the idea that 12 years of small classes would produce significant increase in student achievement. However, disadvantaged minority students seemed to benefit significantly from small classes. (SM)

Descriptors: *Academic Achievement; Classroom Environment; *Class Size; *Disadvantaged Youth; *Educational Policy; Elementary Secondary Education; Minority Groups; *Teacher Student Ratio; *Teaching Conditions

Identifiers: *Project STAR; Tennessee

ED292216 EA020100

Class Size and Public Policy: Politics and Panaceas.

Tomlinson, Tommy M.

Office of Educational Research and Improvement (ED), Washington, DC.

Mar 1988

49p.; Contains a forward by Chester E. Finn, Jr., Assistant Secretary for Research and Improvement and Counselor to the Secretary, U.S. Department of Education.

Report No.: PIP-88-838

Available from: Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 (Stock No. 065-00000-326-1; \$2.75).

EDRS Price - MF01/PC02 Plus Postage.

Language: English

Document Type: POSITION PAPER (120)

Geographic Source: U.S.; District of Columbia

Journal Announcement: RIEAUG88

Government: Federal

Target Audience: Policymakers

This document reviews the issue of class size reduction, analyzes the evidence from research on the relationship between class size and educational improvement, and cites findings supporting the view that the costs of class size reduction outweigh the benefits and that reducing class

size to improve student achievement is inconsistent with the push to enhance teacher professionalism by placing greater demands on teachers. After an introductory overview, the following topics are discussed: (1) the context for reform; (2) the history of the debate; (3) the current debate; (4) perspectives on workload, including statistics on pupil/teacher ratio, pupils per class, pupil load, and staff ratios; and (5) sifting the evidence from standardized tests, state comparisons, and international comparisons. This is followed by a "lesson for America" on classroom culture and class size based on comparisons with the Japanese education system, and a discussion of what teachers can do to manage large classes. Forty-three references are included, and computations are appended. (TE)

Descriptors: *Class Size; Comparative Analysis; *Educational Economics; *Educational Policy; Elementary Secondary Education; *Politics of Education ; Resource Allocation; School Statistics; Teacher Responsibility; *Teacher Student Ratio

6/9/53 (Item 19 from file: 484)
DIALOG(R)File 484:Periodical Abstracts Plustext
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03108411 SUPPLIER NUMBER: 97019054 (THIS IS THE FULLTEXT)

When size is a class matter

Anonymous

NEA Today (INEA), v15 n5, p9

Jan 1997

ISSN: 0734-7219 JOURNAL CODE: INEA

DOCUMENT TYPE: Feature

LANGUAGE: English RECORD TYPE: Fulltext; Abstract

AVAILABILITY: Full text online. UMIACH CATALOG NO.: 13450.00

WORD COUNT: 510

ABSTRACT: California teachers like Randy Witt are relishing smaller class sizes after a statewide campaign. The campaign resulted in a budget that appropriates nearly \$1 billion over three years for kindergarten-grade 3 class size reduction.

TEXT:

Headnote:

California K-3 teachers relish smaller class sizes gained after statewide campaign.

Randy Witt's second grade class is 12 students smaller this year. But that hasn't lightened his workload a bit.

So why is this California teacher so excited?

"My job may not be easier with 20 students instead of 32, but I have more time to get to each kid individually," explains Witt, who teaches at the Starr School in Fresno.

Witt has fewer desks in his class, more small group discussions, and more time to talk to parents. "It's wonderful!" he exclaims.

That sentiment rings throughout the state these days, one year after the California Teachers Association's intensive lobbying and media campaign to reduce class size.

That campaign resulted in a budget that appropriates nearly \$1 billion over three years for grade K-3 class size reduction. The carrot: A \$650-per-student incentive, payable annually, to districts that lower their elementary teacherstudent ratios (which now average 1:28) to 1:20.

When Governor Pete Wilson signed this legislation into law, "He challenged teachers to make it work," notes Fresno Teachers Association President Carol Massey.

"You bet we'll make it work," says Massey, "and show the governor we care about kids and the profession."

No state has ever sought to reduce class size so widely so quickly, and educators in California aren't minimizing the challenge ahead. One big

problem is space-just finding all the new classrooms needed. Orders for portable classrooms have surged statewide.

Smaller classes are also creating a need for additional teachers, and the state now must hire an estimated 20,000 new teachers over the next three years.

"There are a lot of wrinkles to work out," says NEA member David Becker, a third grade teacher at Woodridge Elementary in Rio Linda, near Sacramento.

This 30-year veteran is pleased that his class size has plunged from 32 to 17, thanks to the hiring of six new teachers at Woodridge. But "kids are not crates of tomatoes," he points out, and the "space crunch" in his school can make life difficult.

Yet Becker is quick to add that the advantages of smaller class size outweigh the disadvantages.

"I have advocated this for many years, but I never thought I'd see it," says Becker.

"I can spend more time working with kids than putting out fires," he explains, "and happier kids mean fewer problems."

Randy Witt, vice president of the Fresno Teachers Association, agrees. "Fewer kids make discipline and control more easily attainable," he stresses, "and if there's a problem during recess, I have more time to pull students aside for counseling."

NEA members in California now want to see the class size reductions extended to the upper grades.

CTA has added this groundbreaking expansion to its legislative priority list. With 260,000 members, this state affiliate has the grassroots lobbying potential to make it a reality.

(Photograph Omitted)

Captioned as: Teacher Randy Witt has 12 fewer second graders in his class and "more time to get to each kid individually," thanks to a lobbying and media campaign waged by the California Teachers Association.

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DESCRIPTORS: Educators; Class size; Elementary schools

NAMED PERSONS: Witt, Randy

GEOGRAPHIC NAMES: California

SPECIAL FEATURES: Photograph

FILE SEGMENT: MI File 47

6/9/9 (Item 9 from file: 47)

DIALOG(R)File 47:Magazine Database(TM)

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04682108 SUPPLIER NUMBER: 18829964 (THIS IS THE FULL TEXT)

Size matters.(reduce all elementary classes to 20 or fewer pupils)(An

Agenda For A Second Term)(Cover Story)(Brief Article)

Mosle, Sara

The New Republic, v215, n20, p38(1)

Nov 11, 1996

DOCUMENT TYPE: Cover Story Brief Article ISSN: 0028-6583

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 618 LINE COUNT: 00049

TEXT:

If any of the president's staff flicked on the tube between stump speeches on the campaign trail, they would have noticed that education is in. Not since the days of "Room 222" and "Welcome Back, Kotter," have there been so many shows about school in prime time: "Mr. Rhodes," "Nick Freno: Licensed Teacher," "Dangerous Minds." There are lessons to be learned here--and not about licensing teachers.

The obvious one is that never, perhaps, in modern American life has education been a hotter issue. The less obvious one has to do with class size. Have you ever noticed, Mr. President, how on all these shows, the viewer gets to know only a few of the students? There's a reason for that. In a thirty-minute sitcom or an hour-long drama, a viewing audience can only get to know a handful of kids. Similarly, a typical teacher can only get to know so many students in a fifty-minute period. On "Welcome Back, Kotter," for instance, the sweatshops monopolized Mr. Kotter's time while the good kids languished in the background. And as it is for the TV audience, so it is for the typical high-school teacher. In fifty minutes she can only get to know so many kids.

In the next four years, Mr. President, you should make reducing class and school sizes, particularly in poorer, overcrowded schools, a top goal. As governor of Tennessee, Lamar Alexander financed a study of the effect of class size on learning in the state's rural, suburban and urban schools. It showed that smaller classes during the elementary school years produced dramatic boosts in student achievement--regardless of student background--and that these gains held even after students were returned to larger classes in later years. Everyone knows that smaller classes work; they're in large part what affluent parents are paying for when they send their kids to private schools.

The place to start is in the earliest grades, kindergarten through third, in order to give all children the solid educational foundation they need to succeed later. Nothing would do more to help all children to read by the third grade, as President Clinton has proposed, than to reduce all elementary school classes to 20 students or less during these years.

Most people assume that school districts would have to hire lots more teachers if they reduced class size, but they wouldn't. In too many districts across the country, teachers work outside the classroom, in administrative positions created partly to respond to the needs of teachers in overcrowded classes and schools. In New York City, for instance, the student-to-teacher ratio is approximately 16 to 1; classes remain large, however, partly because so many teachers aren't teaching and because of overcrowding.

Instead of giving money to states for special education or other "pull-out" programs, the federal government should give funds to schools exclusively to reduce class size; if every class, particularly in the earliest grades, had 20 students or less, then every child, in essence, would receive a "special" education. And just as every class should have no more than 20 students, every school should have no more than 20 teachers. Teachers get lost in big schools, just as kids do. Smaller schools and classes will create the kind of communities where teachers, parents and students can work together and know each other as individuals. If you can push for school uniforms, Mr. President, you can push for smaller classes. Call it your 20/20 vision for school reform.

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DESCRIPTORS: Class size--Political aspects; Education and state--Political aspects

NAMED PERSONS: Clinton, Bill--Social policy

FILE SEGMENT: MI File 47

6/9/66 (Item 32 from file: 484)
DIALOG(R)File 484:Periodical Abstracts Plustext
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03009042 SUPPLIER NUMBER: 96378262 (THIS IS THE FULLTEXT)
Making big schools smaller
Berkey, Timothy B
Education Digest (GTED), v62 n2, p10-14
Oct 1996
ISSN: 0013-127X JOURNAL CODE: GTED
DOCUMENT TYPE: Feature
LANGUAGE: English RECORD TYPE: Fulltext; Abstract
AVAILABILITY: Full text online. UMIACH CATALOG NO.: 218.00
WORD COUNT: 1967

ABSTRACT: Public perception appears to be married to the notion that students will be more successful in schools with smaller student populations. Educational leaders find themselves pressured into making decisions to use scarce financial resources to build smaller or additional school buildings rather than focusing on programs and initiatives that make significant improvements in teaching and learning.

