In February 1994 the San Diego (California) Board of Education adopted a policy to bring about a phased reduction in class size in all district schools. Resources were allocated to initiate Phase I of this plan, which called for limited class size in grades 1 and 2 at all elementary sites to 25.5 students. A formative review was undertaken to determine the effectiveness of the policy before any decision is made about its expansion to other grade levels. Implementation and program effects were studied through surveys of 85 principals, 747 teachers in grades 1 and 2, 120 teachers of higher grades, and 5,216 parents as well as interviews completed by some teachers, parents, and administrators. Positive appraisals outweighed negative appraisals for all stakeholder groups, with teachers, in particular, very satisfied with the advantages class size reduction has brought their classrooms. Observational data from 36 classrooms also supported the effectiveness of the program. Roughly two of three teachers and principals believed that reduction in class size would have a positive impact on reading achievement by grade 3. Some suggested disadvantages were the belief that services in other grades would be adversely affected. Respondents criticized the program for a lack of professional support and staff development and its imposition from the district in a top-down approach. Eleven appendixes provide supplemental data about study methodology and findings. (Contains 8 tables, 19 figures, and 26 references.) (SLD)
San Diego City Schools
Planning, Assessment and Accountability Division

REVIEW OF THE INITIAL PHASE OF THE IMPLEMENTATION OF THE CLASS SIZE REDUCTION POLICY

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STANDARDS, ASSESSMENT, AND INTEGRATION SERVICES REPORT
REVIEW OF THE INITIAL PHASE OF THE IMPLEMENTATION OF THE CLASS SIZE REDUCTION POLICY

March 7, 1995

Prepared By

San Diego City Schools
Planning, Assessment, and Accountability Division

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This review of the implementation of the Class Size Reduction Policy was possible because of the generous contributions of our colleagues at the 85 elementary study sites.
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ISSUE/CONCERN

In February 1994, the Board of Education adopted a policy to effect a phased reduction in class size in district schools. Reallocation of resources ($6.2 million) was subsequently approved to initiate Phase I of this plan, which called for limiting class size in grades 1-2 at all elementary sites to 25.5 students. The Board delayed preparation of any expansion of the policy to other grade levels until an assessment of the implementation of Phase I could determine (1) the extent to which the spirit and intent of the policy were adopted, (2) the effectiveness of the planning process at district and school levels, and (3) changes in classroom structures and practices resulting from policy implementation.

PURPOSE OF THE REVIEW

A formative review of the implementation of the class size reduction policy, Phase I, was undertaken to determine the policy's effectiveness prior to any decision regarding its expansion to other grade levels. Before the district can responsibly prepare for implementation of subsequent phases, specific data are required with regard to (1) the extent to which the spirit and intent of the policy were adopted, (2) the effectiveness of the planning process at district and school levels, and (3) changes in classroom structure and the impact on teaching practices. General study questions formulated by a district task force included:

- What decision-making and planning processes occurred prior to the implementation of Phase I?

- To what extent have teachers, parents, and governance group members been involved in implementation planning and decisions?

- How has the policy been implemented at district elementary schools?

- How has implementation of the policy impacted classroom practice and student achievement to date?
OVERALL SUMMARY OF FINDINGS

Results of the review of the initial implementation of the class size reduction policy (Phase I) suggest that:

1. Positive appraisals outweigh more negative assessment of class size reduction among all stakeholder groups. A majority of principals, teachers, chairpersons, and parents think that the policy has had a positive impact on teaching and learning opportunities in grades 1 and 2. (Source: Interview and survey data)

2. First- and second-grade teachers, in particular, are very satisfied with the advantages that class size reduction has afforded their classrooms. Observational data from 36 first- and second-grade classrooms indicated that students were actively engaged in learning and that disciplinary management was very effective. (Source: Survey, interview, and observation data)

3. Site staff believe that reduced class size in grades 1 and 2 has resulted in (a) improved classroom management, (b) more individual and small group instruction, (c) increased contact with parents, (d) more team teaching and collaboration, (e) an expansion of developmental learning and combination classes, (f) an increased use of more diverse instructional methods, and (g) higher morale among first- and second-grade teachers. (Source: Survey and interview data)

4. Roughly two out of three teachers and principals believe that class size reduction is likely to improve student mastery of reading achievement by grade 3. Eighty-five percent of parent respondents also believe that the policy will help their students' reading ability.

5. Among study subjects who expressed dissatisfaction with various aspects of the class size reduction policy, reasons included (a) an increase in class size at other grade levels; (b) a decrease in support services to students at other grade levels; (c) inadequate supplies and equipment; (d) the reorganization of sheltered and bilingual classrooms, and continual reorganization in general, to maintain a 25.5:1 ratio in first- and second-grade classrooms; (e) the reduction or elimination of valued programs and support services; (f) a reduction in key support personnel; (g) the loss of space used for support functions (e.g., libraries, labs, pullout rooms, auditoriums, nurses' rooms); (h) the loss of scheduling flexibility; and (i) uncertainty and frustration among teachers at other grade levels. (Source: Survey and interview data)

6. The policy has dissimilarly impacted schools, depending largely on the availability of adequate facilities and financial resources. The unavailability of such facilities and resources has, in turn, necessitated undesirable changes in personnel, programs, and activities. (Source: Interview data)

7. One out of three chairpersons and slightly less than half the principal respondents support the trade-off between the benefits of class size reduction at grades 1 and 2 and the loss of space and services at their sites. (Source: Survey data)
8. Roughly two-thirds of the principals indicated that, given present facilities and budget constraints, their sites could not accommodate expansion of the implementation of the class size reduction policy to additional grade levels. (Source: Survey data)

9. Roughly two out of three parent respondents reported knowledge of the policy; one out of four indicated awareness that parents had been involved in planning for class size reduction at their site. (Source: Survey data)

10. A majority of teachers and chairpersons reported that the planning process to reduce class size has been effective at their site. However, slightly more than half of the teacher subjects reported either little or no involvement in this process. (Source: Survey data)

11. Staff development relevant to class size reduction has not been uniformly provided by the sites during the initial phase of policy implementation. Where staff development has been available, perception about its effectiveness is largely favorable. (Source: Survey and interview data)

12. All interviewed groups are critical of the district's "top-down" approach with respect to the decision-making and implementation processes related to the policy — particularly given the district's recent efforts to promote shared and site-based decision making. (Source: Survey and interview data)

13. Schools generally favor expansion of class size reduction — but only if such a decision reflects the broad participation of key stakeholder groups and if additional facilities and funds are ensured. (Source: Survey and interview data)

CONCLUSIONS

Study data demonstrate that perceptions about class size reduction are largely positive. These perceptions are likely a product of both realized effects of the policy on teaching and learning during these first few months of implementation, as well as beliefs that individuals held prior to the policy's initial implementation given little time to factually assess its impact. Study subjects express satisfaction, in general, with the advantages of reduced class size in grades 1 and 2 and — all else being equal — would like to see its expansion to other grade levels. The initial implementation, however, has not been accomplished without considerable cost at both operational and attitudinal levels. While subjects, overall, suggest that the benefits outweigh the costs, a significant level of concern among key stakeholders invites serious consideration of strategies to minimize these costs if the policy is to be more fully embraced.

