



Council for Education Policy,
Research and Improvement

**IMPACT OF THE CLASS SIZE
AMENDMENT ON THE QUALITY OF
EDUCATION IN FLORIDA**

Impact of the Class Size Amendment on the Quality of Education in Florida

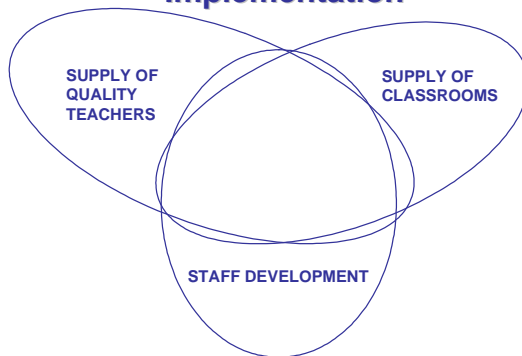
November, 2005



**Council for Education Policy,
Research and Improvement**

The Council for Education Policy, Research and Improvement was directed by the 2004 Legislature, to “assess the impact of implementation of the class size reduction amendment on the quality of education in Florida.” Class size reduction (CSR) is a resource-intensive educational reform based on increasing the largest categories of public school expenditures: teachers and classrooms. In addition, successful implementation of CSR is dependent on teacher training and professional development in order to make maximize the effectiveness of smaller classes (Figure 1; Scudder, 2001; Buckingham, 2003).

Figure 1: Successful Class Size Implementation



In carrying out the charge, the Council focused on the five questions below.

1. Is CSR the best strategy for improving the quality of education?
2. Can Florida sufficiently expand the number of teachers to meet the requirements of the CSR Amendment while maintaining a quality teaching workforce?
3. How does the need to maximize resources to meet the CSR Amendment affect the ability of districts to

provide students and parents with the opportunity to choose schools and to take low demand courses?

4. How are teacher training and staff development related to CSR implementation?
5. What obstacles need to be overcome in order to meet the requirements of CSR?

The report is based on a review of the national literature on class size reduction, an analysis of Florida data, and interviews with personnel from six school districts to determine their initial experiences in implementing the class size amendment. Included in the interviews were urban and rural districts, north, central, and south Florida districts and districts with varying need to recruit additional teachers in order to meet CSR requirements. A related CEPRI study, *In-service Education: The Challenge of Determining Cost and Effectiveness* (November, 2005), provides additional detail on teacher training issues.

This analysis reached the conclusions discussed below.:

1. CSR does not represent the best strategy for improving education in Florida. The benefits of CSR for all grades have not been established by empirical evidence and there are significant reasons to expect negative consequences.
2. It will be very difficult for Florida to expand the teaching workforce with quality teachers. Florida's CSR initiative is the most stringent in the country and will place extraordinary demands on the supply of teachers in a state that is already facing one of the most severe teacher shortages in the country. California's initiative approaches Florida's in its rigor, although limited to grades K-3. That

CSR initiative (California) has been associated with a persistent deterioration in the quality of the teaching workforce which became concentrated in high poverty, high minority schools.

3. Some districts are already limiting school choice and reducing access to low demand classes in order to meet 2005 requirements.
4. Improved staff development will be needed in order to realize those benefits that can be gained from CSR and will be even more important as a strategy to reduce turnover and the anticipated deterioration in the quality of Florida’s teaching workforce.
5. There are a number of unique circumstances that together combine to make Florida’s implementation of CSR much more difficult than those undertaken by other states. At the same time, Florida’s unique circumstances have the potential to create a negative impact on the quality of the teaching workforce that exceeds the impact experienced in previous class size reduction initiatives. These circumstances include the facts noted below.
 - Before the CSR Amendment was adopted, Florida was already experiencing the worst teacher shortages in the country.
 - Florida’s CSR requirements are being implemented at a time when No Child Left Behind has resulted in a nationwide competition for fully qualified teachers.
 - The implementation of Florida’s CSR requirements has coincided with a substantial increase in construction costs that has hampered the ability of school districts to build enough new classrooms to meet CSR requirements and has limited the ability of many districts to recruit teachers because of the lack of affordable housing.

Background

In November 2002, Florida voters approved a constitutional amendment that limits the number of students allowed in Florida’s public school classes. To achieve this goal, the amendment requires a reduction of the average number of students by at least two students per year beginning in 2003-04 until the maximum limits are met. CSR limits do not apply to extracurricular classes.

In 2003, the Florida Legislature enacted Senate Bill 30A, which implements the provisions of the CSR amendment and defines the progress districts must make towards compliance. The implementing bill provided definitions for “core-curricula” and “extracurricular courses.” “Core-curricula courses” are defined as mathematics, language arts/reading, science, social studies, foreign language, English for Speakers of Other Languages, exceptional student education, and courses taught in traditional self-contained elementary school classrooms. “Extracurricular courses” are all other courses. The CSR maximums for core-curricula courses are displayed in Figure 2. Under the provisions of Section 1003.03, *Florida Statutes*, school districts over the CSR limits must reduce their class sizes by at least two students per year until 2010-11 according to the schedule and measures indicated in Figure 3.

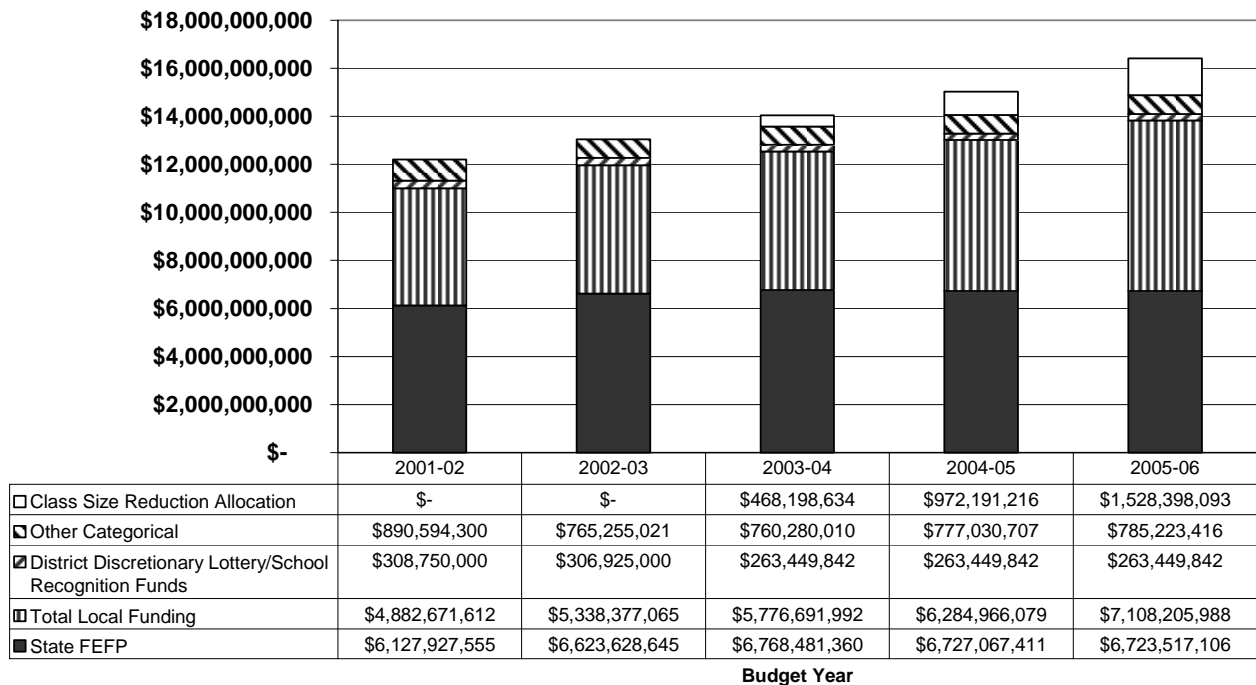
Figure 2: Maximums Under Florida’s CSR Constitutional Amendment	
<u>Grade Levels</u>	<u>Maximum Number of Students</u>
PreK-Grade 3	18
Grades 4-8	22
Grades 9-12	25

In 2004-05, 11 school districts were not in compliance with the required **district** class size averages. Had **school** averages been utilized, the Department of Education reports that 64 districts would not have been in compliance in 2004-05. School averages will be used to define compliance in 2006-07.

The Florida Constitution requires that the state provide funds to pay the cost of the CSR Amendment. These costs are primarily related to increasing the number of teachers and the number of classrooms. CSR funds, both operating and capital outlay, are allocated equitably by formula among all the districts based on a special class size formula for operating funds and an established operating and capital outlay formula. Although “penalties” may be assessed if a district is out of compliance (*See Compliance with CSR, infra*), the formulas provide funding to all school districts, regardless of whether they already meet the class size requirements. A school district in compliance may use these funds for any purpose.

Figure 3: Schedule for Implementing Florida’s CSR Constitutional Amendment	
Time Frame	Measure
2003-04 to 2005-06	District-level average class size for PK-3; 4-8; and 9-12
2006-07 to 2007-08	School-level average class size for each of the three grade groupings
2008-09 to 2009-10	Classroom-level maximum class sizes

Figure 4: State Operating Funding for Public Schools by Category, 2001-02 to 2005-06



Sources: Final calculations of the FEFP (2001-02 to 2003-04), fourth calculation of the FEFP for 2004-05, and the Conference Report for 2005-06

Figure 4 presents the increases in public school operating funds for the past five years since 2001-02. The white blocks on the graph represent the portion of operating appropriations devoted to CSR. (Operating funds do not include funds provided for building construction). CSR operating funds have increased from \$468 million in 2003-04 to \$1.5 billion in 2005-06.

The CSR Amendment also has created an unexpected need for additional facilities and classrooms in

excess of projections. To help meet new facilities demands, the Legislature has appropriated \$787 million for CSR-related capital outlay expenditures throughout the state. The largest amount of capital outlay funds (\$600 million) was provided to the districts in the first year of CSR implementation in an effort to meet the future need for additional classrooms.

Beginning in 2006-07, school districts not in compliance with the CSR Amendment in the previous year will be required to implement one of the following policies:

- year-round schools;
- double sessions;
- rezoning; or
- maximizing use of instructional staff by changing required teacher loads and scheduling of planning periods, deploying school district employees who have professional certification to the classroom, using adjunct educators, operating school beyond the normal operating hours to provide classes in the evening, or operating more than one session during the day.

Compliance with CSR

While the constitution makes clear that the state and not the districts are responsible for paying for the costs of implementing CSR initiatives, each district is responsible for determining how it will meet the class size requirement. School districts are provided with various implementation options by statute (Section 1003.03(3), *Florida Statutes*) to comply with the amendment. Districts may take the actions noted below.

- Adopt policies to encourage qualified students to take dual enrollment courses.
- Adopt policies to encourage students to take courses from the Florida Virtual School.
- Repeal district school board policies that require students to have more than 24 credits to graduate from high school.
- Maximize use of instructional staff, such as changing required teaching loads and scheduling of planning periods, using adjunct educators, using district employees who have professional certification,
- Use innovative methods to reduce school construction costs by using prototype school designs.
- Use joint-use facilities through partnerships with community colleges, state universities, and private colleges and universities.
- Adopt alternative methods of class scheduling, such as block scheduling.
- Redraw school attendance zones to maximize facilities while minimizing transportation.
- Operate school beyond normal operating hours.
- Use year-round schools or other nontraditional calendars.
- Review and consider amending any collective bargaining contracts that hinder the implementation of CSR.
- Use any other approach not prohibited by law.