TEXT:

RESEARCH on the relationship between size of the school population and students' academic performance is inconclusive and fails to establish any clear implication for educators to follow. Public perception, however, appears to be married to the notion that students will be more successful in schools with smaller student populations. With this intuitive hunch unvalidated by research, educational leaders find themselves pressured into making decisions to use scarce financial resources to build smaller or additional school buildings rather than focusing on programs and initiatives that make significant improvements in teaching and learning.

In my five years as Principal and Assistant Superintendent at Adlai E. Stevenson High School, in the Chicago suburb of Lincolnshire, Illinois, we've grown from 2,100 to over 3,000 students and participated in a successful referendum campaign that expanded the campus to accommodate future growth to a school of 4,000 by the turn of the century.

My experience is that size of school population has little to do with potential enhancements to be made by investing resources in school programs and initiatives that will have direct impact on academic, personal, and social development of students. Bricks and mortar won't change schools; people and programs will.

Therefore, to deal with public fear of large schools-and more important, create successful school environments-we must look for ways to make big schools smaller. A cornerstone of making big schools smaller is to design a restructured organization that captures the individual attention

provided to students in small schools while taking advantage of the rich and broad opportunities that present themselves in large school programs.

We introduced a school-within-a-school arrangement. We organized a 21-member transition task force made up of students, parents, teachers, and administrators to examine other school-within-a-school models and identify key elements that would meet the needs of our organization. Here are some of the features we found important in our design:

- * Establish zoned areas of campus called "houses" in which students take the majority of their core subjects while also allowing for movement to other houses for electives or courses not available within one's house.

- * Provide additional travel time only for students who need to move to a classroom outside their house. There is no need to put the entire school in the hallways for additional travel time.

- * Allow students access to their friends regardless of house assignment. For example, although we have two cafeterias, students can use either one to meet with friends assigned to other houses.

- * Give teachers the opportunity to determine their own assignments. Some of our teachers prefer to stay within a given house while others like to teach in a second location.

- * Avoid creating artificial barriers between each house. Students and staff are not looking for separation but for the continuation of a sense of unity. We did not divide our athletic teams, student government, or clubs based on the school-within-a-school arrangement.

- * Locate student services within each house. We have assigned counselors, deans, and social workers to students within a given house. Siblings are assigned to the same house to maintain close relationships between families and student services personnel.

Student Services

A frequent criticism of large schools is that students will go unnoticed and "fall between the cracks," an understandable concern of parents who have watched their child experience difficulty in school and get little or no attention from school personnel. The key to providing effective student services is in the monitoring process.

This process can begin prior to the first day of school for entering freshmen. During the spring, our counselors meet with junior-high and middle school personnel to identify students who are experiencing academic, social, or personal problems and therefore need to be monitored closely as they enter high school.

As they enroll in our school, each student is assigned to a student support team consisting of a guidance counselor, dean, and social worker. The team meets on a regular basis and reviews academic, behavioral, and personal/social information about students assigned to them.

Appropriate strategies are discussed and formulated with a lead person within the team designated to carry out the plan and report back at the next meeting. Team members contact parents and, when necessary, involve

outside agencies and resources to assist the student. Teachers, support staff members, and administrators are encouraged to report any important information about students to the appropriate student support team.

Drop-in service is available to all students throughout the day. A word of caution, however-make sure the secretarial staff get the name of any student who stops by when everyone is busy or out of the office. It's important to know immediately who may need assistance.

Academic Support Services

Academic support services are also important. Remember the good old days when grades were reported every six weeks? Somewhere along the line, administrators got the bright idea that nine-week grading periods would be less costly and more efficient. Teachers rallied around this idea as they saw an opportunity to reduce some of the voluminous paperwork that comes with the job. Did anyone think about the impact on students and parents? Probably not.

Several years ago, we made the decision to go back to six-week periods with a progress report at each interim. Every three weeks, parents get feedback about the academic performance of their students.

Once a problem is identified, be ready to put a series of support services in place. At Stevenson, we have developed a progression of tutorial services to assist students with their studies:

- * Resource centers staffed by teachers, peer tutors, and community volunteers who can provide daily tutoring throughout the school day;
- * Guided study halls where students can get help in a small group arrangement rather than in a large study hall;
- * Mentor programs for students who need instruction in study skills and academic intervention.

If these services fail to bring about improved results, the student is targeted for a full case study for possible special education services.

The results of these services have been outstanding. Not only have we reduced the dropout/failure rate for the entire school population, we have been able to help students by intervening at a much earlier stage of a problem.

As schools become larger, teachers begin to feel isolation from their colleagues as common lunch and preparation times become less frequent. Important sharing among teachers of similar curricula can suffer unless the school pays close attention to the need for people to meet. There are several ways to accomplish this:

- * Provide shortened school days for teachers to meet for a couple of hours before the students arrive;
- * Arrange for substitute coverage when a group of teachers needs a large block of time to resolve issues or complete special projects;
- * Fund curriculum team proposals that allow teachers to meet on weekends or during summer months. Although you will never be able to resolve all the concerns teachers express about lack of meeting time,

placing designated times in the school calendar is a step toward building a greater sense of teamwork and collegiality in a large school environment.

Staff Development

This brings us to the area of staff development. For many years, schools have used a menu approach in their staff development programs, allowing teachers to independently select items of interest from a list that is usually determined by some type of needs assessment.

The problem with this approach is that teachers miss the opportunity to work together to integrate their new knowledge and skills in common areas of instruction. In large school environments, it becomes even more problematic with teachers going in so many different directions that staff development becomes an activity rather than a meaningful experience that finds its way back into the classroom.

Three years ago, we decided to provide teachers with the opportunity to select a strand from our staff development as a curriculum team or department instead of as an individual. The vast majority of teachers took us up on the offer and decided to use the team approach.

The results have been amazing. Not only have teachers integrated their new skills in the classroom, our students have set new academic records for virtually every internal and external indicator monitored by the school.

Cocurricular Offerings

The most frequent complaint you will hear from parents as a school grows is about the cocurricular program. Students who get cut from an athletic team or don't get the lead in the school play can be dramatic examples of the negative aspects of growth unless you plan and prepare for improvements in your cocurricular offerings.

Several years ago, we created a special task force to study our athletic, fine arts, club, and intramural opportunities and devise a plan to at least maintain the percentage of students involved in cocurriculars as the school grows.

Here are some of the strategies that were suggested:

- * Create a pyramid of teams for each sport that involves a try-out and cut roster approach. For example, it made sense for us to run multiple levels of soccer, baseball, and basketball in grades 9 and 10.
- * Provide more intramural activities and allow the programs to share in the use of athletic facilities.
- * Support involvement in community service projects by providing bus transportation and adult supervision after school.
- * Identify a process for students to start a new club or organization within the school.

This brings me to the subject of parent partnerships. It has always surprised me how many parents drop off their children at our school but rarely step inside our schoolhouse doors. I don't believe this is a function of apathy but more of lack of familiarity with a large school campus. To overcome this, I recommend inviting them into the school.

I don't mean open house. Ask parents to meet with you while school is in session. Throughout the school year, I invite every ninth-grade parent to join me for a meeting, tour of campus, and lunch in the student cafeteria. After all, if you want to relieve the anxiety parents may be feeling about the size of the school, show them the busiest place on campus. Not all of my parents come to the luncheons, but those who do walk away as partners of a campus that reflects a calm, organized, and friendly environment conducive to learning. Defrosting the Look A final area for consideration is building aesthetics. How many of us have walked into school facilities and immediately felt the cold and impersonal message left by a lack of attention to aesthetics? This problem becomes magnified in large buildings with numerous entrances and hallways that look institutional instead of friendly.

Our students, teachers, and parents have enjoyed working together on projects that have enhanced the physical environment of the school: flags of the United Nations hung in the student cafeteria, student art galleries, framed art posters of famous works, displays of school memorabilia and historical artifacts, student and professional murals, and enlarged pictures of everyday student life.

You can take decisive action to overcome the potential impact of large school size by focusing district efforts on strategies that will remove school size as a key issue in your restructuring and school improvement efforts. By paying close attention to the needs of students, parents, and staff, you can transform your school into a friendly and nurturing environment where each member of the school family takes ownership in success.¹⁰

(Illustration Omitted)

Captioned as: "It gets worse. In high school, you learn this all over again in other languages!"

Author Affiliation:

Timothy B. Berkey is Principal and Assistant Superintendent, Adlai E. Stevenson High School, Lincolnshire, Illinois. Condensed from The High School Magazine, 3 (June/July 1996), 22-26, published by National Association of Secondary School Principals, from which related educational materials are available by contacting NASSP, 1904 Association Drive, Reston, VA 20191 (phone: 703-860-0200).

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DESCRIPTORS: Schools; Education expenses; Class size

6/9/10 (Item 10 from file: 47)
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04597177 SUPPLIER NUMBER: 18662376 (THIS IS THE FULL TEXT)

Standing room only: the nation's schools are inundated with
kids.(overcrowding of schools)

Kantrowitz, Barbara

Newsweek, v128, n12, p81(1)

Sep 16, 1996

ISSN: 0028-9604 LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 851 LINE COUNT: 00074

ABSTRACT: Public schools in the US are becoming increasingly crowded due to the record number of students. Schools are building new facilities, using temporary trailers, and hiring more teachers to accommodate the students, but still have difficulty keeping up with their increasing number.

TEXT:

IT SHOULD HAVE BEEN A DAY FILLED with promise; instead, Jose Barahona was full of frustration as he waited with his daughter Elizabeth in the auditorium of PS 149 in Queens, N.Y. Dressed in a crisp yellow-and-white gingham dress, Elizabeth was eager to start first grade. But her classroom this year is one of four bright red trailers parked in the playground. It could have been worse; her school is one of New York City's most crowded, with 1,100 kids crammed into a space meant for 650. "Education is very important," says Barahona, a cabdriver who fled his native El Salvador more than a decade ago. "The school has to supply a better place to learn."