Of operational concern is a variety of schoolwide ramifications that have impacted space, organization, equipment and supplies, personnel, services, and programs. With additional financial assistance, the district can likely mitigate these considerable obstacles to facilitate a more effective implementation of reduced class size at grades 1 and 2. Expansion of the policy's implementation to other grade levels, however, will require an even larger investment of district resources — resources that must be assured before stakeholders (particularly those at highly impacted sites) will support such expansion. As evidenced in the
literature, implementation of class size reduction is expensive, particularly a reduction that is likely to benefit student achievement to a reliably significant degree. Unfortunately, the policy coexists with diminishing state and district resources.

Just as salient are perceptions that the policy's implementation followed a decision-making process which excluded the involvement of key stakeholders, namely the site communities. This approach rendered the recent emphasis on shared and site-based decision making, at very least, difficult to understand. The resulting skepticism among site staff compounds operational hardships that together restrain full acceptance of the policy. Study subjects indicate that their acceptance of expanding class size reduction will be based, in part, on their participation in that decision.

Apart from perceptions and acceptance of the policy by stakeholder groups is the issue with respect to what reduced class size can achieve and what it perhaps cannot. The policy will likely be judged successful if the district's measures focus on increased interest and energy among teachers and increased satisfaction among parents. However, cumulative research data suggest that class size must be very small before any significant increase in student achievement will appear, and that smaller class size does not guarantee that teachers adapt their teaching practices to take advantage of the smaller classes. (The reader is reminded to review the Summary of Relevant Literature provided earlier in the report.) Whereas dramatically reducing class size is probably unfeasible given available resources, strategies to improve teacher competence may offer more affordable options.

Discussions regarding expansion of the implementation of the class size reduction policy will undoubtedly focus on how to address the undesirable ramifications of the policy that this initial phase has manifested, how to proceed in the decision-making process with an appreciation of the perspectives of key stakeholder groups, and how to define the scope of what the policy is intended to achieve. Given a reasoned response to these paramount issues, the policy is likely to enjoy broad acceptance and effectiveness.

RECOMMENDATIONS

Based on the review's findings, it is recommended that the district:

1. Provide sufficient district support to address schoolwide ramifications of implementing class size reduction at grades 1 and 2. Ensure that any further expansion of the implementation of the policy provides such support.

   Rationale: Insufficient facilities and resources have necessitated a number of undesirable changes in personnel, programs, and activities at some sites. These inadequacies must be addressed before effective class size reduction at grades 1 and 2 can be fully realized and before the policy should be expanded to other grade levels.

2. Consider unique site characteristics in the refinement and application of the class size reduction policy and its potential expansion.
Rationale: Interview and survey data revealed that sites have been dissimilarly impacted by class size reduction. The availability of suitable space and the presence of specialized programs (e.g., bilingual instruction) are inextricably related to the extent to which the policy is being successfully implemented at individual sites. Clearly, where the policy has negatively impacted space and programs, its acceptance has been compromised.

3. Ensure a sufficient level of district staff development to promote instructional competence and to explore the particular advantages of class size reduction.

Rationale: Reduced class size provides a wide variety of teaching and learning opportunities — the advantages of developmental learning, combination class structures, and strategies associated with higher order thinking skills, in particular. Since study data indicated that staff development efforts at individual sites have been somewhat uneven, district support to assist schools in disseminating relevant information is both practical and judicious. Relevant literature emphasizes that ongoing teacher training lies at the heart of improved student achievement — with or without smaller classes.

4. Include stakeholder groups (site administrators, teachers, and parents) in further decisions regarding class size reduction.

Rationale: Success of the policy depends, in large part, on its broad acceptance among stakeholder groups, namely the site communities. The lack of such involvement in early phases of the policy's conceptualization has resulted in disenfranchisement, in general, and in cynicism about the district's commitment to shared decision making, in particular.

5. Define what specific benefits to the quality of public education the district intends to realize as a result of class size reduction.

Rationale: The effectiveness of reducing class size continues to be controversial within the education research community. Realistic benefits of the policy should be articulated to bring expectations into clearer focus.

Given the inconclusive nature of research which has attempted to correlate smaller class size and improved student achievement, the district should continue to explore relevant school reform literature.

6. Conduct follow-up evaluation of the impact of the class size reduction policy, for which elements of this review will provide baseline data, after two years of implementation (to be completed Fall 1996).

Rationale: This review of the initial phase of the implementation of the policy is extremely limited in the degree to which it can adequately assess the impact of the policy. It provides very early perceptions about both costs and benefits of reduced class size and about the processes that brought the policy thus far. It does not provide an assessment of a complex range of effects — student achievement foremost among them — that only a long-term study permits.
ISSUE/CONCERN

In February 1994, the Board of Education adopted a policy to effect a phased reduction in class size in district schools. Reallocation of resources ($6.2 million) was subsequently approved to initiate Phase I of this plan, which called for limiting class size to 25.5 students in grades 1 and 2 at all elementary sites. The Board delayed preparation of any expansion of the policy to other grade levels until an assessment of the implementation of Phase I could determine (1) the extent to which the spirit and intent of the policy were adopted, (2) the effectiveness of the planning process at district and school levels, and (3) changes in classroom structures and practices resulting from policy implementation.

BACKGROUND INFORMATION

In his November 30, 1993, memo to the superintendent and Board of Education, school board member Ron Ottinger presented a proposal to "put our kids first by funding the classroom first." Ottinger argued that significant reductions in class size could be accomplished using existing resources by "redeploying out-of-classroom certificated staff into the classroom and converting a portion of both non-instructional and instructional classified positions into certificated teaching positions.

With today's general fund resources, we can bring classes down districtwide over no more than a three-year period to 25 students per class in K-3, to 27 students in 4-6, and to a true 29 students in grades 7-12 (Ottinger, November 1993).

Noting that primary components of the district's sixteen expectations for improving student achievement focus on early grades and subject areas, Ottinger recommended that the reduction in class size begin in kindergarten through third grade classrooms, effective in the 1994-95 school year.

The board agreed with Ottinger's tenet that "significant class size reductions will greatly enhance the learning opportunities of our young people, the quality of teaching conditions for
our faculty, and the public's confidence in our ability to use their money wisely to educate all students" and approved a proposal that instructed the district to:

1. Fund the classroom first and reduce class size significantly across the district, with even smaller classes in those schools with large amounts of integration and categorical money; fund supporting services and administration with the remaining funds, only after guaranteeing the necessary number of classroom teachers.