If the Department of Education determines for any year that a school district is not in compliance with the Class Size Amendment, an amount of that district's CSR operating allocation (proportionate to the amount of CSR not accomplished) is transferred to an approved capital outlay appropriation in the affected district (Section 1003.03(4)(a), *Florida Statutes*). In 2003-04, approximately \$1.5 million of the \$468 million operating allocation was transferred to capital outlay budgets statewide. In 2004-05, \$9.2 million was transferred to capital outlay because of district non-compliance with the CSR Amendment. If school averages had been used in lieu of district averages to measure compliance with the amendment

in 2004-05, the Department of Education estimates that about \$157 million of the \$972 million allocated to operating expenses would have been transferred to capital outlay.

Is Class Size Reduction an Effective Strategy for Improving the Quality of Education?

Florida is one of 17 states that have mandated some type of CSR initiative over the last two decades. Several other states have implemented voluntary class size programs, or have introduced a combination of both voluntary and mandated CSR programs. By 1999, some early state CSR initiatives led the federal government to fund the Class-Size Reduction Program. The federally mandated program was designed to help school districts hire additional qualified teachers, especially in the early elementary grades. In that year, \$1.2 billion was appropriated to states based upon a formula distribution using poverty and enrollment data. Between the years 1999-2001, over \$4 billion in federal CSR funds were distributed to the states to be used for hiring and training new teachers. Over that three-year period, Florida received approximately \$191 million in federal CSR funds. As part of the reauthorization of the 2001 Elementary and Secondary Education Act of 1965 (ESEA), the CSR program was folded into Title II. While CSR is no longer a separate federal program, class-size reduction initiatives are an allowable use of funds under Title II Part A, the No Child Left Behind Act (NCLB). In 2005, there are mandated or voluntary CSR initiatives in 32 states that are funded from a variety of local, state and federal dollars. Of these, 29 are state initiatives. The majority of the states have focused their resources on implementing class size requirements for grades K-3 and many are based on district or school wide averages rather than class averages. Florida's CSR Amendment applies to all grades (K-12) and will be implemented at the class size level in 2010.

Literally hundreds of studies have been conducted over the last two decades to determine whether reduced class size affects student learning. Much of the most recent literature has focused on the federal CSR program and experiments in California, North Carolina, Indiana, Tennessee, and Wisconsin. Despite the growing amount of literature on the subject, and the amount of money invested in CSR initiatives nationwide, there is no consensus that a positive correlation exists between reduced class size and improved student performance. Despite the inconsistent results among CSR studies and questions concerning the quality of their research design, there is some indication that young children in grades K through 3 may receive persistent benefits from very small classes (less than the 18 student-to-teacher ratio set by the CSR Amendment). There is also some indication that very small classes may be particularly beneficial for minority students and students attending inner city schools.

CSR and Student Teacher Interaction

In a review of CSR literature and initiatives by Buckingham (2003), the research of the CSR initiatives on the quality of instruction is put into perspective:

“Many (CSR) studies have methodological problems that make their application in a real world context doubtful.

- *Many studies have introduced other reforms such as curriculum changes at the same time as class size reduction, making their individual effects impossible to determine.*
- *The large majority of studies have found no significant effects of class size on student achievement. The remainder have shown small benefits, usually only when classes have less than 20 students.*
- *Reducing classes from 25 to 20 would obtain only two minutes more individual instruction per day.*
- *Class size has less effect when teachers are competent.*
- *The single most important influence on student achievement is teacher quality.*

It is far more valuable, both in educational and economic terms, to have good teachers than lots of teachers. The first priority is to ensure that the current and incoming teaching force is as good as it can be, by improving teacher education and in-service training and removing ineffective teachers.”

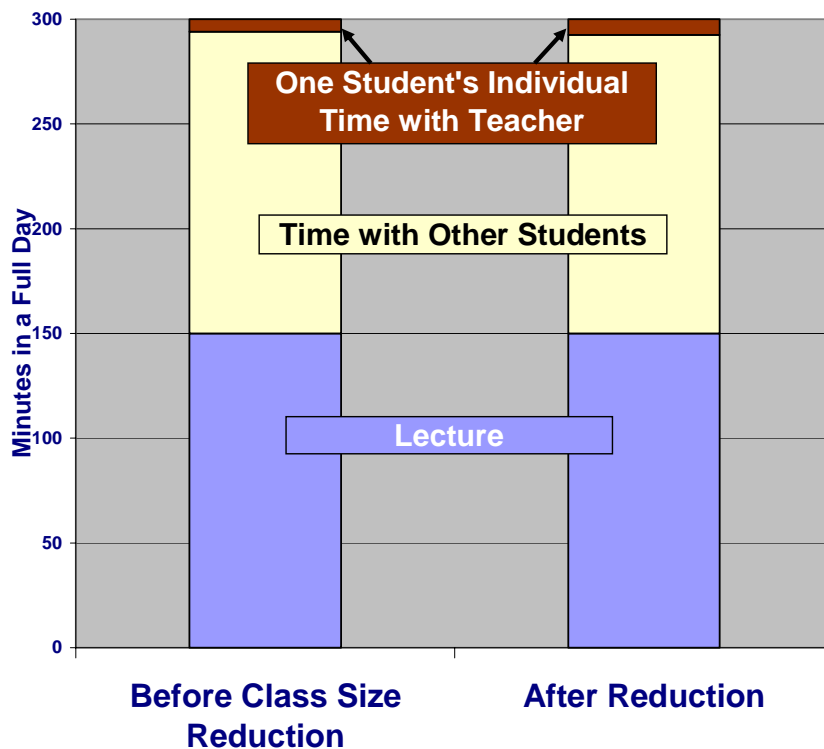
Buckingham also provides a detailed analysis of the impact of CSR on teacher time with individual students.

“The idea that a teacher can devote more time to each student in a smaller class, thereby increasing the amount students learn, is the most intuitively appealing of all these theories. Yet simple calculations show this appeal to be misplaced.

*In a six hour school day, approximately five hours are spent in the classroom. If half of this time is spent directly addressing the class, and the other half on individual attention, each child would hypothetically receive six minutes of individual instruction in a class of 25, or 7.5 minutes of individual instruction in a class of 20. That is, **a class size reduction of this magnitude buys an extra 1.5 minutes per day of teacher’s time**. If two-thirds of classroom time is spent on individual attention, students get two minutes more in a class of 20 than 25.”*

Figure 5 illustrates Buckingham’s point. It should be noted that Buckingham’s analysis is most appropriate for middle and high school but much less appropriate for primary grades where classes are more interactive.

A 90-Second Improvement in One-on-One Contact



**Figure 5:
Reducing Class Size Has an Insignificant Impact on a Student's Individual Time with the Teacher**

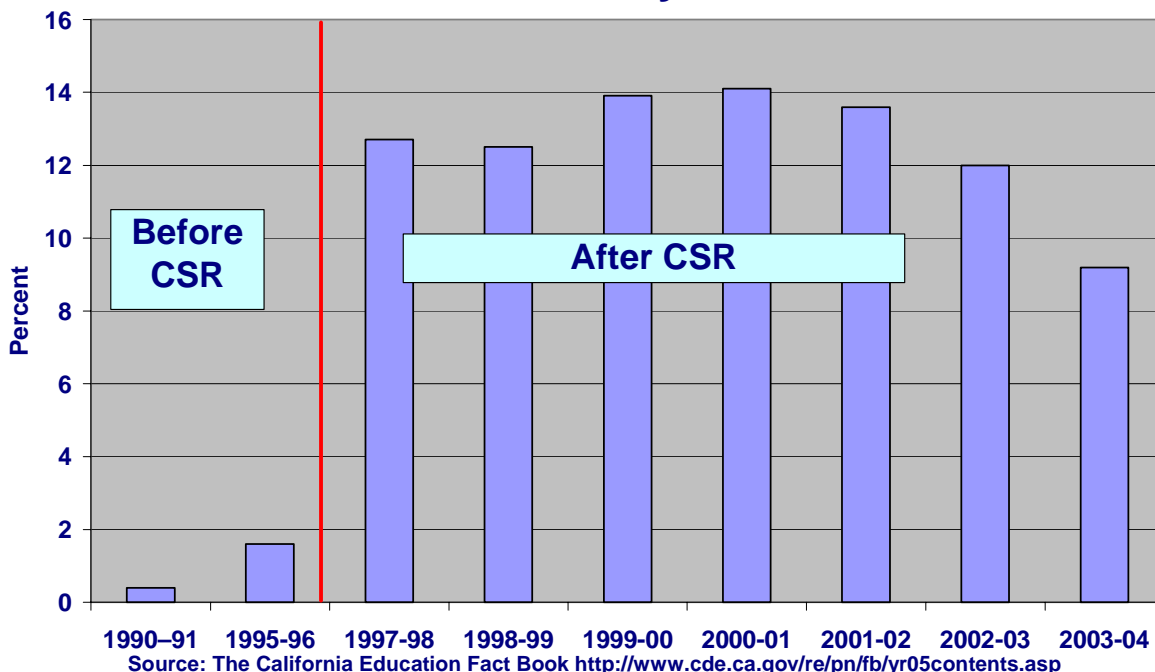
Note: Assumes 50% of teacher time is spent on lecture

CSR and Quality Teachers

Statewide initiatives have been very different from the much more limited projects often cited as supporting the value of CSR (Reichardt, 2000). Early studies which propelled the class size movement into popularity were also less comprehensive than Florida’s CSR amendment. Those studies were

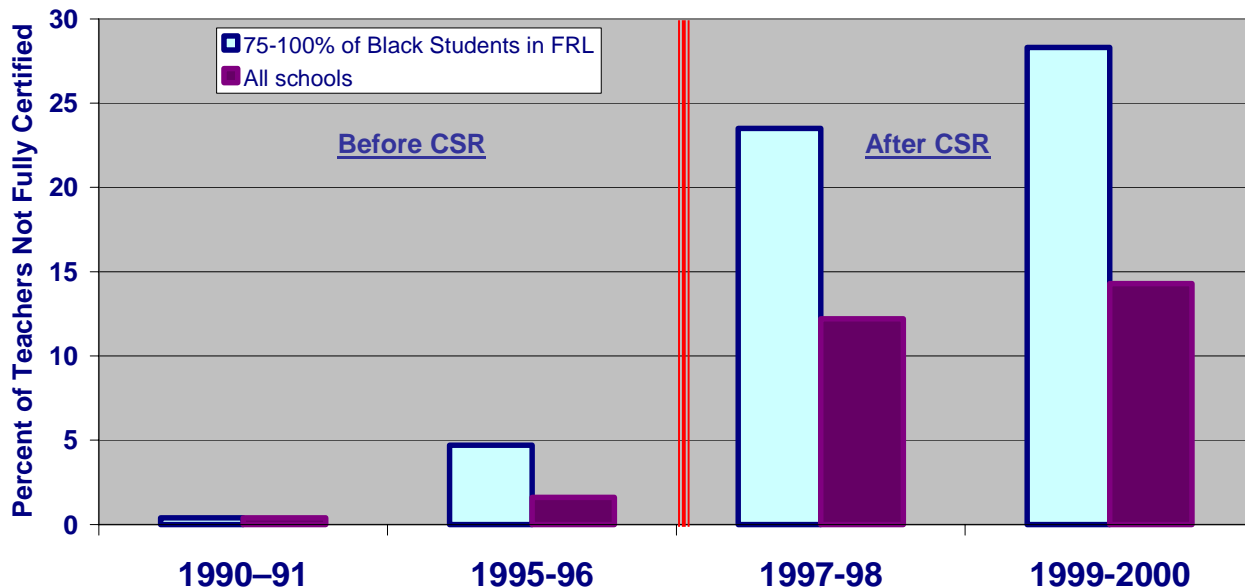
largely composed of pilot programs that did not require the mass hiring of new teachers associated with a statewide initiative (Greene and Foster, 2003). For example, Tennessee’s often-cited CSR pilot program reduced class sizes in grades K-3 to a range of 13 to 17 students at 79 elementary schools. In contrast, Tennessee’s statewide initiative provides for average K-3 classes of 20 with a maximum of 25 **as long as CSR is fully funded** (Pate-Bain, Fulton, and Boyd-Zaharias; 1999). Probably the most rigorous, statewide CRS effort to date occurred in California (Reichardt, 2000). Implementation of CSR in California, which was limited to grades K-3, **resulted in the percentage of teachers without full credentials increasing from one percent to over twelve percent by 1997** (West Ed *Policy Brief*, 1999; Reichardt, 2000) **and to over fourteen percent by 2000-01** (California Education Fact Book). Figure 6 illustrates a sustained effect of CSR on teacher certification rates.

