

# Class Size Reduction

#### 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 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, 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 \$100 million 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 Proposition 98 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 \$52 Million 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 \$52 million in Goals 2000 funds for CSR-related staff development, in addition to the uses proposed by the Governor.

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#### 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.

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

#### 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.

the state's K-3

year."

smaller classes this

*"... 54 percent of* students will be in

1997 in order to receive funding in the current year. Figure 2 summarizes district participation and funding.

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.

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 Depart-

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 85 percent

of 1996-97 school yeara

Percent of all K-3 students in a CSR class

54 percent

Data from School Services of California.

ment 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.

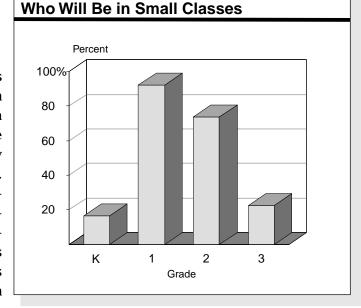
#### Why Did Some Districts Not Participate In CSR?

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 (see next page) summarizes the enrollments of nonparticipating districts.

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.

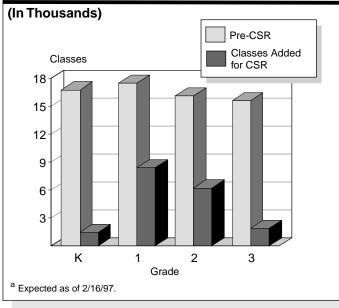
Of the other districts that did not participate, most of those with enrollments greater than 200 stated

# Percent of Students



#### Figure 4

#### Class Size Reduction Will Result In About 18,400 New K-3 Classes<sup>a</sup>



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 40 percent of all the nonparticipating districts surveyed stated that they plan to participate next year.

#### Figure 5

### Size of Districts Not Participating In Class Size Reduction—1996-97

District Enrollment	Number of Districts
More than 10,000	1
2,000 - 10,000	0
1,000 - 2,000	3
200 - 1,000	10
Less than 200	28
Total	42

#### **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 75 percent rate originally assumed. The budget

would provide \$160 million to account for the greater costs of Option 1 over Option 2, as well as enrollment growth.

**Provide a COLA to the Per-Pupil Amount.** The budget proposes \$31 million 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 \$151 million 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. Figure 6 summarizes the number and enrollment of the state's school districts in the most recent year for which data are available.

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

#### 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	51	2,380,350	44%
5,000 - 20,000	209	2,091,294	39
1,000 - 5,000	303	781,445	14
Less than 1,000	436	156,798	3
State Totals	999	5,409,887	100%

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 imple

mented, 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

"Costs for the state as a whole average \$770 per pupil, with an average CSR class size of 18.8." 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.

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.

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	19.3
5,000-20,000	810	39,000	29.0	18.8
1,000 - 5,000	800	40,000	28.1	18.6
Less than 1,000	710	35,700	25.9	17.6
State Average	\$770	\$38,300	28.6	18.8

"... 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)."

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

Figure 8

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,

r igure o					
Estimated Current Average Per-Pupil Costs Of Class Size Reduction Under Two Scenarios <sup>a</sup>					
District Size	Cost at 18.8 to 1	Cost at 20 to 1	Difference		
Greater than 20,000	\$690	\$620	\$70		
5,000-20,000	800	660	150		
1,000 - 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.					

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.

"... the cost of the program increases by 21 percent if average class size is 18.8 rather than 20 statewide."

#### 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 115 percent 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, 24 percent of teachers hired for CSR do not have a teaching credential. Of the total, 21 percent 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 forrenewal 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.

We estimate the increase in emergency permits and waivers due to

Figure 9

Experience Level of Teachers Hired for CSR—1996-97

		District Enrollment Range			
Experience Level	Statewide	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	3	3	3	0	4
District intern	2	3	1	2	0
Non-Credential:					
Emergency	21	28	20	9	8
Waiver	3	3	3	5	0
Totals	100%	100%	100%	100%	100%

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

"... the teachers hired for CSR are less prepared and less experienced, on average, than teachers hired in the past."

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.

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.

Given current average CSR class sizes (18.8), schools will have to hire about 7,800 additional 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 59 percent and 37 percent fewer new teachers, respectively.

#### Figure 10

# Problems Experienced by Districts In Implementing Staff Development—1996-97

Statewide	Greater Than 20,000	5,000 to 20,000	1,000 to 5,000	Less Than 1,000
69% 49	71% 53	73% 51	54% 38	44% 33 22
	69%	Statewide         Than 20,000           69%         71%           49         53	Statewide         Than 20,000         20,000           69%         71%         73%           49         53         51	Statewide         Than 20,000         20,000         5,000           69%         71%         73%         54%           49         53         51         38

"An unintended side effect of CSR has been conversion of some spaces used for other purposes into classrooms."

# Number of New Teachers Needed For Full Implementation of CSR Statewide Average Class Size Implementation Levela 18.8 20 Difference Three grades 7,800 3,200 4,600

Figure 11

Four grades

Assumes full implementation.

#### **PROVIDING FACILITIES FOR CLASS SIZE REDUCTION**

16,500 10,400

6,100

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 Figure 12 (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 44 percent 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 Figure 12, about 8 percent 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.

#### 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

#### 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 <sup>a</sup>
Reconfigure grade levels among schools	7
Divide classrooms	4
Other	9
Total	100%
a Includes only permanent conversions	

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 0.5 percent 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 Proposition 98 minimum guarantee could be substantial. For example, if CSR causes an 0.5 percent increase in K-3 enrollment, the Proposition 98 minimum guarantee would increase by about \$50 million.

**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 21 percent 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

"The strict 20student CSR cap creates a number of administrative and educational problems . . . " 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 purpos 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 stu-

dents 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

"Districtwide Averaging Would Solve Many Problems." 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 class-rooms 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 \$100 million on a one-time basis in the budget year for class-size facilities. By this action, the Legislature will reserve \$100 million 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

the Legislature delay expansion of the CSR program for at least one year."

qualified than new teachers hired in previous years. The current threegrade CSR program will result in thousands more teachers being hired next year as districts continue ... we recommend 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 \$100 million in the 1997-98 Proposition 98 "base" for support of class size reduction in

subsequent years. This \$100 million 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 1997-98when these monies are needed. Second, it clearly states the Legislature's long-term intentions for class size reduction. Finally, it works into the base \$100 million, or about onethird. of the approximately \$300 million 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 perstudent 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 shortcircuit 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 perstudent 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 \$300 million increase in district revenue limits. In our K-12 Priorities section above, we recommend that \$149.7 million 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 \$52 million 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 \$52 million 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 \$46.4 million allocated to training teachers in grades four through eight, and \$5.6 million to augment training programs for teachers in grades kindergarten through three. In the current year, \$39.4 million 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 \$39.4 million in the current year plus the additional \$5.6 million 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. The office wishes to thank the State Department of Education for their assistance on the CSR Survey.

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