2. Redeploy current staff and resources first, then secure additional resources as necessary — the goal being to reduce class size districtwide to 18-24 students per class within two to four years, beginning with the 1994-95 school year; plan and project specific class size reduction targets and dates for each year and for each school.

3. Direct staff to prepare and develop scenarios with exact timelines and phases of staff and resource redeployment and facilities strategies to achieve the specific class size reduction targets; prepare a preliminary report on the scenarios and school-by-school class size reductions for the 1994-95 school year, with full scenarios for the 1994-95 school year.

Parents, community members, school staffs, and district staff were urged to "begin a dialogue about how to achieve putting the kids first by funding the classroom first."

It is our belief that parents and teachers will choose significantly smaller class sizes as the best use of existing resources to enable their children and students to be successful ... We must make it clear that classroom teaching and leading schools are the most important jobs in the school system (Ottinger, November 1993).

In December 1993, a formal staff response prepared by the Superintendent’s Cabinet endorsed the class size reduction proposal, noting that class sizes in California have grown steadily during the past decade and were now larger than most other states in the nation.

Most professionals and parents support smaller class sizes because they provide a more personal learning environment; enable the teacher to follow up with parents more easily; and reduce the amount of written student work to be reviewed and corrected. While the research regarding class size reduction is not conclusive, it suggests that class sizes must be reduced significantly to make a difference in student achievement (Staff Response to a Proposal to Reduce Class Size, December 1993).

The staff response recommended that the first year of implementation focus on grades 1-3; kindergarten was not included "because much of the innovative practice in developmental primary programs and ungraded formats is occurring at this level" and also because "the facilities issue would be compounded (given) existing double session schedules." The staff report estimated that roughly 180 new classroom positions would be required to reduce class size in grades 1-3 from a then current allocation level of 29.7 to 25.5, representing a reallocation of $9 million from non-classroom resources to classroom teacher use. The
report specified a plan to begin a program of class size reduction in the 1994-95 school year; the response was augmented in January 1994 to specify program reduction and related personnel impacts to reallocate resources to the classroom. The staff's addendum also specified an instructional model whereby "in grades 1, 2, and 3, class size ratios may not exceed 25.5 to 1 for language arts, math, social studies, and science." The superintendent was directed to develop a plan to support the proposal that addressed staff training and budget requirements. When the plan was subsequently approved by the Board, the scope of class size reduction for the 1994-95 school year addressed grades 1 and 2, due to classroom space requirements and fiscal capability, at a cost of $6.2 million (see Appendix K).

SUMMARY OF RELEVANT LITERATURE

Since the publication of *A Nation at Risk* in 1983, the quality of public education in the U.S. has received increased scrutiny and political attention. The issue of class size has been in the forefront of that discussion. Some states have considered reducing class size as part of school improvement programs, specifically as a means of improving student achievement and attracting greater numbers of qualified teachers. Research studies on class size date back as far as 1900; the effectiveness of reducing class size in elementary schools, however, continues to be controversial. The debate over reduced class size, as presented in the literature, is briefly summarized here; a Bibliography is provided following the report. The reader will notice that, as is common in other areas of research, the number of studies that support or challenge class size reduction is not evenly balanced; this in no way reflects on the quality of the arguments.

Arguments in Support of Smaller Class Size

Common sense seems to dictate that "smaller is better." Few teachers disagree; indeed, their largest professional association, the National Education Association, has been lobbying for smaller class size for years. Proponents of smaller classes usually cite the work of Glass and Smith (1978), because it provided the first scientific evidence indicating that higher achievement can be expected in smaller classes. Based on several studies on class size that employed different methodologies and various criteria for measuring achievement, Smith and Glass concluded that the studies provided evidence of a significant negative relationship between class size and student achievement regardless of grade levels, subject areas, and ability ranges. Gilman, Swan, and Stone (1987) later categorized several generalizations that have promoted the small class size argument:

1. Teachers would have the energy and interest to give more concerned care and attention to each student if there were fewer students in the classroom.

2. Classroom management would be more effective because teachers could spend time with each student and keep track of individual progress.

3. Teachers would be able to employ a wider variety of instructional strategies, methods, and learning activities, and would be more effective with them if class size were small.
4. Teachers' attitudes and morale would be more positive if there were fewer students.

5. Small class size would allow the teacher to make good use of added time and space.

6. Teachers would be able to find more time to plan, diversify, and individualize their teaching. When teacher attention, energy, and time are shared among fewer students, the environment can be more conducive to learning.

Arguments Which Challenge a Smaller Class Size Policy

While the generalizations promoting class size reduction are persuasive, the research results are ambivalent. Findings from other studies which argue against reduced class size include the following arguments:

1. What occurs in classrooms (e.g., beliefs and capabilities of teachers, abilities and backgrounds of students, and subject matter) has a greater effect on achievement than class size per se (ERS, 1980a).

2. Class size must be very small (at least 15 or fewer) before any dramatic increase in achievement will appear (Glass, Cahen, Smith, and Filby, 1979).

3. Instructional effectiveness depends more on the teacher than on class size. Few, if any, student benefits can be expected from reducing size if educators continue to use the same instructional methods and procedures in smaller classes that they used in larger classes. Teachers will have to learn how to exploit the features of smaller classes before gains may be expected (Hallinan and Sorenson, 1985).

4. Evidence to date, from research and practice, does not generally support a policy of limiting class size in order to raise student achievement or to improve the quality of worklife for teachers, nor does it justify small reductions in student/teacher ratios or class size in order to enhance student achievement. Research also fails to support school policies designed to lower class size if these do not first specify which students will benefit and how and why they will do so (Down, 1979; Shapson et al, 1980; ERS, 1980a).

Additional arguments relevant to reduced class size research include the following:

- Practices in other societies lend little support to the idea that academic excellence requires smaller classes. Japan, for example, has an average of 41 students in its mathematics classes, yet leads the world in math achievement. California has one of the highest student/teacher ratio in the country. Nevertheless, its SAT scores continue to rank well above the median and are probably restrained more by the challenges of demography and diversity than by the size of its classes (Tomlinson, 1988).

- Teachers understand that students are supposed to perform better in smaller classes and feel significantly more pressure to increase student performance. If improvement
does not occur, teachers may receive the punishing effects of being evaluated as a poor teacher (Chase, Mueller, and Walden, 1986; Gilman et al, 1988).

- It is very expensive to implement a small class size policy, particularly in the absence of evidence of cost effectiveness. Furthermore, reducing class size to the point where student achievement would likely benefit to a reliably significant degree is prohibitively expensive (Gilman et al, 1988; Tomlinson, 1990).

Critics of smaller class size argue that there are other strategies that deserve consideration before steps are taken to reduce class size. They contend, for example, that improving teachers' instructional competence will also lighten their workload by helping them to perform more effectively in the classroom. Furthermore, to the extent that learning depends on instructional quality, improved teacher competence will also raise student achievement (Tomlinson, 1988). Strengthening instructional competence is consistent with the growing trend toward professionalism and with the creation of the National Board for Professional Teaching Standards, as recommended in A Nation Prepared: Teachers for the 21st Century (Carnegie Forum, 1986).