Figure 6: Percentage of California Teachers Not Fully Certified



In California, CSR had a more detrimental impact on teacher certification at schools with more than seventy-five percent of black students eligible for the free and reduced lunch program (FRL) than at all other schools. See Figure 7. The relationship between teacher certification and student participation in FRL was similar for Hispanic and Black student populations. Schools with high concentrations of FRL eligible Asian and White student populations were much less affected. In all cases, the most disadvantaged schools experienced the highest incidence of teachers who were not fully certified, regardless of racial mix. It appears that the labor shortage created by large-scale CSR initiatives in turn creates opportunities for well qualified teachers to move to the most desirable schools. In California, disadvantaged schools not only tend to have a smaller proportion of fully qualified teachers, they are also the most likely to not meet the CSR class size targets. A related problem is the reduction in the available number of special education and ESOL teachers and classrooms because these resources were reallocated into K-3 classes in order to implement CSR (Bohnstедt and Stetcher, 2002).

Figure 7: In California CSR the Highest Percentage of Teachers Who Were Not Fully Certified Occurred at Disadvantaged Schools

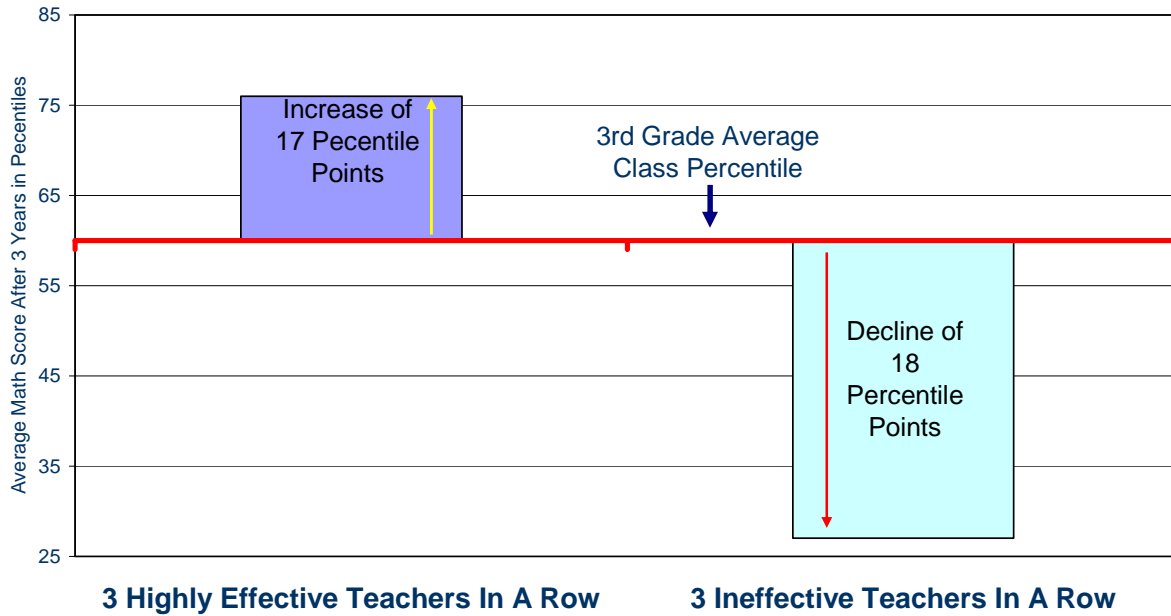


Source: Jepsen, Christopher and Steven Rivkin, *Class Size Reduction, Teacher Quality, and Academic Achievement in California Public Elementary Schools*, Public Policy Institute of California, 2002.

In *Beyond Smoke and Mirrors, A Critical Look at Smaller Class Sizes*, Thomas Hruz (1998) concurs with Buckingham's point on the value of teacher quality. He presents arguments for and against smaller classes but makes the point that **costs used to achieve smaller classes are better spent on improving teacher skills which are shown to have a greater impact**. Research on the value of effective teachers is un-ambivalent and fully supports this point. For example, several studies have been based on an assessment of teachers' effectiveness based on comparisons of their students' improvement in standardized test results over time compared with similar students taught by other teachers. The researchers also took into account student background factors, such as race and ethnicity, English proficiency, and poverty. Students were then tracked to determine the cumulative effect of successive effective or ineffective teachers on student performance. In a different analysis of the impact of effective teachers, Lazear (1999) conducted an analysis of education production that demonstrated that student misbehavior and effective classroom discipline have a far more powerful effect on student learning and productive teacher time with students than CSR. This suggests that increased emphasis on in-service training to improve teacher's skills in enforcing class discipline could have a more significant impact on student academic improvement than reducing class size. Again, the skill of the teacher is the critical element.

Figure 8 compares results from a Dallas study that compared the math performance of students with three successive effective teachers to the performance of students with three successive ineffective teachers. The average math scores of a group of Dallas third graders who were assigned to highly effective teachers three years in a row rose from third grade scores at the 59th percentile to scores at the 76th percentile by the conclusion of sixth grade. A fairly similar (but slightly higher-achieving) group of students was assigned three consecutive ineffective teachers and fell from the 60th percentile to the 42nd

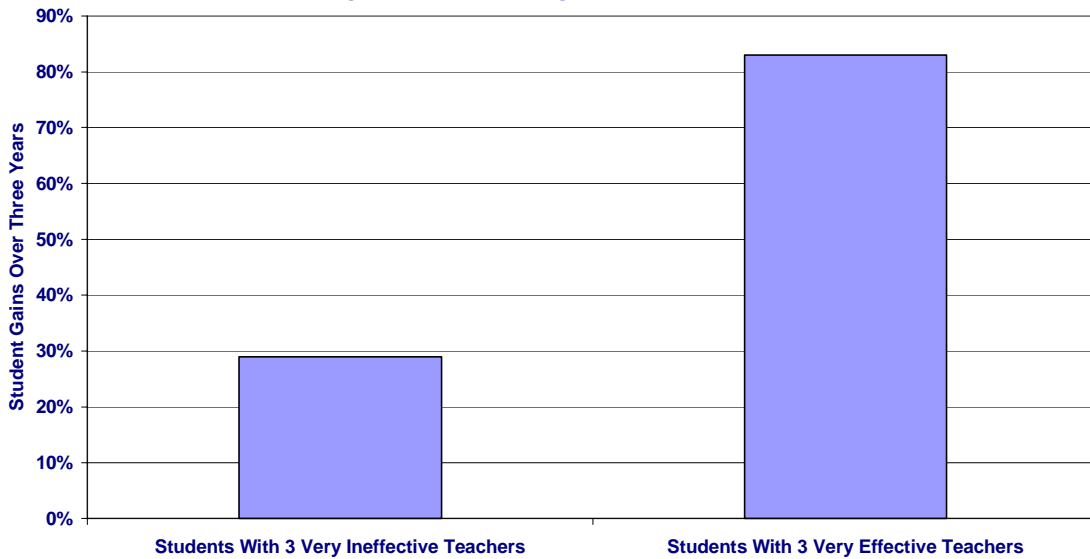
Figure 8: Three Highly Effective Teachers in a Row Improves 5th Grade Math Scores in Dallas



Source: Heather Jordan, Robert Mendro, & Dash Weerasinghe, "Teacher Effects On Longitudinal Student Achievement" 1997.

percentile by the end of sixth grade. The result was a dramatic difference of 34 percentile points between groups of students who started off roughly the same. Figure 9 compares the results of a similar study in Tennessee where student gains in math were almost three times greater for students with effective teachers than for those with ineffective teachers.

Figure 9: Cumulative Effects of Successive Teachers on 5th Grade Math Scores in Tennessee
Percentage Increase in Learning Based on State Assessment



Source: Sanders, William L. and Rivers, Joan C; "Cumulative and Residual Effects of Teachers on Future Student Academic Achievement" 1996 Figure 1 p. 12

Looking at trends involving student performance, econometric evidence, international comparisons, and analysis of state-level data on CSR, Eric Hanushek, Professor of Economics and Public Policy at the University of Rochester, makes a similar point:

“Existing evidence indicates that achievement for the typical student will be unaffected by instituting the types of class size reductions that have been recently proposed or undertaken. The most noticeable feature of policies to reduce overall class sizes will be a dramatic increase in the costs of schooling, an increase unaccompanied by achievement gains.”

How Will the Implementation of CSR affect the Quality of Florida’s Teaching Workforce?

Other state’s initiatives have largely focused CSR on the early grades, have not attempted the small class size of Florida, have provided exemptions, and have generally placed limits on class averages rather than individual classes. **They have not resulted in the degree of expansion of the teaching workforce that is in the process of being implemented in Florida.** Even among states with statewide K through 12 initiatives, Florida’s CSR program is the most stringent in the country, and will require a substantial increase in the number of teachers in the state. Figure 10 compares the CSR initiatives in the other states that currently have CSR requirements that span grades K through 12. All of these states have initiatives that include larger classes and less strict provisions than Florida as shown below.

Figure 10: States with K through 12 CSR Initiatives (Another 24 have primary grade initiatives)						
	K to 3	4 to 6	4 to 8	7 to 12	9 to 12	Comments
Alabama	18	26		29		A guide based on student/faculty ratio. State can approve waiver
Florida	18		22		25	
Kentucky	24	28		31		School based management councils can exempt, otherwise schools can exceed by 2 without waiver and by 5 with waiver.
New Jersey	21		23	24		Mandated in 440 schools in special needs districts
Tennessee	20	25		30		Average of each range of grades

Source: Reduce Class Size Now <http://www.reduceclasssizenow.org/>

Even among states with statewide K through 12 initiatives, Florida’s CSR program is the most stringent in the country, and will require a substantial increase in the number of teachers in the state. Figure 10 compares the CSR initiatives in the other states that currently have CSR requirements that span grades K through 12. All of these states have initiatives that include larger classes and less strict provisions than Florida as shown below.

- Provisions in other states are often based on district or school-wide averages. Florida’s provisions will be based on individual classrooms by 2010.
- Most states limit CSR requirements to early grades.
- With the exception of a limited number of grade levels in a few states, Florida’s mandate provides for the smallest classes.
- Provisions in other states range from guidelines to goals to mandates. Some of the states with mandates include provisions for exceptions under special circumstances. Some states simply provide funding for districts to reduce class size as much as possible. Florida’s provisions will be based on individual classrooms when fully implemented.