His anxiety echoed in school corridors around the country last week as administrators and teachers scrambled to find space for a record 51.7 million elementary- and secondary-school students, a bumper crop that tops even the peak baby-boom years. "This is not a blip," predicts Education Secretary Richard Riley. "It's a constant trend and we are going to have to deal with it."

Some districts have been trying. When birthrates began to rise in the late 1980s, many administrators sought to raise money for new construction; that proved to be daunting in an age of taxpayer revolt. Then a surge in immigration-combined with an unexpected increase in black and Hispanic births and a decline in the high-school dropout rate--created standing-room-only crowds from kindergarten to 12th grade. "It's like you're on the beach and you see big waves coming," says Brian Cram, superintendent of schools in Clark County, Nev., the country's fastest-growing district. "If you don't have enough money to build a retaining wall, those waves are going to crash right over the beach."

With no immediate cure in sight, many school officials admit they're relying on stopgaps. In the affluent district of Walled Lake, just north of Detroit, residents have defeated school-construction bond issues for three years in a row; a fourth vote is scheduled for the end of this month. Meanwhile, administrators are using trailers, busing some kids to less crowded districts and converting any available space. Last week high schoolers studied biology in a garage designed for auto-repair classes.

Even districts that managed to raise construction money say they can't keep up. Superintendent Frank Petruzielo presides over 218,000 students in Broward County, Fla., the second fastest-growing district in the country. Broward has built 87 new schools in the last seven years--and still doesn't have enough space for 40,000 students, many of whom have been assigned to 2,200 trailers, dubbed "portable classrooms." "We've been called the portable capital of the world," says Petruzielo, "and we're just about portabled out. There is no room on most campuses to add many more." Some Broward schools are already on staggered sessions; others have converted to a year-round schedule in order to accommodate as many students as possible.

In fast-growing areas in the West and the Southeast, hiring teachers is as hard as finding space. "We're always competing," says Dale Braun, who is in charge of finding places for 657,000 students in the Los Angeles Unified School District, the largest enrollment in the district's history. "There isn't anything like an NFL signing bonus that we can offer, but, believe me, we thought of things like that." Resourcefulness helps. Evelyn Bostwick, principal of San Miguel Elementary School in Southgate, recruited three teachers at her daughter's wedding last month. When Bostwick heard that the maid of honor's sister was looking for a job, she urged her to apply. "She said, 'Can I bring my two friends?' I said, 'Are you kidding? Bring all your friends'."

The crunch comes at a particularly bad time for education reformers, who have been pushing for smaller class sizes. This summer, California legislators approved a plan to give districts \$19,500 for each class that has no more than 20 students--a good idea that's almost impossible to implement in the crowded schools that need it most. Officials in booming Gwinnett County, Ga., outside Atlanta, tried to minimize the vastness of the new Creekland Middle School (with 2,500 students) by creating five subschools. But principal Joan Akin isn't optimistic. "How soon will we have trailers here?" she asks. Like her colleagues, she knows that before she can worry about Reading, 'Riting and 'Rithmetic, she has to master the new R-- Room.

A Bumper Crop of Pupils

In the fast-growing West and Southeast, classrooms are filled as fast as they're built

Districts with the largest enrollment gains

PERCENT SCHOOL DISTRICT	INCREASE	CHANGE
Los Angeles Unified, Calif.	91,223	16.6%
New York City, N.Y.	87,163	9.5
Dade County, Fla.	86,407	38.9
Broward County, Fla.	64,118	51.0
Clark County, Nev.	55,647	62.1
Palm County, Fla.	51,327	72.5
Gwinnett County, Ga.	38,263	100.1
Orange County, Fla.	34,893	44.3
Guilford County, N.C.	30,214	124.7
Fresno Unified, Calif.	27,127	55.1

SOURCE: U.S. DEPT. OF EDUCATION, NAT'L CENTER OF EDUCATION
STATISTICS

BY BARBARA KANTROWITZ

With SUSAN MILLER in New York, JEANNE GORDON in Los Angeles, DANIEL
McGINN in Detroit and VERN E. SMITH in Atlanta

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SPECIAL FEATURES: illustration; photograph; table

DESCRIPTORS: Public schools--Management; Class size--Management

FILE SEGMENT: MI File 47

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04240148 SUPPLIER NUMBER: 16925548 (THIS IS THE FULL TEXT)

Poor priorities: school budgets.

The Economist, v335, n7911, p58(2)

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ABSTRACT: British teachers' unions are threatening to strike unless class size is reduced. The teachers say that the larger class sizes will contribute to lower educational standards, but research on the subject is contradictory. About 28% of British primary school classes have over 30 students.

TEXT:

CONDEMNATION from political leaders, parents and school governors has not, so far, persuaded the biggest teachers' unions to withdraw their threats of strikes and boycotts over increased class sizes. Teachers argue that, unless they take action, classes of more than 30 pupils will grow ever more common, causing a serious decline in educational standards. The government counters that, if local councils spend wisely, they will not have to sack teachers; and that, anyway, there is no clear evidence that larger classes mean lower standards.

In support of their argument, teachers point out that British primary schools already have more pupils per teacher than most European Union countries. Scotland has some limits on class sizes but England does not, and 28% of its primary-school classes have more than 30 pupils. An analysis of results from the first national standardised tests on seven-year-olds, taken in 1991, shows that pupils in smaller classes were more likely to do well. In the American state of Tennessee, researchers followed the progress of a group of 7,000 five-year-olds for four years. They found that those taught in classes of around 15 did better at reading and maths than those in larger classes.

However, another widely quoted international study, compiled in 1992 for the American government, seems to contradict these findings. It tested the abilities in mathematics of 13-year-olds in 19 countries. South Koreans did best, even though they are taught in classes of 49 on average. Taiwan was second, despite average class sizes of 44. Canada and America, with classes half that size, fared much worse.

The conclusion that educators draw from these apparently conflicting studies is that, if class size does matter, it makes the most difference in the earliest years of school. Listening to each pupil reading out loud, and

watching over their shoulders as they attempt long division for the first time, are time-consuming but important. For teenage pupils, though, there may be little to gain from small classes.

Unfortunately, instead of having smaller classes for smaller pupils, many British schools tend to do the opposite. Secondary- school classes in England, according to official figures, typically have 5.5 fewer pupils than those in primary schools. This is because the spending per pupil is Pounds 1,638 (\$2,620) a year in English primary and nursery schools, compared with Pounds 2,250 in secondaries. And throughout Britain, sixth forms, whose pupils are the highly motivated achievers of their generation, and who therefore need least coaching, have the smallest classes of all.

On top of this apparently unjustifiable bias towards secondary schools, Alan Smithers, director of the Centre for Education and Employment Research at Manchester University, points to equally puzzling differences in spending between local-education authorities. In inner London, for example, Westminster spends Pounds 1,535 a year on secondary pupils. Their friends next door in Kensington & Chelsea have Pounds 4,055 spent on them. Mr Smithers says the formula which the government uses to work out its grants to local councils must be changed to reduce these extreme variations.

Given that Britain's spending on both primary and secondary schools, as a proportion of national wealth, is around the average for rich countries, there is not much justification for teachers' cries that education as a whole is being starved of funds. But Britain does spend less than many countries on primary schools. There clearly is an argument for the government to take action that could be just as controversial as its squeeze on overall budgets: switching resources to the early years, where smaller class sizes are most likely to make a difference, and sharing the money more fairly among schools in different parts of the country.

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ABSTRACT: James S. Gilmore won the Virginia gubernatorial election last week, partly on his promise to reduce elementary school class sizes. This issue is becoming increasingly popular with politicians, including those in Congress.

TEXT:

Republican James S. Gilmore was elected governor of Virginia last week after a campaign dominated by his promise to cut an unpopular tax on cars. But a second issue, whose impact went largely unnoticed, also played a key role in the victory: Gilmore's promise to reduce the size of classes in elementary schools.

It is an idea whose political appeal is growing greater. In California, as reported by U.S. News ("Does Class Size Matter?" October 13), Gov. Pete Wilson has already won wide acclaim for a program to reduce class size. But Gilmore went even further, turning class size into a partisan issue. Don Beyer, the Democrat who lost to Gilmore, had campaigned under the slogan "Education First!" He proposed to improve education by significantly raising teachers' salaries-a notion that Virginians had supported in the past. By contrast, Gilmore promised to give teachers only a cost-of-living raise-and to apply the savings to hiring new teachers.

Virginia Democrats and Republicans both say their polls found that Gilmore's approach proved more popular with voters than Beyer's. This was particularly significant-and surprising-because support for education traditionally has been one of the great political strengths of the Democratic Party.

M. Boyd Marcus, a senior strategist for Gilmore, said he believes that even though the GOP candidate's proposed tax cut was hugely popular, taxes alone would not have turned the election. "[The class-size initiative] opened people's eyes and ears and showed them this guy was serious about education," said Marcus.

Gilmore's success could give the issue a big national boost with the

GOP, which is seeking new ideas on education. Clinton Key, executive director of the Republican Governors Association, said he is certain that the question of class size will surface at the group's annual meeting later this month. The session will focus on education.

In Congress, reducing the size of classes may well attract GOP lawmakers who have had little success winning broad public support for such complex proposals as quasi-independent "charter schools" or taxpayer-funded vouchers that subsidize private school tuition. Several Republican strategists say that class reduction is especially appealing because it is easy to understand and reflects common sense. The idea offers extra political appeal for Republicans with its emphasis on limiting teacher raises. That is one political gesture that won't be lost on the National Education Association, which has long been strongly Democratic. Kent Jenkins Jr.