(In 1980 the Educational Research Service published a review of relevant research on class size reduction policies in elementary and secondary schools. A 1986 ERS Research Brief summarized the results of a cluster analysis of the data collected in the 1980 study; Appendix A provides prominent findings from the 1986 brief.)

An Unresolved Debate

Many unanswered questions remain with respect to how successful reduced class size policies will be and whether their continuation will be assured. The inconclusive research findings highlight the need for continued experimentation and research. In the meanwhile, many educators emphasize that ongoing teacher training lies at the heart of improved student achievement — with or without smaller classes.

That teachers can be taught to manage complicated classroom situations is beyond question ... Whether class size is reduced or not, teachers will require additional training if improved pupil performance is to result. In the first instance they must be prepared to take full advantage of the smaller size. In the second, they must learn to better manage the diversity that accompanies our mixed culture, the pride and the challenge to American society and its schools (Tomlinson, 1988).
PURPOSE OF THE REVIEW

A formative review of the implementation of the class size reduction policy, Phase I, was undertaken to determine the effectiveness of the earliest phases of implementation prior to any decision regarding its expansion to other grade levels. Before the district can responsibly prepare for implementation of subsequent phases, specific data are required with regard to (1) the extent to which the spirit and intent of the policy were adopted, (2) the effectiveness of the planning process at district and school levels, and (3) changes in classroom structure and the impact on teaching practices. General study questions formulated by a district task force included:

- What decision-making and planning processes occurred prior to the implementation of Phase I of the class size reduction policy?

- To what extent have teachers, parents, and governance group members been involved in implementation planning and decisions?

- How has the policy been implemented at district elementary schools?

- How has implementation of the policy impacted classroom practice and student achievement to date?

METHODOLOGY

Study Sites. All elementary sites were included in the scope of the review, with the exception of those scheduled for either a Comité review or a Comprehensive Compliance Review during the 1994-95 school year. The 85 study sites follow:

Interview Component. Thirty-six elementary schools were randomly selected, within school service areas, to participate in either the interview or the classroom observation components of the review. Because the interview component relied, in part, on data from principals, schools for the interview component were identified first to ensure that all 18 principals had been involved in the class size reduction planning at the selected site during the 1993-94 school year. The 18 interview sites follow:

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<td>Longfellow</td>
<td>Rolando Park</td>
<td>Miller</td>
<td>Miramar Ranch</td>
<td>Florence</td>
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Four individuals at each of the 18 sites were interviewed. In addition to the site principal, interviews were conducted with a grade 1 or grade 2 teacher; a teacher from a grade K, 3, 4, or 5 classroom; and the chairperson of the Governance Team or School Site Council (SSC)/School Advisory Council (SAC).

To ensure broad representation, the selection of classroom teachers was based on (1) grade level assignment (to include "straight" grade 1 and grade 2 classrooms and combination grades K-1, 1-2, and 2-3), (2) language program in the classroom (English, second language, or sheltered), and (3) years of teaching experience.

Four of the 18 schools were identified as Chapter 1 Schoolwide Project schools, which requires them to add an additional "above-formula" teaching position at the grades 1-2 level using Chapter 1 funds. Because of their advisory affiliation with Chapter 1 funding, the SSC/SAC chairpersons at these schools were selected for interviews; the Governance Team chairpersons were selected at most of the remaining schools. A concerted effort was made to interview the individuals who served as chairpersons during the 1993-94 school year, whether or not they continue to serve the sites in that capacity during the 1994-95 school year.

While standardization in the conduct of the site interviews was encouraged (including a videotaped rehearsal of the interview protocol), a review of the interview findings revealed that not every interviewee addressed every one of the questions as specifically as desired. These inconsistencies may be attributed to a number of factors, including failure to similarly rely on prompts and a reluctance to ask a question when a previous response appeared to provide the answer.

Classroom Observation Component. After identifying 18 of the 36 randomly selected sites to participate in the interview component, the remaining 18 schools became sites for classroom observations:

<table>
<thead>
<tr>
<th>Area I</th>
<th>Area II</th>
<th>Area III</th>
<th>Area IV</th>
<th>Area V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knox</td>
<td>Carson</td>
<td>Boone</td>
<td>Green</td>
<td>Barnard</td>
</tr>
<tr>
<td>Mead</td>
<td>Cubberley</td>
<td>Hancock</td>
<td>Rowan</td>
<td>Cabrillo</td>
</tr>
<tr>
<td>Pacific Beach</td>
<td>Darnall</td>
<td>Lee</td>
<td>Sandburg</td>
<td>Perkins</td>
</tr>
<tr>
<td>Webster</td>
<td>Wegeforth</td>
<td></td>
<td></td>
<td>Sunset View</td>
</tr>
</tbody>
</table>

20
Observations were conducted by resource teachers (assigned to the Planning, Assessment, and Accountability Division) in classrooms where first- or second-grade students were enrolled. These classrooms included "straight" grade 1 or grade 2 classrooms, as well as combination grades K-1, 1-2, and 2-3, or developmental levels 4-8 and 5-9 (Darnall). Two classrooms at each site were observed during the literacy period. As with the interview component, the selection of classrooms ensured broad representation based on grade level assignment and language program (i.e., English, second language, or sheltered). In addition, to minimize the review's impact on novice teaching staff, the selection did not include classrooms with first-year teachers.

Survey Component. Survey subjects at the 85 elementary study sites (identified above) included all principals (n=85), all teachers of students in grades 1 or 2 (n=747), 24 randomly selected teachers in grades K, 3, 4, and 5 from each service area (n=120), and all chairpersons of governance teams and school site councils (n=170). Parent survey subjects were drawn from the 49 sites which were not involved in either the interview or observation component of the review. The subjects included (1) all parents/guardians of grade one students at the 24 sites listed below, and (2) all parents/guardians of grade two students at an additional 25 sites (n=5216):

### Parent Subjects: Grade 1

<table>
<thead>
<tr>
<th>Area I</th>
<th>Area II</th>
<th>Area III</th>
<th>Area IV</th>
<th>Area V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bird Rock</td>
<td>Alcott</td>
<td>Curie</td>
<td>Adams</td>
<td>Burbank</td>
</tr>
<tr>
<td>Field</td>
<td>Cadman</td>
<td>Fulton</td>
<td>Ericson</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Sequoia</td>
<td>Jones</td>
<td>Kumeayaay</td>
<td>Franklin</td>
<td>King</td>
</tr>
<tr>
<td>Sessions</td>
<td>Ross</td>
<td>Spreckels</td>
<td>Marvin</td>
<td>McKinley</td>
</tr>
<tr>
<td>Torrey Pines</td>
<td>Toler</td>
<td>Tierrasanta</td>
<td></td>
<td>Ocean Beach</td>
</tr>
</tbody>
</table>