Impact on the Teacher Shortage

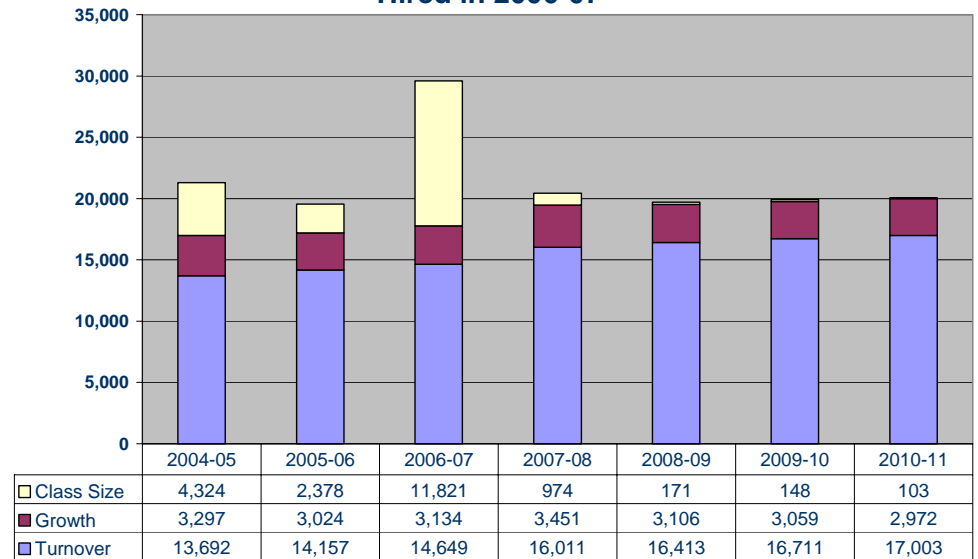
CSR could present problems for all school districts because of its impact on the teacher labor market. Even districts with little need for additional teachers due to CSR and growth have to replace about nine percent of their teaching force every year due to turnover. By comparison, CSR is projected to require a statewide increase of seven percent in the number of teachers in

2006-2007 (the peak year) compared to a statewide increase due to enrollment growth of two percent in 2006-2007. As shown in Figure 11, the demand for new teachers will peak in the year 2006-07 when the CSR Amendment is implemented for the first time at the school (as opposed to district) level.

Because some districts already have small classes in their public schools, CSR requirements are not projected to be a major factor in meeting the need for teachers in those areas. However, Florida also faces the challenge of being one of the fastest growing large states in the country. Growth is a significant factor in many counties where the impact of CSR is less severe than most. On the other hand, teacher turnover is the *most significant factor* statewide in the need for new teachers and affects all districts at very similar rates.

In part because of Florida's growth, the state was already experiencing the worst teacher shortages in the country before CSR (as measured by the percentage of schools with vacancies after the beginning of the school year). This is illustrated in Figure 12. Florida also experiences problems with teacher supply

Figure 11: Most New Teachers Will Need to be Hired in 2006-07



Source: Florida Department of Education; Projected Number of Teachers Needed Florida Public Schools, November 2004

Figure 12: Percentage of Public Schools in 1999-2000 with One or More Teaching Vacancies

	U. S. Avg.	Florida	Fl. Rank
General elementary	91.1	97.6	50
Special education	66.9	86.1	51
English/language arts	58	71	47
Social studies	50.9	60.1	44
Computer science	35	52.8	51
Math	54.6	71.9	51
Biology or life sciences	45.8	61.9	49
Physical sciences	39.9	57.2	50
ESL, ESOL, or bilingual education	38.3	45.4	41
Foreign languages	42.8	48.4	39
All Measures Combined			51

Source: U.S. DOE, National Center for Education Statistics, Schools and Staffing Survey, 1999-2000 "Public School Survey" and "Public Charter School Survey." Most recent survey as of August, 2005.

because the state colleges and universities only provide a small portion of the needed supply of new teachers (Figure 13). One implication is that all districts may be at least *indirectly* affected by the class size amendment because of its statewide effect on teacher shortages. Class size, student growth, and teacher turnover contribute to the need for teachers in those ten districts with the highest staffing needs projected for 2006-07. For Example, Miami-Dade County will be the county with the highest need for new teachers that year due to CSR implementation, while Liberty County's need for new teachers will be most affected by student growth. All of the districts in the Council's survey reported a growing problem with finding certified teachers at the secondary level and with finding reading teachers (due to the state priority placed on this subject). In some cases, districts are dealing with this by paying for in-service training that leads to reading certification.

Figure 13: 2001-02 Comparison of Selected States on Teacher Production vs. Need				
State	Total Teachers	Teacher Vacancies	Teacher Candidates Produced	% of Vacancy Needs Met
California	304,598	29,468	18,397	62%
Texas	281,427	45,000	16,601	37%
Georgia	97,562	1,392	3,104	223%
Florida	135,290	22,582 (1/3 increase due to CSR)	5,790 (Only 3,744 will teach in FL public schools)	26% 15% expected to teach in Florida.
Source: DOE Office of Teacher Recruitment				

An overview of which counties in Florida will have the greatest (and least) need for new teachers in 2006-07 is further detailed in Figure 14. While South Florida, particularly Miami-Dade and Palm Beach Counties, will be most impacted by the need for new teachers, there will be widespread need to replace or add new teachers throughout the state.

What Will Be the Impact on Teacher Quality in Florida?

Even those counties that are not expected to need the largest numbers of additional teachers may be impacted by the CSR because of the effect on the labor market for teachers. For example Figure 15 illustrates that many districts with a lesser need for additional teachers are already having trouble hiring teachers that are fully certified for the area in which they are teaching.

Selectivity in Hiring

No Child Left Behind requires that by the end of the 2005-06 school year there will be a “highly qualified teacher” in every classroom in the nation. This provision has two implications for Florida that are relevant to discussions of CSR. First, the National Council on Teacher Quality's is now examining states' progress in meeting these new federal requirements (The most recent report is December 2004, *How States are Responding to the Nation's Goal of Placing a Highly Qualified Teacher in Every Classroom*). Each state is assigned a grade based on the measures it has adopted to meet NCLB teacher standards. In another measure of California's continuing problems in maintaining a quality teaching workforce after implementing CSR, California's grade was an “F”. Florida also received a grade of “F”, prior to any impact from CSR.

The second implication has to do with increased competition for highly qualified teachers. As the teacher labor market becomes more competitive, the problems these districts face in employing highly qualified teachers may become more acute even if they are able to hire enough teachers to meet CSR. Districts contacted in the survey that was conducted as part of this study confirmed that CSR is making an existing problem worse.

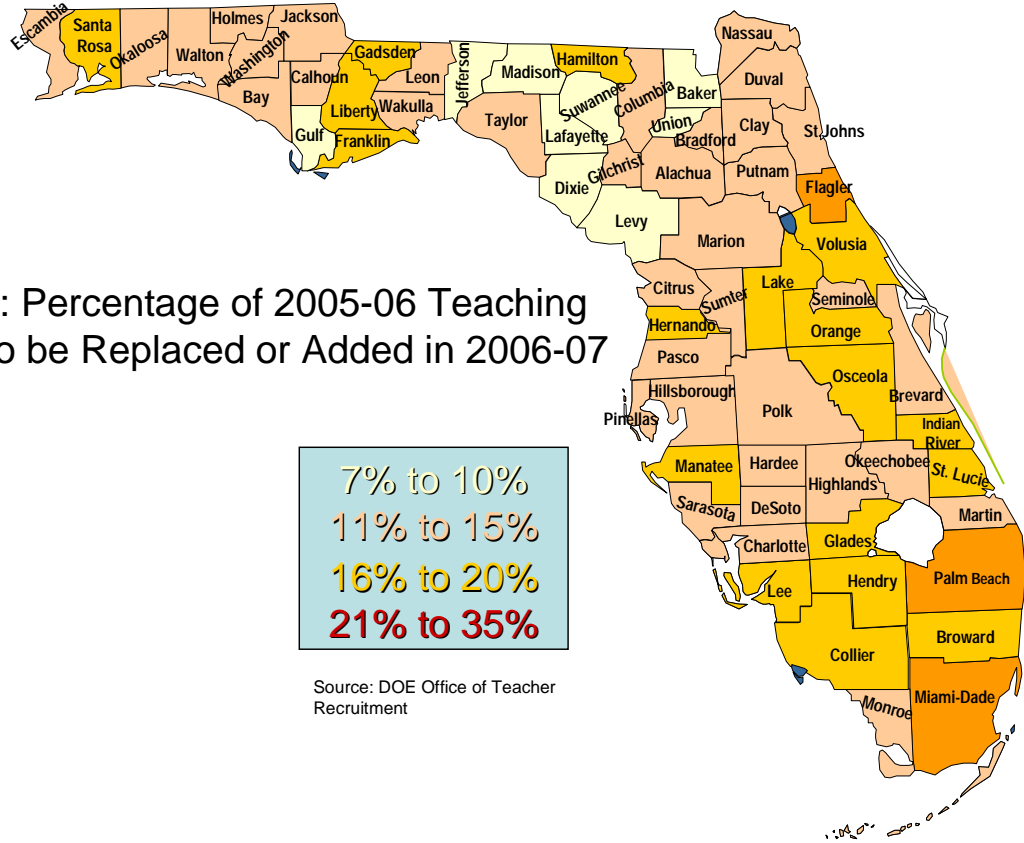


Figure 14: Percentage of 2005-06 Teaching Positions to be Replaced or Added in 2006-07