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Class Size Reduction

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Summary

The Legislature and the Governor created the Class Size Reduction (CSR) program as part of the 1996-97 Budget Act. The program is intended to increase educational achievement by reducing average class sizes from 28.6 students to no more than 20 students in up to three grades. The 1997-98 Governor's Budget proposes expansion of the CSR program to four grades in the budget year.

The Legislative Analyst's Office surveyed school districts to gather detailed information on CSR implementation. Below, we identify our major findings and recommendations to the Legislature.

Findings

- * Lack of Flexibility Increases Costs. Districts are maintaining CSR classes at a ratio of about 19 students to one teacher in order to be sure of remaining under the cap of 20 students to one teacher. This increases per-pupil CSR costs by as much as 21ápercent. As a result, CSR costs

about \$770 per pupil on a statewide basis under these circumstances. If CSR classes could be kept at 20:1, average costs would be about \$630 per pupil in the current year. This cost figure is less than the state's reimbursement level.

- * **Costs Vary Widely.** CSR per-pupil costs vary from zero to about \$1,000 from district to district. These costs depend on initial class size, class size in CSR classes, and the cost of teachers hired.

- * **Teachers Hired for CSR Are Less Qualified.** The approximately 18,400 teachers hired for CSR have less teaching experience, fewer qualifications and a lower skill level, on average, than teachers hired in previous years. Implementing CSR fully in four grades would require 16,500 additional teachers (assuming average class sizes of about 19).

- * **Districts Are Running Out of Low-Cost Options for New Facilities.** In the current year, a significant number of CSR facilities were created by converting classroom space used for other programs or services. Facilities to expand CSR next year to more classes and grades will be more expensive on a per-classroom basis, suggesting that districts now have fewer options for expanding CSR facilities other than purchasing portable classrooms.

Recommendations

- * **Increase Flexibility On the Use of CSR Teachers.** We recommend that the Legislature allow districts to use CSR teachers much more flexibly than is allowed under the current CSR program. There are a number of effective educational interventions, in addition to CSR, that require additional teaching staff.

- * **Increase Flexibility On 20:1 Cap.** If the Legislature decides to stay with the current program structure, we recommend redefining the cap to require a 20:1 average ratio for all CSR classes in a district (while allowing individual class maximums of up to 22 students). This action would reduce costs and reduce counterproductive activities (such as busing and shuffling of children between classes) that have occurred solely to remain under the 20:1 cap.

- * **Delay Implementation of a Fourth Grade.** Due to shortages of qualified teachers and high costs for new facilities, we recommend the Legislature delay implementation of a fourth grade of CSR. The Legislature, however, should earmark \$100ámillion toward funding expansion of a fourth grade in subsequent years.

- * **Provide New Funds in Revenue Limits, Not in CSR Per-Pupil Amount.** We recommend that the Legislature not increase the per-student funding level (in real terms), and instead direct new Propositioná98 funds into local revenue limits. Revenue limit funds could be spent for CSR, if needed, or for other purposes depending on local, rather than state, priorities.

- * **Allow \$52áMillion in Goals 2000 Funds To Be Used For CSR Staff Development.** CSR has created an acute need for new-teacher staff development. We recommend the Legislature allow districts to use \$52ámillion in Goals 2000 funds for CSR-related staff development, in addition to the uses proposed by the Governor.

Implementation of Class Size Reduction

The Legislature and the Governor created the Class Size Reduction (CSR) program as part of the 1996-97 Budget Act. The program is intended to increase educational achievement by reducing average class size from 28.6 to no more than 20 in up to three grades, from kindergarten through third. Figure 1 summarizes the provisions of the CSR program.

Figure 1 Features of the Class Size Reduction Program
Almost \$1 Billion Appropriated in 1996-97. The Legislature provided \$771 million in ongoing operational funds and \$200 million in one-time facilities funds.
Districts May Implement CSR in Up to Three Grades. On a school-by-school basis, implementation must begin with grade one, followed by grade two, and then either kindergarten or grade three. Districts may not implement CSR in a grade until all classes in the higher-priority grade(s) have been reduced to 20 or below.
Districts Have Two Implementation Options. Districts receive funding for reducing class size to no more than 20 under either of two options:

- * Under "Option 1," districts receive \$650 for each student in a class of no more than 20 for a full day.

- * Under "Option 2," districts receive \$325 for each student in a class of no more than 20 for a half day.

Implementation Deadline. In 1996-97, districts receive funding only for implementation that occurs by February 16, 1997.
One-Time Grants Are Available. Districts may apply for facilities grants of \$25,000 per new classroom.
Governor's Budget Would Extend CSR to a Fourth Grade. The Governor's proposal would add \$297 million in ongoing funds to expand CSR to a fourth grade. The proposal also would provide \$151 million in one-time funds for facilities.

Almost all school districts elected to participate in the program. Of the 895 school districts eligible for the CSR program, 95 percent, or 853 districts, elected to participate. Of the participating districts, about 85 percent began reducing class sizes at the beginning of the school year. Other participating districts must implement the program by February 1997 in order to receive funding in the current year. Figure 2 summarizes district participation and funding.

Figure 2 Participation in the Class Size Reduction Program

1996-97 Districts participating 853 out of 895
Amount of ongoing funds claimed \$630 million out of \$771 million
Amount of facilities funds claimed \$200 million out of \$200 million
Percent of CSR districts implementing in first semester of 1996-97 school year 85 percent
Percent of all K-3 students in a CSR class 54 percent
Data from School Services of California.

As Figure 2 shows, districts expect to claim \$630 million, or 82 percent, of the funding appropriated for CSR. Of districts implementing CSR, fewer than 2 percent have chosen Option 2 in grades one through three. In kindergarten, 20 percent of implementation has occurred under Option 2. The 1996-97 Budget Act assumed districts would use Option 2 about 25 percent of the time. Thus, the use of Option 2 is substantially lower than anticipated.

Figure 2 also shows that 54 percent of the state's K-3 students will be in smaller classes this year. As shown in Figure 3, district implementation of CSR focused on grades one and two. Ninety-two percent of the state's grade one students and 74 percent of grade two students will be in small classes by the implementation deadline of February 1997. Implementation in kindergarten and grade three is significantly less common.

<Picture>

One-time funds for facilities have been insufficient to meet demand created by CSR. As Figure 2 shows, the entire \$200 million appropriation in the 1996-97 Budget Act was distributed to schools. The State Department of Education (SDE) received 14,000 requests for facilities grants to implement the CSR program. Available one-time funds will cover 8,000 of these requests. Eligibility was based on the same space standards used in the State School Building Program.

Figure 4 shows the existing number of K-3 classes in the state in 1995-96 and the number of new classes that will be created by CSR in 1996-97. Overall, CSR will add about 18,400 new K-3 classes in the state in 1996-97, an increase of 28 percent. We estimate that the state's overall K-3 class size will be lowered from 28.6 students in 1995-96 to about 23.5 students by the end of the 1996-97 school year.

<Picture>

Why Did Some Districts Not Participate In CSR?

Forty-two districts did not participate in the CSR program in 1996-97. Most of these districts have very low enrollments. Overall, nonparticipating districts represent less than 1 percent of the state's enrollment in grades kindergarten through third. Figure 5 summarizes the enrollments of nonparticipating districts.

Figure 5 Size of Districts Not Participating

In Class Size Reduction--1996-97	District Enrollment	Number of Districts	More than
10,000	12,000 - 10,000	0	1,000 - 2,000
3	200 - 1,000	10	Less than 200
28	Total	42	

The SDE surveyed nonparticipating districts to find out why these districts did not participate. Modesto City Elementary, the only very large district that is not participating, estimated the program would result in a budget deficit in future years. Modesto does plan to implement CSR in two grades in 1997-98.

Of the other districts that did not participate, most of those with enrollments greater than 200 stated that they already have small classes (21 to 24 students) and did not feel that the disruption and cost of going down to 20 would be worth the potential benefits. The 28 districts with enrollments of less than 200 cited two main reasons for not participating: (1) the district had class sizes slightly above 20 but did not have enough children at each school to create another class or (2) the district had class sizes of 20 or under already and administrators did not realize that the district could nevertheless qualify for the program. About 40ápercent of all the nonparticipating districts surveyed stated that they plan to participate next year.

Budget Proposal Would Expand CSR to Four Grades

The Governor's budget proposes expansion of the CSR program to four grades in 1997-98. There are four facets to the Governor's proposal:

Expand CSR to Four Grades. The budget proposes \$297 million to fund a fourth grade of CSR. With these funds, the program would provide funding to implement CSR in all of grades kindergarten through third.

Increase CSR Base Funds to Account for Higher-Than-Planned Use of Option 1. As discussed above, use of Option 1 was substantially higher than the 75ápercent rate originally assumed. The budget would provide \$160ámillion to account for the greater costs of Option 1 over Optioná2, as well as enrollment growth.

Provide a COLA to the Per-Pupil Amount. The budget proposes \$31ámillion for a COLA that would raise CSR per-pupil funding from \$650 in the current year to \$666 in the budget year.

Provide One-Time Facilities Funds. The budget requests \$151ámillion in one-time funds to be distributed as facilities grants for CSR.

LAO and SDE Surveyed Districts for Information on CSR Implementation

In order to obtain more detailed data on the CSR program to inform the budget and policy process, the Legislative Analyst's Office (LAO), in collaboration with SDE, sent surveys to 200 California school districts.

We surveyed the 50 largest districts and 50 districts chosen at random from each of three groups: (1) districts with enrollments between 5,000 and 20,000, (2) districts with enrollments between 1,000 and 5,000, and (3) districts with enrollments of less than 1,000. Figureá6 summarizes the number and enrollment of the state's school districts in the most recent year for which data are available.