### Parent Subjects: Grade 2

<table>
<thead>
<tr>
<th>Area I</th>
<th>Area II</th>
<th>Area III</th>
<th>Area IV</th>
<th>Area V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crown Point</td>
<td>Bay Park</td>
<td>Nye</td>
<td>Dailard</td>
<td>Balboa</td>
</tr>
<tr>
<td>Holmes</td>
<td>Chesterton</td>
<td>Paradise Hills</td>
<td>Foster</td>
<td>Emerson</td>
</tr>
<tr>
<td>Johnson</td>
<td>Fletcher</td>
<td>Perry</td>
<td>Hearst</td>
<td>Fremont</td>
</tr>
<tr>
<td>Lingbergh-Schweitzer</td>
<td>Hardy</td>
<td>Vista Grande</td>
<td>Grant</td>
<td>Grant</td>
</tr>
<tr>
<td>Whitman</td>
<td>Oak Park</td>
<td>Zamorano</td>
<td>Logan</td>
<td>Logan</td>
</tr>
</tbody>
</table>

The response rates for principals, teachers, chairpersons, and parents are provided in the Findings section.

Limitations of the Study. The findings must be interpreted with tentativeness in recognition of the following important methodological issues:

1. The review addresses the earliest phase of the policy's implementation. The policy was implemented at the study sites just a few months prior to the review, limiting opportunity for a more complete assessment of the policy's impact.
2. The review relies heavily on attitude and opinion data provided by interviews and surveys. This review of the first phase of the policy does not address the focus of most school reform initiatives — improved student achievement.

3. While the scope of the study included data for a broad majority of elementary sites (n=85), it did not include all elementary sites. Findings in the classroom observation and interview components, in particular, were limited to 36 sites (18 sites for each component).

4. In the absence of baseline data collected prior to the 1994-95 school year, no comparison of classroom observation data was possible. The findings intend to provide a "snapshot" of what currently exists at 18 sites and may serve to establish baseline data for any future process-oriented research on the policy's impact.
FINDINGS

I. SURVEY DATA
(The survey instruments are provided in Appendices B-E.)

Table 1 provides the number of surveys which were distributed and returned, as well as the response rate, for each of the four groups of respondents. The response rate was highest for principals, followed by teachers, chairpersons, and parents. When the respondents were disaggregated by school enrollment size (Table 2), the data showed that principals and chairpersons at small sites comprised 40-50 percent of the responses, while teachers and parents more evenly represented all three categories of site enrollment.

Table 1
SURVEY RESPONSE RATE

<table>
<thead>
<tr>
<th>Group</th>
<th>Surveys Distributed</th>
<th>Surveys Returned</th>
<th>Response Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals</td>
<td>85</td>
<td>65</td>
<td>76.5</td>
</tr>
<tr>
<td>Teachers</td>
<td>867</td>
<td>502</td>
<td>57.9</td>
</tr>
<tr>
<td>Chairpersons</td>
<td>170</td>
<td>80</td>
<td>47.1</td>
</tr>
<tr>
<td>Parents</td>
<td>5216</td>
<td>1294</td>
<td>24.8</td>
</tr>
</tbody>
</table>

Table 2
SURVEY RESPONDENTS BY SCHOOL ENROLLMENT SIZE

<table>
<thead>
<tr>
<th>School Enrollment</th>
<th>Principals * (%)</th>
<th>Teachers * (%)</th>
<th>Chairs * (%)</th>
<th>Parents * (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-500 students</td>
<td>46.2</td>
<td>29.5</td>
<td>41.3</td>
<td>29.4</td>
</tr>
<tr>
<td>501-800 students</td>
<td>27.7</td>
<td>32.9</td>
<td>26.3</td>
<td>37.2</td>
</tr>
<tr>
<td>801+ students</td>
<td>26.1</td>
<td>36.1</td>
<td>28.8</td>
<td>24.9</td>
</tr>
</tbody>
</table>

* Total percent within this group may not equal 100 if demographic data were not provided.
Response choices to a number of survey questions included a five-point Likert scale ranging from "strongly agree" to "strongly disagree." In reviewing the survey findings, it is important to note that these responses were collapsed for analysis and display purposes: the responses at the extremes of the scale were combined with those adjacent (i.e., "strongly agree" is combined with "agree" and "strongly disagree" is combined with "disagree").

**Teacher, Principal, and Chairperson Surveys**

Surveys distributed to teachers, principals, and chairpersons raised many common issues. These issues will be addressed in terms of both similarities and differences among respondents.

**Change in Instructional Practices in Grades 1-2.** Figure 1 shows considerable diversity of opinion regarding the impact of class size reduction on the status of classroom instructional practices in grades 1 and 2. Principals were considerably more likely to report unchanged instructional practices in grade 1 and 2 classrooms since the policy was implemented (70 percent) than were chairpersons (56 percent) or teachers (49 percent). Overall, slightly more than half the respondents reported a continuation of former instructional practices.

Statement: Classroom instructional practices in grades 1 and 2 remain basically the same as before the class size reduction.

![Figure 1: Continuation of Same Instructional Practices in Grades 1-2 As Reported by Teachers, Principals, and Chairpersons](image)
Teaching and Learning Opportunities at Grades 1 and 2. While slightly more than half the respondents, overall, indicated above that instructional practices in grades 1 and 2 have remained unchanged since the implementation of class size reduction, a decided majority of respondents (roughly 75 percent) reported that the policy has had a positive impact on "teaching and learning opportunities in grades 1 and 2" (Figure 2).

Furthermore, when teachers, principals, and chairpersons were given an opportunity to react to specific aspects of classroom culture that implied change in instructional practice, between one-third and one-half the respondents identified a broad variety of positively impacted phenomena (Figure 3). The apparent contrast between perceived "change in instructional practices" and perceptions about "teaching and learning opportunities" is likely a product of both the surveys' wording and respondent interpretation.
The data indicated that roughly one out of two respondents reported that class size reduction has provided greater opportunity for one-on-one interaction with students. Slightly less than half (46.3 percent) noted greater ability to provide timely response to students' requests for assistance. A large minority (varying between 30-40 percent) also noted increased opportunity for supportive feedback, improved classroom management, and more time for small group instruction, corrective feedback, consideration of individual learning styles, use of manipulatives, and attention to special needs populations.

Figure 3. Improved Aspects of Teaching and Learning at Grades 1 and 2, As Reported By Teachers, Principals, and Chairpersons
Teaching and Learning Opportunities at Other Grade Levels. Figure 4 demonstrates that only a small minority of respondents believe that the class size reduction policy has had a positive impact on teaching and learning opportunities in grades other than 1 and 2. A majority of respondents were fairly evenly divided, overall, between those who indicated that the policy has had no impact on teaching and learning opportunities and those who reported that the policy has had a negative effect on such opportunities at those grade levels.

Statement: The impact of class size reduction on teaching and learning opportunities in grades other than 1 and 2 has been ...