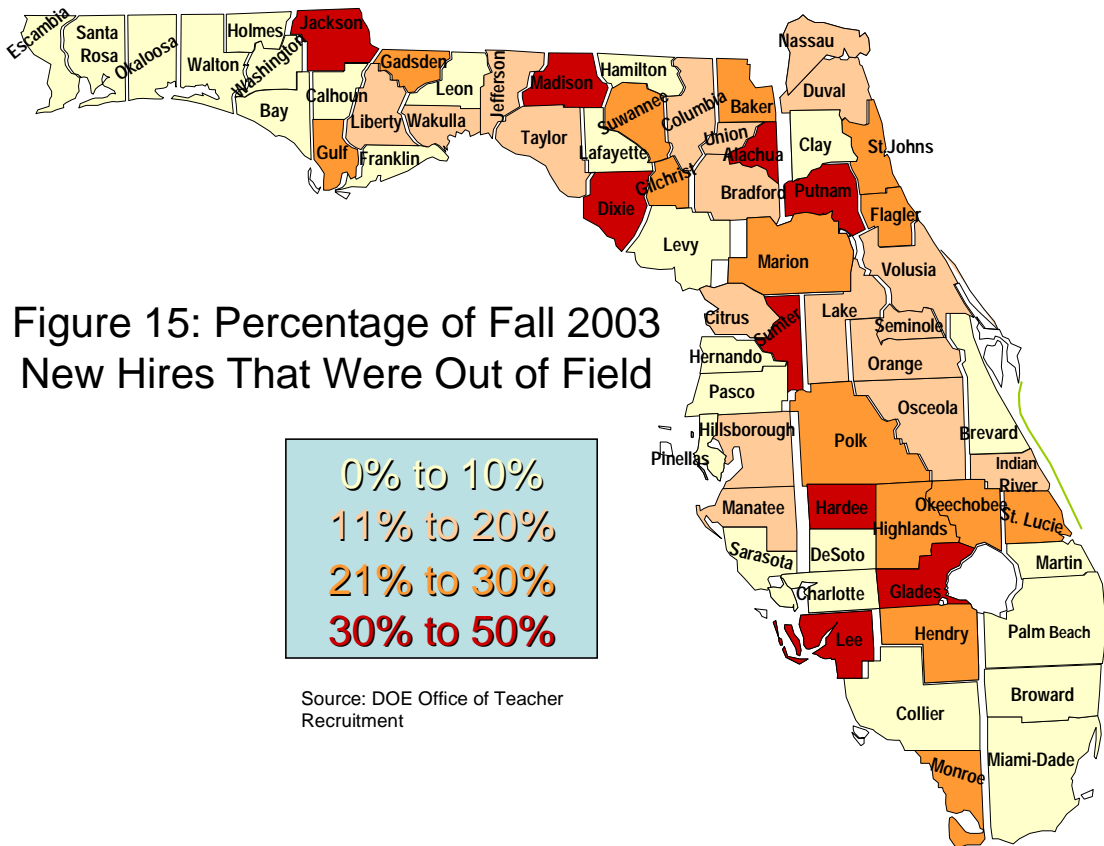


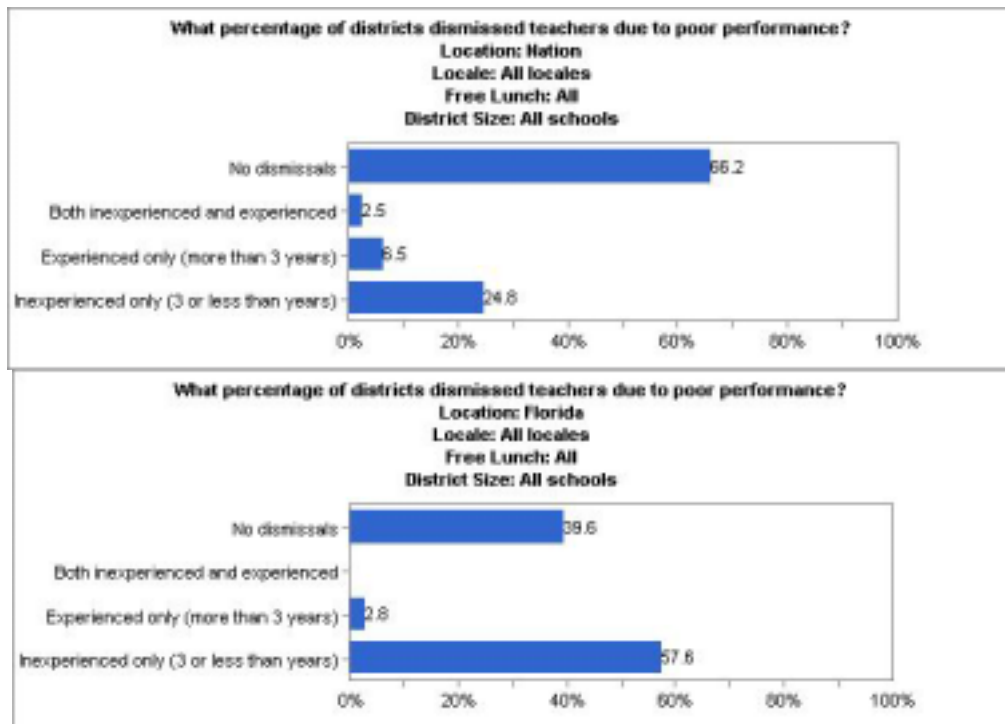
Figure 15: Percentage of Fall 2003 New Hires That Were Out of Field

The increased demand for teachers from CSR also may reduce efforts to improve the quality of the teaching workforce through retention and tenure policies. One of Florida’s innovative reforms has been the “97 day rule” (ss. 1012.33(1)(b), *Florida Statutes*) This law provides that:

“The first 97 days of an initial contract is a probationary period. During the probationary period, the employee may be dismissed without cause or may resign from the contractual position without breach of contract.”

Data collected by the North Central Regional Educational Laboratory demonstrates the impact of this law on Florida’s early dismissal of teachers for poor performance (Figure 16). Dismissals for performance are far more common in Florida than in the nation as a whole and those that are done occur more often within the first three years of a teacher’s career. It remains to be seen if districts will continue to use this tool for improving the quality of the teaching workforce when they are faced with financial penalties for failing to meet the CSR requirements.

Figure 16: Florida Districts Dismiss Teachers for Poor Performance More Frequently and Earlier than Elsewhere in U.S.



Source: North Central Regional Educational Laboratory <http://www.tqsource.org/randr/data/results.asp?question=3>

NCLB also presents another barrier to Florida’s implementation of CSR. Florida’s CSR requirements are being implemented in an era when NCLB is causing a nation-wide competition for highly qualified teachers.

The negative effects on teacher qualifications associated with CSR in California do not yet appear in statewide Florida data (Figure 17). Until 2003 the percentage of newly hired teachers who were not certified in field was in decline. However, CSR did not begin until 2004-2005 and the 2006-2007 school year is when the teaching workforce will experience the greatest expansion associated with CSR. It also should be noted that before the impact of CSR, Florida was already hiring a high percentage of teachers into fields they are not fully certified to teach.

Figure 17: Number of Florida New Hires Not Certified in the Appropriate Field

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
11.1	14.9	12.3	11.3	12.9	13.5	15.6	14.2	16.9	15.8	11.5

Source: New Hires in Florida Public Schools Fall 1993 Through Fall 2003, February 2004, Florida Department of Education

All but one of six districts interviewed as a part of this study reported that they have not yet been forced to hire out of field teachers in order to meet the initial phases of the CSR schedule. One interviewed district had reduced the percentage of new hires that were not appropriately certified from a high of 41% in 2001 down to 10.9% in 2002, but the percentage had grown back to 18% by 2004.

What Will Be the Impact of Class Size Reduction on Student and Parental Choice?

Parental choice has been a mechanism for improving education since the late 1970s, when choice began to be used as a device that could assist the desegregation process. A variation is “controlled choice” which attempts to provide choice while maintaining ethnic and racial integration. Controlled choice plans are designed to do away with neighborhood attendance districts. Often zones are created which include several schools and families are allowed to choose within their zone, provided that admitting students to their school of choice does not upset the racial and ethnic balances (Alves and Willie 1990). Section 1002.31, *Florida Statutes*, provides a statutory framework for public school controlled parental choice programs in Florida.

A component of the Federal No Child Left Behind program provides that beginning in the 2002-2003 school year, Title I schools must offer public school choice if the school is:

- in the first year of school improvement,
- in the second year of school improvement,
- in corrective action, or
- in the planning year for restructuring

Parents must be given the option of at least two schools, which may include charter schools, not identified as needing improvement. Districts must give priority in granting school choice to the lowest achieving students from low-income families. Only schools not targeted for improvement and not designated as dangerous may receive students. If no eligible schools are available, parents must be notified and supplemental services may be offered in lieu of transfer to another school.

School choice provisions appear to be in conflict with CSR because it is more difficult to maximize utilization of classroom space when there is reduced control over the number of students that attend a particular school. One district interviewed in this study reported that before CSR the district would have between 40,000 and 70,000 students attending a school through their open reassignment policy. Currently reassignment is only allowed into schools that are below capacity and participation in this program has declined to about 13,000, less than five percent of the student population. Most districts reported that school choice policies now reflect the minimum necessary to comply with court orders.

A second aspect of choice is the ability of students to supplement the curriculum with academic electives that may attract small numbers of students. The response of the sample districts to this issue has been mixed with some districts reporting elimination of seventh periods (which provides opportunities for electives), advanced placement, foreign language, and fine arts electives. CSR requirements and the state emphasis on reading improvement are often cited as reasons why funds

needed to be redirected. Districts that have avoided an impact on academic electives to date have indicated difficulty in doing so.

What Other Challenges Are Emerging?

Construction Costs and Class Size Reduction

In the past several years, Florida has experienced dramatic increases in construction costs. This rise in costs affects both of the major issues associated with CSR, recruitment of additional classroom teachers and classroom construction.

Teacher Recruitment and Affordable Housing

The supply of classroom teachers is being affected by recent increases in the cost of housing and by the availability of housing after two years of severe hurricanes Figure 18 shows the annual percentage increase in the sales price of single family homes in Florida.

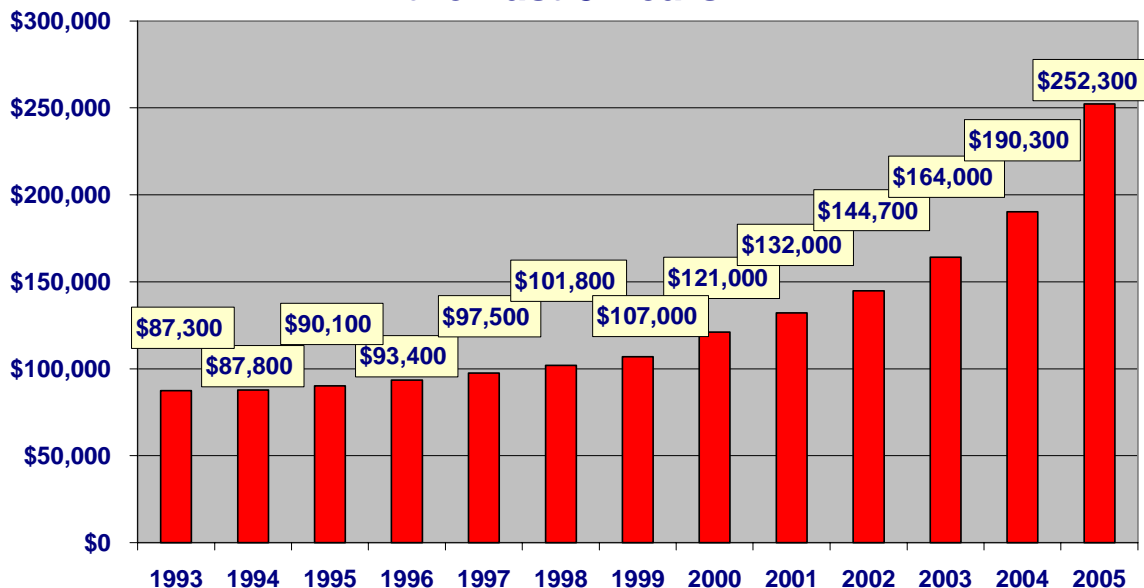
Figure 18: Annual Statewide Percentage Increase in the Sales Price of Single Family Homes

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
4%	4%	4%	5%	13%	9%	10%	13%	16%	33%

Source: Survey of MLS sales levels from Florida’s Realtor boards/associations.

Figure 19 shows that the median sales price of single family homes in Florida has doubled between July 2000 and July 2005 (before the 2005 hurricane season). In many areas the current median cost of single family homes cannot be supported on a beginning teacher’s salary and in other areas there is a severe shortage. Most of the districts interviewed as a part of this study reported a serious teacher recruitment problem due to the lack of availability of affordable housing. In some districts, repairs from hurricane

Figure 19: The Median Price of Existing Single Family Homes Sold in Florida Has Doubled in the Last 5 Years



Source: Florida Association of Realtors and the University of Florida Real Estate Center

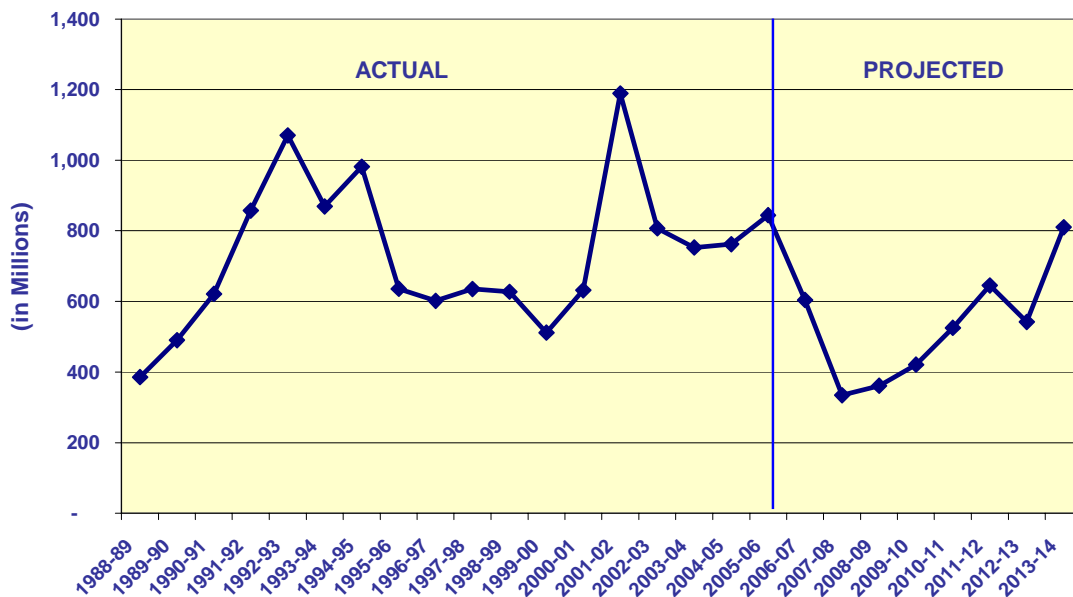
damage have been subject to long delays, further reducing the availability of housing. Additional shortages are being caused in some districts by the conversion of rental apartments into condominiums. Some districts reported a shortage of construction companies as efforts are shifted to reconstruction to other states along the Gulf coast. All the districts that participated in the interviews reported significant cost increases which are causing them to delay new construction projects. The problem of affordable housing is affecting not only teacher recruitment but also the filling of other school district positions.