Figure 6 Number and Enrollment in California K-12

School Districts by District Size

1995-96 Enrollment Range Number

of Districts Enrollment Percent of

Statewide

Enrollment Greater than 20,000 512,380,350 44 % 5,000 - 20,000 2092,091,294 39 1,000 -

5,000 303781,445 14 Less than 1,000 436156,798 3 State Totals 9995,409,887 100 % Source: Data from the California Basic Education Data System (CBEDS).

We chose this sampling plan with the twin goals of covering a large proportion of the state's total enrollment while at the same time gathering information about the issues faced by districts of different sizes. Of the 200 districts surveyed, about 150 responded, with similar response rates among all four district size groups. Responding districts represent about half of the state's K-3 school enrollment.

The survey questions fell into four groups:

Costs for CSR. We asked districts how much they are spending to compensate new CSR teachers as well as other teachers already in that district. We also asked districts how much their new CSR facilities cost.

Teacher Background and Experience. We asked districts how many teachers they hired for CSR, their experience, what these new teachers were doing before they were hired, and the district's judgment of the new teachers' skill levels compared with new teachers the district had hired in the past.

Facilities. We asked districts how they are providing new classrooms for CSR and if facilities were redirected from other uses for CSR classrooms.

Other Issues. We asked districts (1) if they had noticed an increase in students transferring from private schools to public schools in their district; (2) how they would have spent the CSR funds they received if the funds were given to the district as unrestricted revenue, rather than solely for class size reduction; and (3) initial impressions regarding the effect of CSR on teacher and parent morale, and on student attendance.

The analysis presented below is based mainly on data reported to us and to SDE by school districts. We have followed up with many districts in order to ensure the accuracy of the data on which our conclusions are based. Nevertheless, as with all surveys, there may remain some divergence between the information districts provided and the actual situation in their schools.

In general, our survey sample appears to be representative of the state as a whole and also of each district size group. However, due to the large variability among the smallest districts, the results we obtained from our sample may be less representative of small districts as a whole.

What Does Class Size Reduction Cost?

Districts are maintaining CSR classes at about 19:1 in order to be sure of remaining under the 20:1 cap. This increases per-pupil CSR costs by as much as 21 percent. As a result, CSR costs about \$770 per pupil on a statewide basis under these circumstances. If CSR classes could be kept at 20:1, costs would be about \$630 per pupil.

Ongoing Costs of CSR

There are a number of factors that determine the ongoing cost to a district of class size reduction:

- * **Initial Average Class Size.** Average class size prior to CSR varies a great deal among districts. Those with lower initial class sizes will need to spend less for CSR than those with higher class sizes. In 1995-96, before CSR was implemented, the statewide average class size in grades kindergarten through third was about 28.6 students, with 84 percent of districts falling between 26 and 32 pupils.
- * **Final Average Class Size.** The law requires that a class average no more than 20 pupils during the course of a school year to qualify for CSR funds. In order to ensure they do not exceed this limit, many districts kept their class sizes below 20. As a result, the statewide average class size in CSR classes appears to be slightly under 19. This increases the cost of the program substantially.
- * **Cost of Teachers Hired for CSR.** Districts that pay higher salaries will have higher CSR costs. The cost of teachers hired for CSR will depend both on the salary schedule of each district, and the experience level of the teachers hired. Including salary and benefits, the average annual cost of teachers hired for CSR ranged from about \$30,000 to \$50,000 on a district-by-district basis. Teacher costs will increase with time as these newly hired teachers move up the salary scale.
- * **Other Ongoing Costs.** Districts generally report additional ongoing costs for CSR. These include costs for substitute teachers, utilities, custodial services, and clerical services. We were not able to collect uniform data on these costs for each district, but they appear to be in the range of \$3,000 to \$5,000 per classroom per year (that is, about 10 percent of teacher costs).

Average Costs Are Higher Than Expected. When CSR was created in the 1996-97 Budget Act, we estimated, including only teacher costs, that the long-run ongoing costs of reducing class size to 20 students per class would be about \$750 per pupil per year. We arrived at this estimate based on statewide average cost of \$50,000 per teacher per year, a statewide average class size in grades kindergarten through third of 28.6, and a final average class size of 20. We expected that first-year costs would be lower than long-run costs because new teachers would start out near the bottom of the salary scale, rather than at the statewide average. The survey data we received from districts now allows more accurate estimates of the costs of CSR.

We developed these cost estimates for CSR using the following information and assumptions: (1) survey data on the average salary of the teachers each district hired for CSR; (2) survey data on the average salary of the rest of each district's teaching staff (that is, not including those hired for CSR); (3) overhead costs assumed to be equal to \$4,000 to account for other ongoing costs of CSR (such as substitute teachers, utilities, custodial services, etc.); (4) data from the California Basic Education Data System (CBEDS) that gives average class size for each school district before CSR was implemented; and (5) data from district CSR funding applications submitted to SDE from which we calculated the final average class size.

Figure 7 lists the estimated average per-pupil cost of CSR given the data and assumptions listed above. Figure 7 shows the following:

- * Districts of Greater Than 20,000 Enrollment. The largest districts have the lowest costs (\$690 per student) for two reasons. First, their new teacher salaries are the lowest and second, the average class size in their CSR classes is the highest.
- * Districts From 1,000 to 20,000 Enrollment. These districts have higher CSR costs (about \$800 per student) than the largest districts because of higher average new teacher salaries and a lower final class size for CSR classes.
- * Districts of Under 1,000 Enrollment. Although these districts pay the lowest new-teacher salaries and have low initial class sizes, their costs (\$710 per student) are slightly higher than the largest districts because of the low number of pupils in their CSR classes. This group of districts also had the widest range of costs, with 7 of 25 districts incurring no costs because their class sizes were already at 20 or below.

Figure 7 Estimated Costs for Class Size Reduction

1996-97 Enrollment Range	Current CSR Cost Per Pupil	Average Teacher Cost	Average Initial Class Size	Average Final Class Size
Greater than 20,000	\$690	\$37,300	28.7	19.35
1,000 - 20,000	\$810	\$39,000	29.0	18.81
Less than 1,000	\$710	\$38,300	28.6	18.8
State Average	\$770	\$38,300	28.6	18.8

Costs for the state as a whole average \$770 per pupil, with an average CSR class size of 18.8. However, costs varied a great deal from district to district. For districts of over 1,000 students, almost all districts had costs between \$400 and \$1,000 per pupil.

Long-Run Costs of CSR. The estimates above are for current-year CSR costs. We can estimate the long-run per-pupil costs of CSR by using data on average teacher costs, rather than new teacher costs. Teachers hired for CSR are lower on the salary scale than the average teacher. However, in five to seven years, their salaries will be more like those of the average teacher. We estimate the long-run per-pupil CSR cost will be about \$1,020 (in current dollars) assuming average class sizes of 18.8.

More Flexibility Would Reduce Costs. The CSR program requires districts to reduce classes to no more than 20 students per teacher in order to receive funding. In practice, however, districts appear to be reducing classes to average sizes well below the required minimum. At least two factors may account for this. First, districts are fearful of losing CSR funding if they exceed the 20:1 cap. Districts do have to plan for enrollment changes during the school year, but the severe penalties for going over 20:1 may be pushing them into creating an extra safety margin, resulting in typical class sizes of 19, rather than 20. Second, some districts have less flexibility in dividing their children between classes and may be forced into low class sizes. A school with three classes of 28 students each, for instance, would have to make four classes of 17 students and one of 16 in order to participate in the program.

To the extent that districts maintain classes averaging less than 20 on an annual basis, costs rise dramatically. For example, the cost of the program increases by 21 percent if average class size is 18.8 rather than 20 statewide.

Figure 8 shows current per-pupil costs for the program when districts maintain average class sizes of 18.8 students and 20 students. Note that at an average class size of 20, current per-pupil funding (\$650 per student) is more than enough to cover the costs of CSR for the average district (\$630 per student). In the long term, costs would rise to about \$840 per pupil, well below the \$1,020 necessary to fund CSR at average class sizes of 18.8. On a statewide basis, we estimate the full-year difference in costs for implementing CSR in three grades at 18.8:1 rather than 20:1 is about \$180 million in the budget year.

Figure 8 Estimated Current Average Per-Pupil Costs
 Of Class Size Reduction Under Two Scenarios
 District Size Cost at 18.8 to 1 Cost at 20 to 1
 Difference Greater than 20,000 \$690 \$620 \$705,000-20,000 800 660 1501,000 -
 5,000 800 630 170 Less than 1,000 710 490 220 State Average \$770 \$630 \$140
 a Estimates are for 1996-97 and are based on stated student/teacher ratios.

Teacher Recruitment and Staff Development

Teachers hired for CSR on average have less teaching experience, fewer qualifications, and a lower skill level than teachers hired in previous years. In addition, shortages of substitutes and lack of funds for staff development may be hindering districts' ability to provide staff development that could make up for deficits in training and experience.

While CSR has the potential to increase student achievement by placing fewer students in each classroom, the success of the initiative hinges on placing competent teachers in those classrooms. The CSR program will result in the hiring of about 18,400 teachers this year. These are in addition to the approximately 16,000 elementary teachers that will be hired for normal replacement and growth needs. Thus, CSR has resulted in a 115ápercent increase in demand for new elementary-grades teachers this year.

Inadequate Supply of Credentialed Teachers

Figure 9 lists the qualifications and experience level of teachers hired for CSR for the state overall and by district size. As Figure 9 shows, on a statewide basis, 24ápercent of teachers hired for CSR do not have a teaching credential. Of the total, 21ápercent have an emergency permit. Emergency permits are issued to people entering the teaching profession who have not completed some of the legal requirements for a teaching credential. Emergency permit holders may have no

formal training or experience in teaching, although some may have experience as substitute teachers. Holders of emergency permits must meet minimal annual training requirements in order to be eligible for renewal of their permit.