Figure 4. Teaching and Learning Opportunities at Grades Other Than 1 and 2, As Reported by Teachers, Principals, and Chairpersons

Reading Achievement. Roughly two out of three teachers and principals believe that class size reduction is likely to improve mastery of reading achievement by grade 3 (Figure 5). Less than half the chairpersons agreed and, within their group, one out of three did not have an opinion. Less than one out of five respondents, overall, disagreed that the policy would improve such achievement.

Statement: Class size reduction is likely to improve student mastery of reading achievement by grade 3.

Figure 5. Potential for Policy to Improve Mastery of Reading Achievement by Grade 3, As Reported By Teachers, Principals, and Chairpersons
Negative Impacts of Policy. As Figure 6 indicates, roughly one out of five respondents reported that the policy had adversely affected their sites because of reallocated personnel, the loss of non-classroom space, inadequate supplies, and other miscellaneous inadequacies at upper grade levels. Thirteen percent also felt that the policy created excessive pressure on teachers at the targeted grade levels to improve the achievement of their students. Additional analyses revealed that, when compared with teachers of grades 1 and 2, a significantly larger percentage of teachers at other grade levels reported negative impacts on their sites.

![Bar chart showing negative impacts of policy](chart.png)

Figure 6. Negative Impacts of Policy As Reported by Teachers, Principals, and Chairpersons
Weighing Benefits vs. Losses. A greater percentage of teachers reported that the benefits of class size reduction at grades 1 and 2 outweighed the loss of space or services (57 percent) than did principals (45 percent) and chairpersons (34 percent). Nearly half the chairpersons and one out of three principals did not support such a trade-off (Figure 7).

Staff Development. At those sites where staff development related to class size reduction has been provided, roughly two-thirds of each respondent group reported that such training has been "effective" or "somewhat effective" (Figure 8). A sizeable minority (one out of three) indicated "ineffective" staff development at their site.
Student-Teacher Ratio. Almost all principals (97 percent) and a broad majority of chairpersons (84 percent) acknowledged that the student-teacher ratio has been "lowered" in grades 1 and 2 as a result of the policy. Nearly three-quarters of the teacher respondents reported that their classrooms have already achieved a 25.5:1 student-teacher ratio.

Planning Process and Site Plan Development. The teacher and chairperson surveys also addressed the effectiveness of the planning process and participation in the development of the site plan to implement reduced class size. A decided majority of teachers (71 percent) and chairpersons (67 percent) reported that the planning process to reduce class size at their site had been effective. Roughly one out of two respondents from each group indicated that their participation in developing the site plan to implement class size reduction had been "moderate" or "high;" on the other hand, this also means that half of the teachers reported either low or no participation in this process.

A separate analysis indicated that, when compared to teachers with students in grades 1 or 2 only, a somewhat smaller percentage of teachers with students in grades other than 1 or 2 perceived the planning process for class size reduction to be effective. A much smaller percentage of this group of teachers in grades K and 3-6 also reported involvement in the development of the site plan to implement the policy than did teachers with grade 1 and 2 students.

Impact on Non-Resident Enrollment. When principals were asked to describe the impact of class size reduction on non-resident enrollment in grades 1 and 2, roughly two of every three reported that such enrollment was largely unaffected by the policy. One out of four principals indicated a slight decrease in enrollment, and only five percent cited a decrease equivalent to one classroom.

It is important to note that this survey question specified non-resident enrollment as "VEEP" enrollment. Since it is unclear whether principals extended their interpretation of the statement to other integration programs (e.g., a magnet program), these findings must be reviewed with tentativeness.

Expansion of the Implementation of the Policy. Principals were also asked if existing space at their sites could accommodate expansion of class size reduction to other grade levels. Slightly more than two-thirds of the principals indicated that, given present facilities, their sites could not reconcile further class size reduction; a majority of the remaining respondents were undecided.

Parent Survey

In addition to English, the survey instrument was translated in six languages including Spanish, Tagalog, Vietnamese, Hmong, Lao, and Cambodian. Parents from 49 sites responded to their survey; responses from each site ranged from between five and 59 parents; ethnicities of the parent respondents are provided in Table 3. When compared with the district ethnic census of elementary schools (Pupil Racial/Ethnic Census Report for 1994-
95), the data indicated that parents of African American, Hispanic, and Indochinese American students are somewhat underrepresented, while other ethnic groups are overrepresented; the representation of Filipino American students roughly parallels that of the district. Parents of male students are also somewhat overrepresented in the survey responses (57.9 percent) when compared with that of the districtwide census for grades 1 and 2.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>129</td>
<td>10.3</td>
</tr>
<tr>
<td>Asian American</td>
<td>81</td>
<td>6.5</td>
</tr>
<tr>
<td>Filipino American</td>
<td>102</td>
<td>8.1</td>
</tr>
<tr>
<td>Hispanic</td>
<td>264</td>
<td>21.1</td>
</tr>
<tr>
<td>White</td>
<td>587</td>
<td>46.8</td>
</tr>
<tr>
<td>Other **</td>
<td>91</td>
<td>7.2</td>
</tr>
</tbody>
</table>

* Ethnicity was not specified by 40 respondents

** Includes 8 Indochinese Americans, 24 Native Americans, 17 Pacific Islanders, and 42 additional respondents from other miscellaneous ethnic groups

Surveyed parents were asked to respond to ten statements dealing with their awareness of the class size reduction policy, their involvement in its implementation, and their opinions about its impact. The data showed that 85-90 percent of parent respondents agreed that class size reduction will have a beneficial effect on teaching and learning opportunities, as evidenced in responses to Statements 4, 5, and 6 (Figure 9). Eighty percent of the respondents indicated that their satisfaction with the overall instructional program will increase because of the reduction (Statement 8). Somewhat fewer parents (73 percent) believe that the reduction will have no negative effects on existing school programs (Statement 10). Sixty-six percent expressed knowledge that the class size reduction had occurred; only 27 percent knew that parents had been involved in planning for class size reduction.
1. I am aware that class size reduction to 25.5 students per class in grades 1 and 2 has occurred at my child's school.
2. Parents have been involved in planning the class size reduction at my child's school.
3. The pupil-teacher ratio in my child's classroom is improved this year because of the class size reduction.
4. I believe that reducing class size to 25.5 will make my child's teacher more effective.
5. I believe that reducing class size to 25.5 will create more opportunities for my child to learn.
6. I believe that reducing class size to 25.5 will help my child in reading.
7. I believe that reducing class size to 25.5 will increase the teacher's contact with me about my child's progress.
8. I believe that reducing class size to 25.5 will increase my satisfaction with the overall instructional program for my child.
9. I believe that instructional practices in my child's classroom will remain basically the same as before class size reduction to 25.5.
10. I believe that reducing class size to 25.5 will have a negative impact on existing programs at my child's school.