The results of a survey of all districts to determine the effect of housing costs on teacher recruitment was intended to be included in this study. However response to this survey has been delayed by Hurricane Wilma so the results will be provided in a later, supplemental report.

Classroom Construction

The Department of Education maintains a record of the cost per square foot of public school construction each year. However, the statewide average is affected by the relative proportion of schools completed in a given year by high or low cost districts and by the level and particular characteristics of the schools completed in that year. As a result these data do not provide a clear trend. Nevertheless, it can be assumed that the cost of school construction has risen in a manner similar to the statewide median single family home sales price. A compounding problem is the decline in PECO revenues which, with other state funds, are responsible for 20 to 25 percent of public school construction (Figure 20). The combination of construction cost trends and declining PECO revenues creates a significant problem in the implementation of the CSR Amendment.

Figure 20: Actual and Projected PECO Revenues



Source: June 2005 Estimating Conference

What is the Impact on Other Quality Improvement Initiatives?

The CSR Amendment has already had the effect of reducing access to specialized, low demand courses in some districts and it can be anticipated that this impact will grow as full implementation of the amendment places greater strain on district resources. Districts reported a variety of budget adjustments that have been made in order to implement CSR. These include reductions to technology purchases,

paraprofessional positions, magnet programs, supplemental coaching in math, science and reading, and dropout prevention programs. One district also reported reducing the number of career academies. While one district interviewed incorporated CSR into an existing quality improvement initiative by meeting districtwide class size standards by first reducing class size at schools with large disadvantaged populations, this strategy will become moot as CSR becomes implemented in all schools and affects quality teacher recruitment. If the strain on resources caused by CSR results in widespread reduction of very small classes for targeted populations, it will have the opposite of its intended result.

Some Partial Solutions

If it is not possible to adjust CSR in order to moderate the negative effects, some partial solutions to these problems include:

1. team teaching,
2. reducing teacher turnover, and
3. improvement in inservice training

Team Teaching and Co-Teaching

One strategy that has been implemented by several districts to meet CSR requirements as well as enhance student learning is team teaching. *Co-teaching* is an inclusion strategy that is widely used in classrooms nationwide. Co-teaching is required by the NCLB Act for mainstreaming children with disabilities into regular classrooms. The model for co-teaching includes one basic teacher and one Exceptional Student Education (ESE) teacher who provides services to ESE students only. The model of using two basic teachers in a single classroom who serve all the non-ESE students in the class for the entire period is generally referred to as *team teaching*. This latter strategy has been used for decades in a variety of implementation methods at different class levels. In general, researchers have not yet documented a strong cause-effect relationship between “teaming” and student achievement; but the literature does support the theory that teacher teams are as effective as individual “contained” teacher classrooms on student learning outcomes. According to its proponents, team teaching can be successful if carefully selected teachers are provided with appropriate training, on-going staff development, and strong administrative support. In addition to its potential for enhancing the academic learning environment, team teaching offers the opportunity to offset some of the problems associated with CSR by

- pairing new teachers with more experienced teachers;
- reducing turnover among new teachers;
- pairing teachers who are teaching out of field with teachers who are in field;
- providing for more flexibility and innovation in the classroom; and
- improving learning opportunities for students.

Experience with CSR in Iowa supports the value of team teaching. Iowa legislation created the Class Size/Early Intervention Program to reduce class size for K-3 to 17 students for basic skills instruction. Among the findings, there was no significant difference in student achievement in first grade with 15 students and one teacher and first grade with 30 students and two teachers. This indicates that team teaching can provide the benefits of CSR without the costs of building additional classrooms (Educational Research Service, 2002).

Team Teaching and Co-Teaching in Florida

In Florida, the term *co-teaching* is used by the Department of Education to refer to the use of more than one teacher in both ESE and in regular classrooms. However, according to DOE, school districts

routinely report separate data for co-taught classrooms that include an ESE teacher and co-taught classrooms that include one or more basic (non-ESE) teachers. Based on data submitted by the districts, co-teaching classroom periods in Florida school districts has increased 260 percent from 4,894 to 17,610 in one year. The biggest percentage jump in co-taught classes has been in non-ESE classroom periods.

The substantial increase in non-ESE co-teaching in Florida schools coincides with the CSR mandate to reduce the student-teacher ratio required by the law. Districts, especially those with the largest school populations, have used co-teaching as a means of meeting the class size law without building costly new facilities. Co-teaching, promoted by some educators in and outside of Florida, as an innovative and effective instruction method, had formerly been approved by the department of Education as a means to allow districts time to “get new classrooms up and running” (Winn, 2005).

On June 21, 2005, however, the State Board of Education established a policy that called for an end to co-teaching as “an acceptable approach to meet the requirement of the Class Size Amendment.” The board expressed the opinion that the use of co-teaching to meet CSR mandates was not “in the spirit of the law.” In a letter to district school superintendents, the Department of Education issued guidelines for adhering to the new policy. Specifically, districts may include co-teaching in the calculation of district average class sizes for the 2005-06 school year, but the percentage of classes taught using the co-teaching strategy may not increase over that calculated for 2004-05. Beginning in 2006-07, co-teaching may not be used in calculating compliance with the school average class size (Champion, 2005). At its June 2005 meeting, the board chairman and staff further reiterated that while co-teaching could not count as two classrooms, districts could use that strategy in regular classrooms as long as they did not use co-teaching as a means of complying with the CSR Amendment.

It is not clear how the new policy will affect those classrooms in which students with disabilities are mainstreamed with their ESE co-teachers. Critics of the board’s decision contend that banning the practice increases the cost of CSR and will force districts to add portable or double-session class schedules. Some of the districts in the Council’s survey reported they will continue to use team teaching where the situation indicates it is a preferred teaching strategy for maximizing the talents of their teachers.

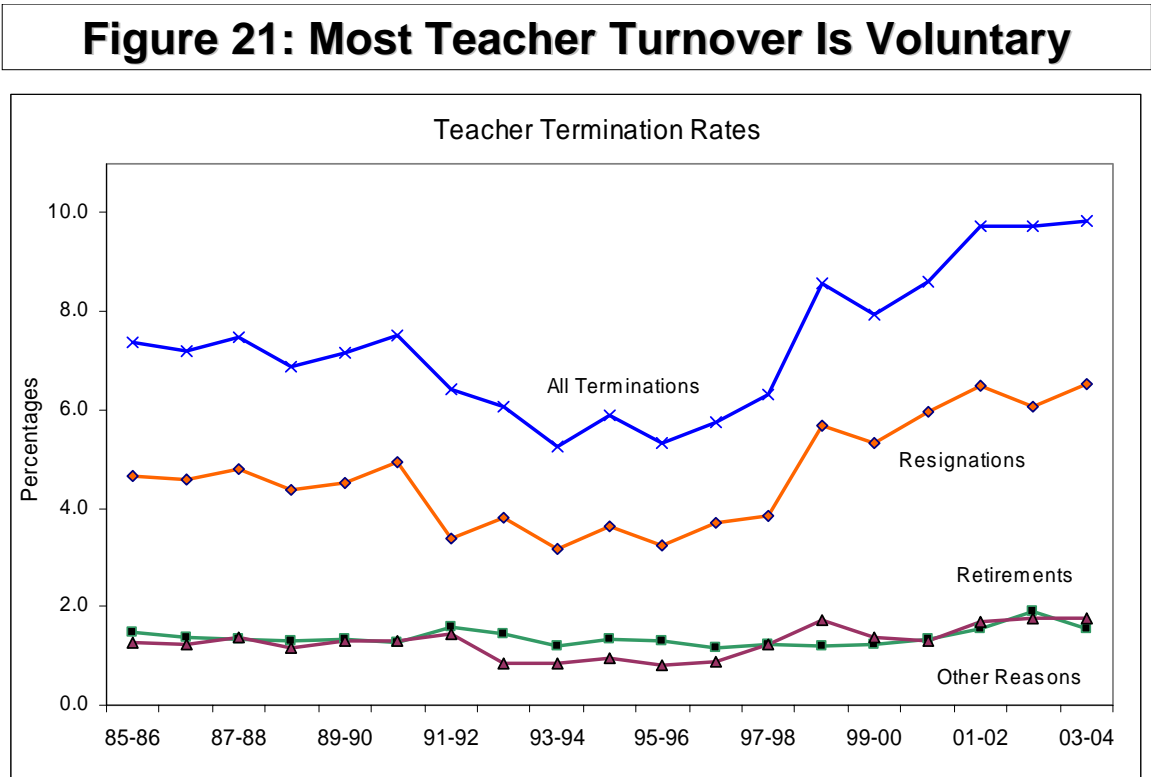
It appears that team teaching or co-teaching can be an appropriate strategy for delivery of quality education, provided that certain provisions are met as follows.

- reasonable limits should be placed on the number of students in a classroom so that classrooms are not overcrowded,
- at least one member of the team should be an experienced teacher,
- at least one member of the team should be fully certified in the subject area, and
- the teachers should be trained in team teaching methods.

Reducing Turnover

Reducing teacher turnover provides another opportunity for improving the teaching workforce. The Alliance for Excellent Education (2004) notes that 14% of all teachers leave by end of first year, 38% leave within three years, almost 50 % leave in five years. They also note that the rate of attrition is roughly fifty percent higher in poor schools than in wealthier ones. Using the most conservative industry model approved by Department of Labor the Alliance estimates the cost of recruiting, hiring and training a new teacher is approximately thirty percent of the existing teacher’s salary - a cost that is not recoverable.

Figure 21 displays teacher termination rates by cause over the past 20 years. In Florida, attrition climbed dramatically in the late 1990's and has continued to climb more slowly in recent years. The figure shows that the majority of Florida turnover is due to voluntary separation.



Source: Florida's Comprehensive Plan for Acquiring and Retaining Qualified Effective Teachers (April 2005)

The Alliance for Excellent Education recommends a comprehensive program it refers to as *induction* as a solution to the problem of teacher turnover. Induction includes high-quality mentoring, a common planning time, ongoing professional development, an external network of teachers, and standards-based evaluation. Florida's Department of Education has an extensive plan to address the issue of teacher turnover which is outlined in *Florida's Comprehensive Plan for Acquiring and Retaining Qualified Effective Teachers* (April 2005).

In-Service Training

The importance of in-service training for teachers has emerged as a theme throughout this report. It has been mentioned in the context of:

1. a cost effective alternative to CSR for improving the quality of education;
2. enabling teachers to adopt teaching techniques geared to reduced class size;
3. a tool for increasing productive class time by improving classroom discipline;
4. a method for coping with reduced percentage of teachers who are fully certified in the field they are teaching; and
5. a method to reduce turnover among new teachers.