Three percent of teachers hired for CSR have a waiver. Persons issued a waiver need not have fulfilled any of the legal requirements for a teaching credential, and therefore may be less qualified than holders of emergency permits. As can also be seen in Figure 9, larger districts were much more likely to hire noncredentialed teachers than were smaller districts.

Figure 9 Experience Level of Teachers Hired for CSR--1996-97

Experience Level

Statewide	District Enrollment Range	Greater Than	20,000	5,000 to 20,000	1,000 to 5,000	Less Than 1,000	Credential:	Greater than five years experience	14 %	16 %	10 %	17 %	23 %	One to five years experience	23	22	22	27	35	Entry level	34	25	42	40	30	University intern	33	33	04	District intern	23	12	20	Non-Credential:	Emergency	21	28	20	98	Waiver	33	33	50	Totals	100 %	100 %	100 %	100 %
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We estimate the increase in emergency permits and waivers due to CSR represents an increase of at least 60 percent in the use of these teaching authorizations in elementary schools. According to data from the Commission on Teacher Credentialing, in 1995-96, 6,000 elementary classroom teachers (out of about 140,000) were working under emergency permits. Based on the results of our survey, we estimate that teachers hired for CSR will add between 3,500 and 4,000 additional emergency permits statewide this year. The vast majority of newly hired teachers will be teaching in CSR classes. Thus, teachers with emergency permits will be more concentrated in the earliest grades.

Big Districts Rate New Teachers Lower. Districts had very different assessments of the quality of new CSR teachers. We asked school district administrators to make a subjective judgment of the skills of new CSR teachers compared to the skills of teachers hired in previous years. On average, the smaller districts felt that CSR teachers were slightly more skilled than in previous years while the larger districts felt that the teachers they hired were slightly less skilled than in previous years. Of particular concern are districts with enrollments over 20,000, of which 35 percent answered that CSR teachers possessed skills that were "somewhat lower" than teachers hired in previous years.

Thus, based on data for teacher qualifications and subjective judgments of teacher skills, the teachers hired for CSR are less prepared and less experienced, on average, than teachers hired in the past. This appears to be a problem mainly for larger districts, as smaller districts have generally been able to hire qualified teachers.

Staff Development Concerns. At the same time that some districts are hiring teachers with lower qualifications and experience than in the past, they are also experiencing difficulties in providing teachers with staff development programs that could improve their teaching skills. Figure 10 lists the types of problems districts say they experienced in implementing staff development for the CSR program.

Figure 10 Problems Experienced by Districts

In Implementing Staff Development--1996-97	Problem Experienced	Statewide	Greater Than 20,000	5,000 to 20,000	1,000 to 5,000	Less Than 1,000
	Insufficient substitutes	69 %	71 %	73 %	54 %	44 %
	Insufficient funds	49	53	51	38	33
	Not enough time	48	45	56	43	22

Once again, larger districts were more likely to experience difficulties than smaller ones. The most common problem, a lack of substitute teachers to provide release time for classroom teachers to receive staff development, is directly related to the demand for new teachers in implementing CSR. One in four teachers hired for CSR were former substitutes.

Future Teacher Demand of CSR. During the 1996-97 school year, CSR will require districts to hire about 18,400 teachers. As described earlier, class sizes in CSR classes average about 18.8. Substantially more teachers are necessary to implement CSR with classes smaller than 20. Figure 11 shows the number of teachers necessary to implement CSR depending on the average class size and the number of grades implemented.

Figure 11 Number of New Teachers Needed

For Full Implementation of CSR	Implementation Level	Statewide
Average Class Size	18.8	20
Difference	Three grades	7,800
	3,200	4,600
	Four grades	16,500
	10,400	6,100

a Assumes full implementation.

Given current average CSR class sizes (18.8), schools will have to hire about 7,800 additional

TAKING INEFFECTIVE TEACHERS OUT OF THE CLASSROOM

Premise: The pivotal role in raising children's achievement in elementary and secondary schools is played by the teacher. High standards, supportive curriculum, student assessment, parental involvement, excellent administration -- all are frustrated by ineffective teachers. Schools know who the ineffective teachers are and many are addressing the problem directly, but others may need incentives to do so. The Federal government can provide such an incentive without intruding into local school decisions, union-school relationships, or State direction of the school system.

Initiative design:

- Conditioning Education grants. The major Federal statutes providing grants to States and schools -- Title I, IDEA, Vocational Education, Indian Education, Bilingual Education -- would be amended to make a condition of annual grant receipt the presence in each District of a system of evaluating teachers and dealing with the results of the evaluations as described below.
- The teacher evaluation system would be devised to meet the unique needs of each State and school system, but would have to have these components:
 - It would involve teachers and administrators in its design and implementation. Where a union contract is in effect, the union would have to be a full partner in, and endorse, the system.
 - Effective input from parents would have to be solicited.
 - It would assess every teacher on a regular cycle, but at least once every three years. The teachers assessed first in the early years would be those for whom there is some evidence of questionable abilities, including the presence of multiple complaints about teaching effectiveness from parents.
 - The assessment could take various forms but would rely primarily on multiple in-the-class observations, over a period of time, by a senior teacher of proven teaching ability. No system that relied primarily on written tests or oral interviews would be acceptable.
- Dealing responsibly with questionable teachers. The teacher assessments could not be cause for automatic dismissal. The system would have to provide, as appropriate, for corrective actions tied to the observed faults: training, mentoring, assignment to more appropriate classes, periods of observation of or team teaching with more effective teachers, etc. Dismissal would be an option in situations of documented extreme incompetence.

- Ensuring fair treatment for teachers. The results of the evaluation would have to be open to challenge by the teacher in an impartial hearing setting before experienced teachers and administrators.
- Measuring system impact. Districts receiving Federal education funds would have to report publicly on the effectiveness of their systems. Systems that did not find any, or only a minuscule number of ineffective teachers in the first two years would be presumed to have ineffective systems (no “Lake Woebegone” effect allowed) and be subject to the “show cause” hearing process below.
- Real sanctions for failure to deal with ineffective teachers. Districts could maintain eligibility for Education grant funds for one year after the laws are amended as above on the basis of having a design for a system that meets the above conditions, if they currently do not have one that meets these principles. If by the second year after enactment the system is not in place and operating effectively, the district would lose 3% of its funds the next year (which would be reallocated to other eligible districts in the State). The district would lose an additional 3% for each successive year, up to 9% of total funding.

If no progress had been made for 2 successive years after implementation (or 3 years from enactment if the district had what appeared to be a satisfactory system in place), the district would face a hearing before the Education Department and a panel of representatives from school districts of comparable size and demographic composition, to show cause why it should not lose eligibility for all its Federal funding. In the event a district loses funding, the Secretary of Education, in cooperation with the State, would designate an alternative deliverer of the educational services to children in that district.

- Technical assistance and dissemination. The Education Department, in coordination with national teacher and administrator and State organizations, and parent groups, would issue materials on alternative methods of teacher assessment and remediation. Education would, with these groups, identify and disseminate best practices.

Draft

Class Size Reduction Plan to Ensure Teacher Quality

Reducing class size without attending to the qualifications and training of teachers will negate benefits gained through smaller classes. Students in a small class but with an ill-prepared teacher will have difficulty in achieving to high standards. In addition, research verifies that new and experienced teachers need training in how to teach more effectively in smaller class settings before the full benefits of a class size reduction can be realized. This proposal, therefore, strengthens support for high quality teaching while also reducing class size. In doing so, it is an investment in students and our teaching force.

Option A

To qualify for funds through this program:

- States must prove that they have fully certified teachers who meet the current state licensure standards to fill all positions created in LEAs that use funds from this program to reduce class size in grades K-3.

- States must also ensure that the percentage of uncertified teachers (i.e. teachers who do not meet the current state licensure standards) will not be increased within any LEA receiving funds to reduce class size.

- Funds unavailable to reduce class size because states do not have enough fully certified teachers who meet the current state licensure standards, must use the money from this program to develop a system which would ensure that all new and experienced K-3 teachers have the knowledge and skills to teach reading to all students and to teach effectively in smaller class settings.

States shall ensure that LEAs receiving assistance under this program shall provide sustained, intensive, high-quality professional development for all K-3 teachers that is of sufficient intensity and duration to have a positive and lasting impact on the teachers' performance in reading instruction. Professional development shall also be aligned with state content standards in order to enable all children to meet state student performance standards in reading.

- In addition to resources from this program, states and LEAs may use resources from Title I, Goals 2000, America Reads, and the Eisenhower Professional Development Program to implement the professional development requirement for reducing class size.
- States that have met the target class size in grades K-3 may use funds from this program to improve the quality of instruction throughout the whole continuum of teacher

Draft

development.

Future funding will be contingent on:

- States decreasing the percentage of uncertified teachers within any LEA receiving funds to reduce class size.
- States demonstrating that reading achievement has improved in those LEAs that receive money through this program.

uncertified

Option B

To qualify for funds through this program:

- States must ensure that the percentage of uncertified teachers (i.e. teachers who do not meet the current state licensure standards) will not be increased within any LEA receiving funds to reduce class size.
- States must provide a plan on how they will decrease the percentage of uncertified teachers within an LEA receiving funds from this program.
- States shall ensure that all new and experienced K-3 teachers participate in sustained, intensive, high-quality professional development that is of sufficient intensity and duration to have a positive and lasting impact on the teachers' performance in reading instruction. Professional development shall also be aligned with state content standards in order to enable **all** children to meet state student performance standards in reading.
- States may use funds under Title I, Goals 2000, America Reads, and the Eisenhower Professional Development Program to implement the professional development requirement for reducing class size.

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Class Size Reduction Initiative
Smaller Classes + Quality Teachers = Increased Student Achievement

Funds

① Formula to States

② states / districts need plan

③ Cost-sharing
- scaling
Scale

1. Purpose

The purpose of this initiative is to reduce class size and provide quality teachers in the early grades, to help all students learn to read independently and well by the end of the 3rd grade.