Figure 9. Parent Response to Survey Questions 1-10
Where responses differed dramatically by ethnic group, the analysis indicated that (1) the percent of African American parents who agreed that "the pupil-teacher ratio in their student's classroom had improved" as a result of the policy was much lower than that for other ethnic groups; and (2) the percent of White and African American respondents who were aware of parent involvement in planning process was considerably lower than other ethnic groups. Overall, the largest percentage of parents who reported confidence in the policy's potential to positively impact their students' academic experience was among Filipino Americans.

When parent responses were disaggregated by school enrollment size, the findings revealed that parents whose students were enrolled at schools with no more than 500 students had a slightly higher rate of policy awareness and belief in the positive implications of class size reduction than did other parents.

(Disaggregations of the survey data are provided in Appendix F.)

Summary of Survey Findings

Drawing on the data provided by survey responses, the findings indicate that:

1. A decided majority of respondents (roughly 75 percent) reported that the policy has had a positive impact on "teaching and learning opportunities in grades 1 and 2." When teachers, principals, and chairpersons were given an opportunity to react to specific aspects of classroom culture that implied change in instructional practice, between one-third and one-half the respondents identified a broad variety of positively impacted phenomena.

2. A broad majority of parents (80 percent) reported that their satisfaction with the overall instructional program for their grade 1 or 2 student will increase because of class size reduction.

3. Slightly more than two-thirds of teachers (71 percent) and chairpersons (67 percent) reported that the planning process to reduce class size has been effective at their site. Slightly less than half the respondents from each group indicated that the level of their participation in developing the site plan to implement class size reduction has been "moderate" or "high;" on the other hand, this also means that half of the teachers reported either low or no participation in this process.

4. Roughly two out of three teachers and principals believe that class size reduction is likely to improve student mastery of reading achievement by grade 3. Eighty-five percent of parent respondents also believe that the policy will help their students' reading ability.

5. A minority of teachers, principals, and chairpersons (less than 20 percent overall) reported specific adverse effects from class size reductions. Most frequently reported among negative impacts were reallocation of personnel, loss of space, and inadequate supplies and equipment.
6. Only a small minority of teachers, principals, and chairpersons (15 percent) believe that the class size reduction policy has had a positive impact on teaching and learning opportunities in grades other than 1 and 2.

7. Nearly half the chairpersons, and one out of three principals, did not support the trade-off between the benefits of class size reduction at grades 1 and 2 and the loss of space and services at their sites.

8. Roughly two-thirds of the principals indicated that, given present facilities, their sites could not accommodate expansion of the implementation of the class size reduction policy to additional grade levels.

9. While roughly two out of three parent respondents reported knowledge of the policy, only one out of four indicated awareness that parents had been involved in planning for class size reduction at their site.
II. INTERVIEW DATA
(The interview instrument is provided in Appendix G.)

As mentioned in the Methodology section, in addition to interviews with each site's principal and governance group or SSC/SAC chairperson, two teachers from each site were interviewed: a teacher of grade 1 or grade 2 students and a teacher from a grade K, 3, 4, or 5 classroom. Figure 10 shows the grade levels and language programs in the classrooms of the 36 teachers who were interviewed. A majority of interviews were conducted with teachers in general English classrooms with single grade levels. Attempts were made to select some newly assigned teachers, but the vast majority of teachers had lengthy teaching experience.

![Figure 10. Grade Levels and Language Programs of Interviewed Teachers](image)

The interview instrument was divided into five sections, with each section comprised of a set of questions related to an issue addressed in the review's design. The interviewees' responses to each question were summarized and addressed by policy issue; the following analysis highlights salient interview findings. While the data suggest general satisfaction among elementary communities with the initial effects of implementing the class size reduction policy, the respondents identified a number of undesirable tradeoffs.

While reviewing the interview findings, it is helpful to note that the comprehensive nature of the interview questions generated considerable overlap in addressing various aspects of the policy's impact (e.g., the interview may have approached the policy's effect on school programs from a number of perspectives). A degree of redundancy in responses, as evidenced in the findings, is a predictable result of such methodology.
Principal, teacher, and chairperson interviewees were asked about the impact of implementing class size reduction on a number of factors including (1) site facilities, (2) the delivery of educational services, (3) personnel, (4) school programs, (5) school activities, (6) classroom structure, (7) classroom practices, (8) attitudes and behaviors, and (9) staff development. Interview questions also addressed issues with regard to (10) the policy's implementation process, (11) the sites' decision-making process, (12) the extent to which the policy has been implemented to date, (13) suggestions for policy revision, (14) expansion of policy implementation to other grade levels, and (15) suggestions for policy assessment.

Impact on Facilities. Ten of the 18 school principals (56 percent) indicated that their sites made some change in use of space as a result of the policy; four of these ten principals indicated that the changes have made considerable negative impact on the overall delivery of educational services.

Principals at the remaining eight sites indicated that no changes were required because the additional teaching position(s) were accommodated by either previously available space or a decline in school enrollment. Five of these eight sites received one new teaching position, while the remaining three received at least two positions. The only site that did not receive an additional teaching position made a facility and program change (placing all computers in classrooms) in anticipation of class size reduction.

It is important to note that these 18 schools may not be representative of elementary schools throughout the district with respect to the impact of policy on facilities. Approximately 22 percent of the elementary schools districtwide are identified in a January 1995 facilities impact report as having "extra" classrooms which are not dedicated to support uses; these sites consequently have not required facility changes to accommodate class size reductions (see Appendix H). In contrast, the eight principals who reported above that their sites did not have to make facility changes represent 44 percent of the interview data. (Three principals reported that the facility changes at their sites were coincidental to, rather than directly a result of, class size reduction.) These data suggest that sites that have experienced a negative impact on their facilities — and consequently on other aspects of school life — are underrepresented in the interview data.

Of the ten principals who reported that class size reduction had an impact on their site's physical facilities, eight specified that they either (1) converted classrooms that were being used for support functions (e.g., computer labs, science labs, and basic skills pullout rooms) or (2) used space for more than one function (e.g., using the auditorium or teacher's lounge for classrooms on a parttime basis). Among specific effects most frequently reported at sites requiring facility changes, teachers cited the loss of lab space and the reorganization of special education classes, which were either moved to smaller spaces or dispersed into regular classrooms. Two teachers also mentioned reallocating loft space, creating six classrooms from space originally designed for five, and moving services provided by the resource specialist to the classroom.