A related CEPRI report, *In-service Education: The Challenge of Determining Cost and Effectiveness* (November, 2005) notes that despite extensive spending on in-service training, "The state currently does not collect data in a way that allows for an exact accounting of professional development expenditures, but only reports in an aggregate of total spending. This approach fails to assess whether investments are going to

activities and practices that work toward creating a systems approach to professional development that will enhance teacher and student learning.” Implementation of an effective evaluation system should allow the potential benefits of teacher in-service training to be realized.

Summary

Research on the benefits of CSR for student achievement is, at best, inconclusive. There is no clear evidence that reducing class size leads to increased academic outcomes for students in all grades. There is some evidence that young children in grades K through 3 may receive persistent benefits from **very small** classes, (less than the 18 student-to-teacher ratio set by the CSR Amendment), particularly for children from disadvantaged backgrounds. In higher grades where there is more emphasis on lectures for delivering instruction, reduced class size does not appear to provide a significant increase in individual interaction between students and teacher.

Unintended Consequences

Even if CSR were an effective strategy for improving K through 12 instruction, experience from the only other similarly rigorous CSR experiment identified in this study predicts offsetting, unanticipated negative consequences noted below which are likely to be experienced in Florida:

1. In California the quality of the workforce of teachers deteriorated as CSR was implemented.
2. Less qualified and less experienced teachers became concentrated in California in disadvantaged schools as competition for teachers increased. The result was to widen the gap in the quality of education between disadvantaged and other schools and worsen the quality at disadvantaged schools in absolute terms.

Further, there are several circumstances that combine to indicate that Florida will probably experience more difficulties in implementing CSR than has been the case in other states.

1. Florida’s CSR Amendment is the most stringent in the country.

- Provisions in other states range from guidelines to goals to a few cases of statutory mandates. States with mandates generally provide exemptions under special circumstances. Some states simply provide funding for districts to reduce class size as much as possible. Florida’s implementation of CSR is inflexible.
 - Provisions in other states are often based on district or school wide averages. Florida’s implementation of CSR is based on individual classrooms.
 - Most states limit CSR requirements to early grades (PreK-3).
 - With the exception of a limited number of grade levels in a few states, Florida’s mandate requires the smallest classes.
2. Before CSR, Florida was already experiencing the worst teacher shortages in the country as measured by the percentage of schools with vacancies after the beginning of the school year.
 3. Florida’s CSR requirements are being implemented in an era of nationwide teacher shortages compounded by intense competition for “highly qualified” teachers mandated by No Child Left Behind.
 4. Florida’s CSR requirements are being implemented amidst a dramatic increase in construction costs which is affecting both the ability to construct sufficient new classrooms to implement CSR and the availability of affordable housing for prospective teachers.

Florida school districts are beginning to report examples of negative consequences noted below that have not generally been reported by other states.

1. Parental choice of schools being reduced by some districts in order to optimize utilization of existing classrooms.
2. Student opportunities to take academic electives, supplemental courses, and non-core courses are being reduced or eliminated by some districts in order to ensure that scarce teaching resources are focused on meeting class size mandates.
3. The ability to use less expensive and/or more effective reform alternatives such as improving in-service training, increasing requirements for tenure, or increasing teacher salaries has been adversely impacted.

Is CSR the Best Strategy Florida Could Adopt to Improve Education?

The value of Florida's CSR constitutional amendment to student achievement in grades K through 12 cannot be substantiated based on empirical studies. On the other hand, the probable adverse effect on the quality of Florida's teaching workforce can be predicted by experiences in other states. Since the effect of quality teachers on improving student achievement is clearly established in the research literature (it is near axiomatic that the quality of the teacher – not the quantity – is the key to learning), **the probable result of the implementation of the amendment would appear to be to reduce student achievement.** Based on the impact of California's less stringent amendment, **the greatest deterioration in the quality of the teaching workforce will probably occur in schools with large disadvantaged populations and these schools will have difficulty in hiring enough teachers to meet CSR requirements,** further exacerbating existing problems at those schools.

As full implementation of the amendment places greater strain on district resources, reduced district flexibility is changing the options available to students. The CSR amendment has already had the effect of reducing access to specialized, low demand courses in some districts and it is anticipated that this impact will grow. Reduced district flexibility in managing resources is also affecting the ability to allow parents to choose the school their children attend. Finally, the 2004 and 2005 hurricane seasons illustrate the danger of a program that does not provide the flexibility to adjust to the realities of natural disasters.

In answer to the question posed by the Legislature, all available data indicates that implementation of the Florida Class Size Amendment will not improve the quality of education in Florida. Indeed, the plethora of unintended consequences of Florida CSR will likely adversely impact the quality of education, particularly in schools that are already disadvantaged. Further, necessary flexibility and funding for effective reforms to improve the quality of education are being adversely affected by the Florida Class Size Amendment.

References

- Alves, Michael J., and Charles V. Willie. (1990) "Choice, Decentralization, and Desegregation: The Boston 'Controlled Choice Plan'." In William Clune and John White (ed). *Choice and Control in American Education, Volume 2: The Practice of Choice, Decentralization, and School Restructuring* 17-75. New York: The Falmer Press.
- American Federation of Teachers, Retrieved August 31, 2005 from AFT Teacher Compensation Surveys <http://www.aft.org/research/teachersurveys.htm> (2002-03)
- The Alliance for Excellent Education. (2004). *Tapping the Potential: Retraining and Developing High-Quality New Teachers*.
- Bohrnstedt, George W. and Brian S Stecher, eds. (2002) *What Have We Learned About Class Size Reduction in California?* CSR Research Consortium.
- Buckingham, J. (2003). Reflections on Class Size and Teacher Quality. *Issue Analysis*, No. 29a, March 21.
- California Department of Education Fact Book 2005 Retrieved September 1, 2005 from <http://www.cde.ca.gov/re/pn/fb/index.asp>
- Champion, Linda, Memorandum to District School Superintendents, July 13, 2005
- Commission on Civil Rights, May 2004, U.S.D.O.E. Retrieved on September 2, 2005 from <http://www.ed.gov/admins/comm/choice/choice03/choiceoptions03.ppt>
- Educational Research Service, *Class Size Reduction*, (2002) Retrieved on August 2, 2005 from <http://www.ers.org/otsp/otsp7.htm>
- Florida Department of Education, *Florida's Comprehensive Plan for Acquiring and Retaining Qualified Effective Teachers* (April 2005).
- Greene, Jay P. and Greg Foster Smaller Classes Mean Less-qualified Teachers, *National Post* Oct. 2, 2003
- Hanushek, Eric A. (1998). *The Evidence on Class Size*. Rochester, NY: University of Rochester, W. Allen Wallis Institute of Political Economy.
- Hruz, Thomas (1998), Beyond Smoke and Mirrors, A Critical Look at Smaller Class Sizes, *Wisconsin Interest*, Fall/Winter.
- Illig, David C. (1996), *Reducing Class Size: A Review of the Literature and Options for Consideration*, Retrieved on July 6, 2005 from <http://www.library.ca.gov/CRB/clssz/clssiz.html>.
- Jepsen, Christopher and Steven Rivkin, (2002) *Class Size Reduction, Teacher Quality, and Academic Achievement in California Public Elementary Schools*, Public Policy Institute of California.
- Jordan, H., Mendro, R., & Weerasinghe, D. (1997, July). *Teacher effects on longitudinal student achievement*. A paper presented at the sixth annual National Evaluation Institute sponsored by CREATE, Indianapolis, IN.
- Lazear, Edward (1999), *Educational Production*, Hoover Institution and Graduate School of Business, Stanford University, September.
- National Council on Teacher Quality, 2004, *How States are Responding to the Nation's Goal of Placing a Highly Qualified Teacher in Every Classroom*, December http://www.nctq.org/nctq/images/housse_report_2.pdf

North Central Regional Educational Laboratory, Teacher Recruitment and Retention Data, Retrieved on July 8, 2005 from <http://www.tqsource.org/randr/data/results.asp?question=3>

Pate-Bain, H., Fulton, D., and Boyd-Zaharias, J. (1999) Effects of Class-Size Reduction in the early grades (k-3) on High School Performance: preliminary results from Project STAR, Tennessee's Longitudinal Class-Size Study

Reduce Class Size Now. Retrieved September 2, 2005 from <http://www.reduceclasssizenow.org/>.

Reichardt, Robert (2000) *The Cost of Class Size Reduction: Advice for Policy Makers*, Rand, RGSD-156

Sanders, William L. and Joan C. Rivers. "Cumulative and Residual Effects of Teachers on Future Student Academic Achievement," from The Education Trust, *Thinking K-16: Good Teaching Matters: How Well-Qualified Teachers Can Close the Gap* Vol. 3, no. 2 (Summer 1998): pp. 3-4. Scudder, D. F. (2001).

Scudder, David F. Institutional Author (1999) Class Size Reduction: A Review of the Literature. *Research Watch*. E&R Report. West Ed, *Policy Brief*, January 1999. Wake County Public School System, Raleigh, NC. Dept. of Evaluation and Research.(BBB29987)

Winn, John, *Re: Class size calculation editorial*, July 19, 2005, Tallahassee Democrat.

Appendix I: CSR in Florida Law

Class Size Reduction Constitutional Amendment

To assure that children attending public schools obtain a high quality education, the legislature shall make adequate provision to ensure that, by the beginning of the 2010 school year, there are a sufficient number of classrooms so that:

- (1) The maximum number of students who are assigned to each teacher who is teaching in public school classrooms for prekindergarten through grade 3 does not exceed 18 students;
- (2) The maximum number of students who are assigned to each teacher who is teaching in public school classrooms for grades 4 through 8 does not exceed 22 students; and
- (3) The maximum number of students who are assigned to each teacher who is teaching in public school classrooms for grades 9 through 12 does not exceed 25 students.

The class size requirements of this subsection do not apply to extracurricular classes. Payment of the costs associated with reducing class size to meet these requirements is the responsibility of the state and not of local schools districts. Beginning with the 2003-2004 fiscal year, the legislature shall provide sufficient funds to reduce the average number of students in each classroom by at least two students per year until the maximum number of students per classroom does not exceed the requirements of this subsection.

Implementing Statute

1003.03 Maximum class size.--

(1) CONSTITUTIONAL CLASS SIZE MAXIMUMS.--Pursuant to s. 1, Art. IX of the State Constitution, beginning in the 2010-2011 school year:

- (a) The maximum number of students assigned to each teacher who is teaching core-curricula courses in public school classrooms for prekindergarten through grade 3 may not exceed 18 students.
- (b) The maximum number of students assigned to each teacher who is teaching core-curricula courses in public school classrooms for grades 4 through 8 may not exceed 22 students.
- (c) The maximum number of students assigned to each teacher who is teaching core-curricula courses in public school classrooms for grades 9 through 12 may not exceed 25 students.

(2) IMPLEMENTATION.--

(a) Beginning with the 2003-2004 fiscal year, each school district that is not in compliance with the maximums in subsection (1) shall reduce the average number of students per classroom in each of the following grade groupings: prekindergarten through grade 3, grade 4 through grade 8, and grade 9 through grade 12, by at least two students each year.

(b) Determination of the number of students per classroom in paragraph (a) shall be calculated as follows:

1. For fiscal years 2003-2004 through 2005-2006, the calculation for compliance for each of the 3 grade groupings shall be the average at the district level.

2. For fiscal years 2006-2007 through 2007-2008, the calculation for compliance for each of the 3 grade groupings shall be the average at the school level.

3. For fiscal years 2008-2009, 2009-2010, and thereafter, the calculation for compliance shall be at the individual classroom level.