2. Design Issues to Address

Funding levels

- Presume \$5 - \$10 billion over 5-7 years
- Phased-in implementation
- Cost-sharing requirement
- Do not assume this is one-time initiative
- Distribution of funds: by formula to state and within state to district, based on number (and cost?) of new teachers needed to meet targets? Is there a better approach?

*Grades: 1-2
size: 18*

Class Size Targets

- NCES producing updated information on current state-by-state average class size in each of grades K-3; this will form basis for estimating cost of reductions to different ceilings (15, 18, 20) at two or more grade levels
- Need to figure out how to deal with differences in current class size within and between states -- what do we do with states/districts that are at or close to target: (1) let them use funds for class size reductions in other grade levels?

III. performance based standards.

→ new teachers

Teacher Quality

- Professional Development for existing teachers, focused on effective teaching in small groups, on language acquisition and on effective reading instruction.
- Preparation and Hiring of new teachers, to ensure that increased demand does not lead to lowering of licensure/hiring standards, and to ensure that new teachers are adequately prepared.
- Teacher Recruitment: How to attract quality teachers to inner cities, and prevent exodus of most qualified/experienced teachers to new openings in suburbs; how to phase in class size reductions so that pipeline issues are addressed at same time
- Helping or removing low performing teachers: Requirement to have serious teacher evaluation system in place that identifies weak teachers, gives them help and if necessary removes them.
- For above issues: what do we require from states/districts? What do we (help) pay for in this initiative? How do we link this initiative with teacher training and related funds in America Reads, Eisenhower, Title 1 and in Title V proposal?

Facilities Issues

- How should we link this with school construction initiative, if at all, beyond rhetorically?

Local Planning and Flexibility

- Need to give districts adequate time for planning and phase-in
- What do we require in the way of state and local plans--how directive and specific should we be?
- How can we best encourage and help local districts and schools carefully and intelligently think through the range of issues they need to address--what kind of t.a. will be needed?
- Possible options for districts that cannot find the space or teachers for reducing class size to target levels:
 - o reductions in instructional group size for reading alone
 - o intensive, proven reading approaches such as Reading Recovery and Success for All
 - o After-school tutoring
 - o small summer classes
 - o one-time use of \$ for facilities (e.g, to buy portables)

Equity Issues

- Reductions in class size will have biggest positive impact on low income, minority, inner-city kids, BUT:
- Urban schools will have the hardest time attracting and retaining qualified teachers, and are most likely to hire people who don't meet licensure requirements
- High poverty school districts most likely to be affected by funding arrangements that require matching funds or dislocations
- Inner city school districts have greatest facilities problems
- Impact on bilingual education needs to be watched--especially in light of shortage of qualified teachers.

Accountability/Evaluation

- Requirement for local districts to evaluate impact on reading achievement, make midcourse corrections as needed, and, ultimately lose funds if no demonstrable achievement gains over time?
- National evaluation?

CLASS SIZE AND TEACHER COSTS ESTIMATES

Date: 12/1/97
To: The Record
From: Marilyn McMillen and Kerry Gruber
Subject: Class size and teacher costs estimates

The task at hand is to develop teacher salary and benefits cost estimates associated with alternative K-3 class size reduction scenarios.

We start with the observed class size estimate of 21 students per class in K-3 classrooms. These class size data are restricted to teachers in self-contained classrooms or teachers of general academic subjects in a departmentalized setting; excluded are enrichment and pull-out teachers. This estimate was developed for grades K-3 teachers using 1993-94 data from the Schools and Staffing Survey (SASS).

This estimate, combined with the Common Core of Data (CCD) students membership count of 13,772,291 in grades K-3 in 1993-94, yields an estimate of 655,823 K-3 classroom teachers in 1993-94.

In order to estimate the number of additional teachers that would be needed to reduce the average class size, the target class size under a series of scenarios is divided into the student membership count to estimate the total number of teachers needed under each scenario. The difference between each of these estimates and 655,823 K-3 teachers yields an estimate of the number of additional teachers needed under each scenario. (Implicit here is an assumption of a fixed number of K-3 students in membership under each scenario).

To estimate the costs associated with the salaries and benefits of these additional teachers, we start with the average teacher salary for newly hired (most recent three years) teachers in grades K-3 in 1993-94. The ratio of 1.265 for instructional staff fringe benefits to salaries from the National Public Education Financial Survey (NPEFS) is applied to the average salary estimate to take benefits into account. Finally, assuming inflation over the 1997-98 and 1998-99 school years is on a par with inflation since school year 1990-91, a CPI based inflation factor of 1.144 is applied to the 1993-94 estimate of teacher salary and benefits. This yields an estimate of \$36,099 needed for each additional teacher in 1998-99.

The number of additional teachers projected under each of the classroom size scenarios multiplied by \$36,099 results in an estimate of the costs associated with teacher salaries and benefits needed to meet the target class size under each scenario.

Estimates of numbers of teachers, new teachers, and salary and benefit costs under alternative class size scenarios

Class size	# Teachers	# New Teachers	New \$'s
21	655,823		
20	688,615	32,792	1,183,758,408
19	724,857	69,034	2,492,058,366
18	765,127	109,304	3,945,765,096
17	810,135	154,312	5,570,508,888
16	860,768	204,945	7,398,309,555
15	918,153	262,330	9,469,850,670

SOURCE: Estimated from 1993-94 SASS, 1993-94 CCD, 1993-94 NPEFS, and CPI.

A Proposed Planning Process To Explore Reducing Class Size in the Primary Grades

We know from our continuous reading of the research on what constitutes successful school environments that essential ingredients include the presence of talented, well trained teachers, an engaging classroom where opportunities for active student learning thrive, and a teacher-student ratio that provides all students with optimum opportunities for small group instruction and individual attention. Effective classroom practice must focus directly on results and in this proposal the intended result is to ensure that every child leaving the third grade is equipped to read for understanding and for continuous learning.

While individual schools within a district should be allowed to retain discretion in determining the most appropriate organizational designs and instructional strategies for helping students to meet the academic standards that precede promotion to the intermediate grades, there are definite advantages to providing schools with options for reducing class size or capping enrollment in the primary grades to no more than 22-24 students per class, depending on the grade level, the available facilities and the organizational design for the elementary schools.

A district willing to reduce class size in the elementary schools must begin with a very specific goal. There must be some logical connection between this reform proposal and the investment in student achievement. The goal must drive a plan for student achievement and take into account the following considerations:

Part One-- Considerations That Take Place At The District Level in Collaboration with Building Staff and the Business Office.

1. **Achievement Data Analysis**--A review of student achievement over the past five years, and the percentage of students leaving third grade able who have met the standard; i.e. they are able to read for understanding.
2. **Enrollment Data Analysis**--a cohort survival method that predicts the enrollments, current and projected, based on birth and mobility rates, for the next five years.
3. **Facilities Analysis**--a review of existing facilities usage, a review of the long-range facilities improvement plan and a comparison of cohort survival analysis to the projected facilities usage plan.
4. **Staff Analysis**--The potential always exists for increasing the primary grade staff without increasing the numbers of employed teachers. If the costs for increasing staff, even with federal support appears prohibitive, we should offer federal support for valid, useful and creative models that, in essence, still reduce class size. The options that follow can either reduce class size or improve the teacher/student ratio.

District staff will need to offer guidance to staff on possible waivers that will allow such changes as increasing class size at the intermediate grades, creating inclusion classes that free up special ed teachers to work in tandem with regular classroom teachers, creating multi-age or multi-grade classes, and considering options for modified cross grade grouping models.

Unique opportunities may include a staggered school day that allows for two school day schedules, or one could imagine a year round schedule that doubled the room usage, and of course, doubled the number of staff teaching at the primary level. Done creatively, this might not mean an overall huge increase in the teaching force.

5. **Teacher Competencies**: An analysis of the years of graduate training possessed by all elementary teachers; an analysis of how many teachers have specialized graduate training and are certified in the areas of reading and early

childhood education.

6. Projected Teacher Turnover Rate: A important key to improving the quality of the teaching force is the ability of the district to attract, train and retain qualified, competent staff. A projection analysis that accompanies the analysis of staff competencies provides a very clear picture of the available and future teaching force. An important set of data, since reducing class size works only if qualified staff are available to effectively meet the needs of students possessing diverse learning styles and needs and they employ dynamic, flexible instructional strategies.

7. Analysis of Professional Development Opportunities: The existing resources available to support the ongoing professional development needs of staff should be inventoried and assessed both for effectiveness and usefulness. Our bill should spend as much money ensuring an adequate supply of well qualified teachers to be hired, as it does on reducing class size. We cannot support plans that have gaping holes in the areas requiring descriptions of how the district will ensure that only qualified teachers are hired.

8. Analysis of the adequacy and availability of contemporary instructional materials. Perhaps the easiest job, but maybe not, is that of inventorying the availability of instructional materials. Even though there is not necessarily an increase in the total student body the materials will need to be distributed over a greater number of classrooms. The availability of technology for additional classrooms will probably need to be increased. The budget implications would need to be explored.

Part Two-Suggested Conditions for Building Level Involvement

1. The building staff must demonstrate, through some form of affirmation, commitment not just to the organizational redesign, but to the goal of improved student achievement.
2. The issue of equity and excellence must drive the planning and be responsive to the long range goal of mitigating the multiple effects of poverty on achievement.
3. The staff must view professional development as long range, continuous and vital to ensuring that student gains in the primary grades are not lost once they enter the intermediate and high school years.
4. The building must commit to ongoing data gathering and staff must develop the analytic capability to generate accurate data useful for diagnosis and instructional planning.