(c) The Department of Education shall annually calculate each of the three average class size measures defined in paragraphs (a) and (b) based upon the October student membership survey. For purposes of determining the baseline from which each district's average class size must be reduced for the 2003-2004 school year, the department shall use data from the February 2003 student membership survey updated to include classroom identification numbers as required by the department.

(d) Prior to the adoption of the district school budget for 2004-2005, each district school board shall hold public hearings to review school attendance zones in order to ensure maximum use of facilities while minimizing the additional use of transportation in order to comply with the two-student-per-year reduction required in paragraph (a). School districts that meet the constitutional class size maximums described in subsection (1) are exempt from this requirement.

(3) IMPLEMENTATION OPTIONS.--District school boards must consider, but are not limited to, implementing the following items in order to meet the constitutional class size maximums described in subsection (1) and the two-student-per-year reduction required in subsection (2):

(a) Adopt policies to encourage qualified students to take dual enrollment courses.

(b) Adopt policies to encourage students to take courses from the Florida Virtual School.

(c)1. Repeal district school board policies that require students to have more than 24 credits to graduate from high school.

2. Adopt policies to allow students to graduate from high school as soon as they pass the grade 10 FCAT and complete the courses required for high school graduation.

(d) Use methods to maximize use of instructional staff, such as changing required teaching loads and scheduling of planning periods, deploying district employees that have professional certification to the classroom, using adjunct educators, or any other method not prohibited by law.

(e) Use innovative methods to reduce the cost of school construction by using prototype school designs, using SMART Schools designs, participating in the School Infrastructure Thrift Program, or any other method not prohibited by law.

(f) Use joint-use facilities through partnerships with community colleges, state universities, and private colleges and universities. Joint-use facilities available for use as K-12 classrooms that do not meet the K-12 State Regulations for Educational Facilities in the Florida Building Code may be used at the discretion of the district school board provided that such facilities meet all other health, life, safety, and fire codes.

(g) Adopt alternative methods of class scheduling, such as block scheduling.

(h) Redraw school attendance zones to maximize use of facilities while minimizing the additional use of transportation.

(i) Operate schools beyond the normal operating hours to provide classes in the evening or operate more than one session of school during the day.

(j) Use year-round schools and other nontraditional calendars that do not adversely impact annual assessment of student achievement.

(k) Review and consider amending any collective bargaining contracts that hinder the implementation of class size reduction.

(l) Use any other approach not prohibited by law.

(4) ACCOUNTABILITY.--

(a) Beginning in the 2003-2004 fiscal year, if the department determines for any year that a school district has not reduced average class size as required in subsection (2) at the time of the third FEFP calculation, the department shall calculate an amount from the class size reduction operating categorical which is proportionate to the amount of class size reduction not accomplished. Upon verification of the department's calculation by the Florida Education Finance Program Appropriation Allocation Conference, the Executive Office of the Governor shall transfer undistributed funds equivalent to the calculated amount from the district's class size reduction operating categorical to an approved fixed capital outlay appropriation for class size reduction in the affected district pursuant to s. 216.292(13). The amount of funds transferred shall be the lesser of the amount verified by the Florida Education Finance Program Appropriation Allocation Conference or the undistributed balance of the district's class size reduction operating categorical. However, based upon a recommendation by the Commissioner of Education that the State Board of Education has reviewed evidence indicating that a district has been unable to meet class size reduction requirements despite appropriate effort to do so, the Legislative Budget Commission may approve an alternative amount of funds to be transferred from the district's class size reduction operating categorical to its approved fixed capital outlay account for class size reduction.

(b) Beginning in the 2005-2006 school year, the department shall determine by January 15 of each year which districts have not met the two-student-per-year reduction required in subsection (2) based upon a comparison of the district's October student membership survey for the current school year and the February 2003 baseline student membership survey. The department shall report such districts to the Legislature. Each district that has not met the two-student-per-year reduction shall be required to implement one of the following policies in the subsequent school year unless the department finds that the district comes into compliance based upon the February student membership survey:

1. Year-round schools;
2. Double sessions;
3. Rezoning; or
4. Maximizing use of instructional staff by changing required teacher loads and scheduling of planning periods, deploying school district employees who have professional certification to the classroom, using adjunct educators, operating schools beyond the normal operating hours to provide classes in the evening, or operating more than one session during the day.

A school district that is required to implement one of the policies outlined in subparagraphs 1 through 4 shall correct in the year of implementation any past deficiencies and bring the district into compliance with the two-student-per-year reduction goals established for the district by the department pursuant to subsection (2). A school district may choose to implement more than one of these policies. The district school superintendent shall report to the Commissioner of Education the extent to which the district implemented any of the policies outlined in subparagraphs 1 through 4 in a format to be specified by the Commissioner of Education. The Department of Education shall use the enforcement authority provided in s. 1008.32 to ensure that districts comply with the provisions of this paragraph.

(c) Beginning in the 2006-2007 school year, the department shall annually determine which districts do not meet the requirements described in subsection (2). In addition to enforcement authority provided in s. 1008.32, the Department of Education shall develop a constitutional compliance plan for each such district which includes, but is not limited to, redrawing school attendance zones to maximize use of facilities while minimizing the additional use of transportation unless the department finds that the district comes into compliance based upon the February student membership survey and the other accountability policies listed in paragraph (b). Each district school board shall implement the constitutional compliance plan developed by the state board until the district complies with the constitutional class size maximums.

History.--s. 113, ch. 2002-387; s. 2, ch. 2003-391.

Appendix II: 1012.33 Contracts with instructional staff, supervisors, and school principals.--

(1)(a) Each person employed as a member of the instructional staff in any district school system shall be properly certified pursuant to s. 1012.56 or s. 1012.57 or employed pursuant to s. 1012.39 and shall be entitled to and shall receive a written contract as specified in this section. All such contracts, except continuing contracts as specified in subsection (4), shall contain provisions for dismissal during the term of the contract only for just cause. Just cause includes, but is not limited to, the following instances, as defined by rule of the State Board of Education: misconduct in office, incompetency, gross insubordination, willful neglect of duty, or conviction of a crime involving moral turpitude.

(b) A supervisor or school principal shall be properly certified and shall receive a written contract as specified in this section. Such contract may be for an initial period not to exceed 3 years, subject to annual review and renewal. **The first 97 days of an initial contract is a probationary period. During the probationary period, the employee may be dismissed without cause or may resign from the contractual position without breach of contract.** After the first 3 years, the contract may be renewed for a period not to exceed 3 years and shall contain provisions for dismissal during the term of the contract only for just cause, in addition to such other provisions as are prescribed by the district school board.

Appendix III: California K-3 Class Size Reduction Program

The kindergarten-through-grade-three (K-3) CSR program was implemented to increase student achievement, particularly in reading and math, by decreasing class size. It is an incentive program in which districts decide whether and how much to participate.

The 2004-05 school year has \$1.7 billion available for the state CSR program. There are two CSR implementation options:

Option 1: Full day

One certificated teacher for each class of 20 or fewer pupils

\$928 per pupil

Option 2: Half-day

One certificated teacher for every 20 pupils for at least one-half of the instructional minutes offered per day, with the primary focus on instruction in reading and mathematics

\$464 per pupil

The state CSR program also has the following key elements:

Each class must average 20.44 (using daily enrollment) or fewer pupils from the first day of school through April 15.

Classes must have certificated teachers only-no aides.

Four grades may participate at each school (K-3).

Priority order must be followed: first priority is grade one; second priority is grade two; third priority is kindergarten and/or grade three.

Staff development must be provided for newly participating teachers.

Districts are subject to an annual independent audit process.

Districts with only one school serving K-3 pupils and no more than two classes per grade level may have up to 22 pupils per K-3 class as long as the average for all participating classes at that school is 20 pupils and the district's governing board has certified that the school has no other option.

<http://www.cde.ca.gov/ls/cs/>.

Appendix IV: Class Size Reduction Questions for Six Districts in the Sample

Teachers

1. Are you experiencing an increase in the numbers of out-of-field teachers in your district? If so, what grade levels and/or subject areas are showing the largest increases?

IF #1 is yes then #2, if not, skip to #3

2. What steps are you taking to reduce the number of out-of-field teachers in your district?
3. Did your district have difficulty finding qualified teachers—that is teachers certified in the subject matter they were assigned to teach- prior to the enactment of the Class Size Reduction (CSR) amendment? Has this challenge increased (and to what extent) since the CSR?
4. Has your district used co-teaching as a means of meeting the class size requirements? (EXCLUDING ESE TEACHERS) If so, is co-teaching used primarily in elementary, middle or high school? How will your district comply with the new State Board ruling that co-teaching cannot be used as a means of meeting CSR?
5. Is the increased cost of housing adversely affecting your ability to recruit teachers? If yes, is the district taking any steps to assist teachers with housing costs? What kind of steps?

Students/School Choice

1. In order to meet CSR requirements, have schools in your district reduced, or will they have to reduce the number of academic electives in low demand courses that are available to students? (If yes, what type of academic electives?)
2. Has your district had to cut back, or will it have to cut back, on other quality improvement initiatives in order to implement class size reduction? If so, what other programs or initiatives?
3. Has your district in the past allowed parents full choice of the school their child attends and if so, are you considering reducing parental choice in order to optimize utilization of existing classrooms?

Construction

1. Is your district experiencing significant construction cost increases? If so, what are the primary causes of these increases? (e.g., building, land acquisition, etc.) Can you estimate the rate and amount of increases you are experiencing? (For example, a 5% increase in 3 months.)
2. Are rising construction costs impacting your district's ability to build enough classrooms to meet class size requirements? If so, can you estimate the number of schools/classrooms that will not be built due to cost increases or quantify the problem in any other way?

Appendix V: Statewide Survey on the Impact of Housing Costs on Teacher Recruitment

1. How often does the cost of housing affect your ability to recruit new teachers? Please mark an X next to the response that most closely mirrors your situation.
 Frequently an obstacle
 Sometimes an obstacle
 Rarely an obstacle
2. If housing costs are a problem, what steps are being taken to assist teachers with housing costs?
3. Are there laws or regulations that prevent or discourage the district from taking steps to deal with this issue? Please describe the legal barrier and the initiative.

Appendix VI: States with Specific Class Size Reduction Goals

<http://www.reduceclasssizenow.org/>

The RCSN Website was last updated on October 1, 2005

	K	K to 2	1 to 3	K to 3	K to 4	4 to 6	4 to 8	7 to 12	9 to 12
Alabama (Mandatory)				18		26		29	
Alaska				18					
Arkansas (Voluntary)					20				
California (Mandatory)				20					
Florida (Mandatory)				18			22		25
Georgia (Mandatory)				18					
Indiana (Voluntary)				K-1 18; 2-3 20					
Iowa (Voluntary & Mandated)				17					
Kentucky (Mandatory)				24		28		31	
Louisiana (Mandated)				20					
Maine (Voluntary)				18					
Maryland (Voluntary)				20					
Massachusetts (Voluntary)				18					
Michigan				Pilot					
Minnesota				17					
Mississippi (Voluntary)				23 = target; 27 maximum					
Nevada (Mandated)				15					
New Jersey Mandated in 440 schools in special needs districts				21			23	24	
New York (Voluntary)				20					
North Carolina (Mandatory)	19			21					
North Dakota (Voluntary)				20					
Oklahoma (Mandated)				20		20			
Rhode Island (Voluntary)				15					
South Carolina (Mandated)				21					
South Dakota				15					
Tennessee (Mandatory)				20		25		30	
Texas (Mandatory)					22				
Utah (Mandatory for K-2)		18			Based on available Funds				
West Virginia (Mandatory)	20		25			25			
Wyoming		19							