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Open or importance of research/ class size personal environment FY 99 make the help to make the same (achieve high stds)

Class Size Reduction Options

All Options below assume that the impact of a class size reduction initiative ~~on school facilities~~ will be taken into consideration in the design/implementation of the school construction initiative

Option 1: Nationwide Reduction in Class Size to 15 for Grades K-3

Cost: \$5.6 billion to \$10.3 billion

Districts would receive grants to pay a percentage of teacher salaries to reduce class size in grades K-3 to 15 students. Grants could also be used to pay for teacher recruitment and for training of new and in-service teachers. In order to receive grants, districts would reduce class size in grades K-3 over a five year period, beginning with grades 1-2 and then moving to grades K and 3.

This would require an additional 345,000 teachers (assumes 13.8 million K-3 students in average classes of 24 students). The cost of the grants would range from: \$5.6 billion (paying 50% of teachers salaries assuming that 1/2 of the new teachers are entry-level) to \$10.3 billion (paying 75% of teacher salaries assuming all new teachers paid at the average teacher salary range).

Additional ^{recruitment / preparation} professional development and recruitment ^{resources} funds could be made available through the Title V proposal. *President*

Funds would be available through the school construction initiative to underwrite a portion of the interest cost for bonds or other financial instruments used to secure funds for constructing or repairing school facilities.

Option 2: Nationwide Reduction to Class Size between 17-20 for grades K-3

Cost: \$1.9 billion to \$7.1 billion

This option assumes there are approximately 13.8 million students in K-3, and ^{a starting} an average class size of 24 students per class:

A reduction to 17 students per class would require an additional 238,000 teachers at a cost ranging from \$3.9 billion (paying 50% of teacher salaries -- assuming half of the teachers receive entry level salary) to \$7.1 billion (paying 75% of teacher salaries -- assuming all receive average salary).

A reduction to 19 students per class would require an additional 151,000 teachers at a cost ranging from \$2.4 billion (paying 50% of teacher salaries -- assuming half of the teachers receive entry level salary) to \$4.5 billion (paying 75% of teacher salaries assuming all receive average salary).

A reduction to 20 students per class would require an additional 115,000 teachers at a cost ranging from \$1.9 billion (paying 50% of teacher salaries -- assuming half of the teachers receive entry level salary) to \$3.4 billion (paying 75% of teacher salaries assuming all receive average salary).

should make point about how to take maximum advantage of small class

what about Schur's idea of bonus in school const. competition for those who do it since?

Option 3: Nationwide Reduction in Class Size for Grades 1 and 2
Cost: \$3 billion (\$9 billion over 5 years)

initial primary
Grades 1 and 2 are the first two years of mandatory education across the U.S. and are the grades in which reading skills are taught. (Kindergarten is only mandatory for the full day in 5 states and half-day in 10 states).

Districts would receive grants to pay for a percentage of the cost of teacher salaries to reduce class size in grades 1-2 from an average of 24 to 18. Districts could choose to use their own state/local funds to cover new teacher salaries and use a portion of the federal grants to offset the costs of training new teachers and in-service teachers re-trained for teaching in the small class environment.

Almost 100,000 teachers (est. 97,220) would be needed to reduce class size to 18 for approximately 7 million first and second grade students.

Assuming all new teachers are paid an average salary (40,000 incl. benefits) and that grants cover 75% of the new teacher salaries -- the cost for 100,000 new teachers would be \$3 billion.

If program is ramped up over 5 years, adding approximately 20,000 new teachers per year, the cost is: \$600,000; 1.2 million, 1.8 million, 2.4 million, 3 million -- for a total cost over five years of \$9 billion.

Entry-level salary options:

Assuming 7 million first and second grade students, and 100,000 new teachers needed to reduce class size to 18 per class:

If half of the new teachers are entry level and the federal grants cover 75% of the teacher salaries of the 100,000 teachers drops to \$2.4 billion.

If half of the new teachers are entry level, and the federal grants cover 50% of the teacher salaries, then the cost of the program to subsidize 100,000 new teachers drops to \$1.6 billion.

Option 4: Nationwide Reduction in Class Size Linked to Accountability

States would receive grants to reduce class size in grades K-3 to (15-20 students per class). Grants would underwrite a percentage (50-75%?) of the new teacher salaries.

Those states receiving grants would have to agree to require testing for new teacher certification and to remove incompetent teachers.

15/1/2

to 18

should look at reduction to 15 in grades 1 & 2 - shouldn't cost all that much more. too as one of the options

Currently, 39 states require some type of basic skills assessment prior to certification, 32 states require other tests (professional/content) and 44 states require in-class observations prior to certification.

[To Answer: how to link local teacher removal requirements with state allocations.]

Option 4: Education Zones Demonstration Program

The education zone program would be competitive challenge grant requiring participating urban/rural districts to:

- end social promotion and require students to meet challenging academic standards at key transition points in order to be promoted or to graduate
- remove incompetent teachers
- turn around failing schools
- and provide enhanced public school choice for kids in failing schools

This option would enhance those challenge grants to provide additional funds for Education Zone schools districts to

- reduce class size to 15 in grades K-3
- provide principal and teacher training
- provide before-, after-school and summer school programs
- design and implement accountability systems

Open or 2 on research/ class size personalizing environment
importance of reducing child learning individual
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FY 99?

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FY 99?

Cost: \$5.6 billion to \$10.3 billion

Districts would receive grants to pay a percentage of teacher salaries to reduce class size in grades K-3 to 15 students. Grants could also be used to pay for teacher recruitment and for training of new and in-service teachers. In order to receive grants, districts would reduce class size in grades K-3 over a five year period, beginning with grades 1-2 and then moving to grades K and 3.

This would require an additional 345,000 teachers (assuming 13.8 million K-3 students in average classes of 24 students). The cost of the grants would range from: \$5.6 billion (paying 50% of teachers salaries assuming that 1/2 of the new teachers are entry-level) to \$10.3 billion (paying 75% of teacher salaries assuming all new teachers paid at the average teacher salary range).

Additional professional development and recruitment *recruitment preparation* funds could be made available through the President's Title V proposal. *resources would*

Funds would be available through the school construction initiative to underwrite a portion of the interest cost for bonds or other financial instruments used to secure funds for constructing or repairing school facilities.

Option 2: Nationwide Reduction to Class Size between 17-20 for grades K-3

Cost: \$1.9 billion to \$7.1 billion

This option assumes there are approximately 13.8 million students in K-3, and an average class size of 24 students per class: *a starting*

A reduction to 17 students per class would require an additional 238,000 teachers at a cost ranging from \$3.9 billion (paying 50% of teacher salaries -- assuming half of the teachers receive entry level salary) to \$7.1 billion (paying 75% of teacher salaries -- assuming all receive average salary).

A reduction to 19 students per class would require an additional 151,000 teachers at a cost ranging from \$2.4 billion (paying 50% of teacher salaries -- assuming half of the teachers receive entry level salary) to \$4.5 billion (paying 75% of teacher salaries assuming all receive average salary).

A reduction to 20 students per class would require an additional 115,000 teachers at a cost ranging from \$1.9 billion (paying 50% of teacher salaries -- assuming half of the teachers receive entry level salary) to \$3.4 billion (paying 75% of teacher salaries assuming all receive average salary).

should make point about how to take maximum advantage of small class

what about federal idea of bonus in school const. competition for those who are very close to it?

Option 3: Nationwide Reduction in Class Size for Grades 1 and 2
Cost: \$3 billion (\$9 billion over 5 years)

in half primary
Grades 1 and 2 are the first two years of mandatory education across the U.S. and are the grades in which reading skills are taught. (Kindergarten is only mandatory for the full day in 5 states and half-day in 10 states).

Districts would receive grants to pay for a percentage of the cost of teacher salaries to reduce class size in grades 1-2 from an average of 24 to 18. Districts could choose to use their own state/local funds to cover new teacher salaries and use a portion of the federal grants to offset the costs of training new teachers and in-service teachers re-trained for teaching in the small class environment. ✓

Almost 100,000 teachers (est. 97,220) would be needed to reduce class size to 18 for approximately 7 million first and second grade students.

Assuming all new teachers are paid an average salary (40,000 incl. benefits) and that grants cover 75% of the new teacher salaries -- the cost for 100,000 new teachers would be \$3 billion.

If program is ramped up over 5 years, adding approximately 20,000 new teachers per year, the cost is: \$600,000; 1.2 million, 1.8 million, 2.4 million, 3 million -- for a total cost over five years of \$9 billion.

Entry-level salary options:

Assuming 7 million first and second grade students, and 100,000 new teachers needed to reduce class size to 18 per class:

If half of the new teachers are entry level and the federal grants cover 75% of the teacher salaries of the 100,000 teachers drops to \$2.4 billion.

If half of the new teachers are entry level, and the federal grants cover 50% of the teacher salaries, then the cost of the program to subsidize 100,000 new teachers drops to \$1.6 billion.

Option 4: Nationwide Reduction in Class Size Linked to Accountability

States would receive grants to reduce class size in grades K-3 to (15-20 students per class). Grants would underwrite a percentage (50-75%?) of the new teacher salaries.

Those states receiving grants would have to agree to require testing for new teacher certification and to remove incompetent teachers.

15/1/2

should look at reduction to 15 in grades 1 & 2 - shouldn't cost all that much more. too as another option.

to 18

Currently, 39 states require some type of basic skills assessment prior to certification, 32 states require other tests (professional/content) and 44 states require in-class observations prior to certification.

[To Answer: how to link local teacher removal requirements with state allocations.]

Option 4: Education Zones Demonstration Program

The education zone program would be competitive challenge grant requiring participating urban/rural districts to:

- end social promotion and require students to meet challenging academic standards at key transition points in order to be promoted or to graduate
- remove incompetent teachers
- turn around failing schools
- and provide enhanced public school choice for kids in failing schools

This option would enhance those challenge grants to provide additional funds for Education Zone schools districts to

- reduce class size to 15 in grades K-3
- provide principal and teacher training
- provide before-, after-school and summer school programs
- design and implement accountability systems