Impact on Delivery of Educational Services. Four principals reported that facility changes had affected the delivery of educational services across grade levels. Specific changes identified by site administrators included (1) enlargement of class size at other grade levels, (2) reduction or elimination of supplemental educational and enrichment programs — the Basic Skills Supplemental Assistance Program (BSSAP) in particular, (3) reduction in special education services, and (4) reduction in science and computer skills instruction.
Teachers with students in grades 1 and 2 were uniformly positive about the effects of class size reduction on their classrooms. However, teachers at these grade levels at the four more negatively impacted schools were also sensitive to the schoolwide ramifications of the policy. One first-grade teacher, for example, cited adverse impacts on the special education, BSSAP, and music programs, as well as restrictions on use of the auditorium and media room; this particular teacher called for state intervention to provide more space. Another first-grade teacher reported that, given the loss of their library, library books are now so dispersed (i.e., some in storage rooms, some in the cafeteria, and some in the auditorium) that they are no longer being used. Upper grade teachers at these four sites confirmed their colleagues' appraisals that class size reduction has had considerable negative impact on the overall delivery of educational services.

Changes in Personnel, School Programs, and School Activities

Personnel. Three out of four principals reported that class size reduction had generated personnel changes; teachers and chairpersons from roughly half of the sites also indicated awareness of personnel changes at their sites. There was no consensus, however, about how principals approached such change. Table 4 provides the specific categories of staff that principals added or eliminated to accommodate their sites' personnel needs.

<table>
<thead>
<tr>
<th>Personnel Change</th>
<th>Number of Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional classroom aide</td>
<td>3</td>
</tr>
<tr>
<td>Increased aide/resource teacher time</td>
<td>3</td>
</tr>
<tr>
<td>Combination classroom</td>
<td>2</td>
</tr>
<tr>
<td>Reduction in district counselor time</td>
<td>1</td>
</tr>
<tr>
<td>Elimination of classroom aide</td>
<td>1</td>
</tr>
<tr>
<td>Elimination of guidance aide</td>
<td>1</td>
</tr>
<tr>
<td>Elimination of VEEP aide</td>
<td>1</td>
</tr>
<tr>
<td>Elimination of librarian</td>
<td>1</td>
</tr>
<tr>
<td>Reduction in nurse's time</td>
<td>1</td>
</tr>
<tr>
<td>Increased computer aide time</td>
<td>1</td>
</tr>
</tbody>
</table>

Personnel-related issues were most frequently cited when interview questions focused on positive impacts of the policy. Personnel advantages, reported by interviewees overall, included (1) a decrease in class size at grades 1 and 2, resulting in more individual attention
for students and more parent contacts, (2) an increase in team teaching and in dialogue among teachers, and (3) a reassignment of resource teachers to the classroom.

Interviewees also cited a number of undesirable personnel changes which included (1) the reduction of funds for classroom aide time, BSSAP services, and resource teacher support, (2) the increase in class size at other grade levels, and (3) the lack of resources to fund new classrooms and additional staff development needs.

School Programs. Half of the principals and slightly fewer than half of the teachers reported program changes as a result of the policy; both positive and negative impacts were noted. The data indicated that positive changes, such as team teaching, cooperative learning, developmentally appropriate activities, and accelerated learning were contrasted by loss of BSSAP services, constant reorganization of classrooms to maintain the new class size ratio, and reassignment of students to maintain classroom levels at sites with large sheltered English or bilingual populations (even when such an approach resulted in the placement of native English speakers in sheltered English classrooms). Staff from two of the schools which reported significant impact on their facilities cited the reduced ability to provide support in basic skills, special education, music, and services to VEEP students.

Other School Activities. A majority of staff (50-70 percent) at the 18 sites indicated that other school activities remained largely unchanged since the implementation of class size reduction. Where changes were noted, the interviewees most frequently reported a reduction in (1) the frequency or the duration of assemblies, (2) reading, computer, and science lab schedules, and (3) music programs. While interviewees reported that most changes in school activities were the result of program changes, some were related directly to changes in the use of facilities. For example, a school using its auditorium for a classroom or another permanent program is more likely to reduce the number of assemblies held in that facility. Still other changes were related to the addition of classrooms (even when there was no increase in enrollment) and its effect on the schoolwide scheduling of activities, such as lunch and recess. Similarly, one school noted that, even without increased enrollment, the policy required that money for field trips be shared among more classes.

General Changes in Classroom Structure and Practices

While a broad majority of interviewees agreed that the policy had generated many changes in classroom structure and practice, they were uncertain about the degree to which changes were clearly a result of implementing the policy. For example, while 15 of the 18 of the principals (83 percent) cited recent changes in classroom structure and practice, only half of them attributed the changes to class size reduction. A somewhat larger percentage of teachers (60 percent) attributed classroom changes at their sites to the policy, while only 14 percent attributed such change to other factors; the remaining 26 percent indicated no recent changes.

When asked to identify positive changes in classroom structure and practices, the changes most frequently reported by all interviewee groups included (1) more time for teacher planning, (2) more team teaching and collaboration, (3) expansion of developmental learning or the Reading Recovery program, (4) more one-on-one and small group instruction, (5) an
increase in combination classes, (6) increased contact with parents, (7) more hands-on time at learning centers, and (8) more time for portfolio work. Negatively oriented changes — most of which were addressed above — were less frequently mentioned but included (1) the loss of aide time, (2) the reorganization of sheltered and bilingual classes to maintain class size ratios, (3) the loss of programs, and (4) the loss of scheduling flexibility.

An interview question related to the issue of classroom changes specifically asked first- and second-grade teachers "What do you do differently in your classroom as a result of the class size reductions at your site?" Almost all (15 of 17) identified a number of positive changes. In addition to those already mentioned, they cited (1) the time to make anecdotal notes, (2) the addition of flexible learning groups, (3) the use of more diverse instructional methods, and (4) greater use of manipulatives.

Little consensus among interviewee groups with regard to changes in classroom structure and practice was noted. For example, at two of the three sites where principals reported that there were no apparent changes in instructional practices at grades 1 and 2, a number of teachers cited the need to modify their instructional approach to compensate for less assistance from the classroom aide, more cooperative learning, more team teaching and collaboration on lesson plans, and more reliance on parent volunteers given a reduction in aide time. This incongruity may be a product of both different perspectives and differing interpretations of what factors constitute "change."

Impact on Attitudes and Behavior

Teachers in Grades 1 and 2. Not surprisingly, 14 of the 17 teachers with students in grades 1 and 2 reported satisfaction with lower class size. When asked to specify the initial effects of reduced class size on their general attitudes, almost one out of two teachers reported that they experienced less stress and felt more positive about teaching in general. Others indicated improved classroom management, more time to spend with individual students, and greater opportunity to be creative.

The small minority of grade 1 and 2 teachers who expressed dissatisfaction (n=3) cited excessive reorganization to meet the new class size target and the inability to achieve a 25.5:1 ratio in some classrooms. At one school, class size was actually higher following the policy's implementation, given changes in enrollment. A number of interviewees also expressed confusion over the timeline for achieving the 25.5 class size average; one teacher assumed that no more than 25.5 students should be assigned to her classroom at any time during the year.

Roughly one out of three teachers reported that teachers at the other grades were "happy for them." However, one teacher suggested that kindergarten teachers felt particularly "left out" and were generally dissatisfied with their larger class size. Two teachers reported that teachers at other grades believe that class size reduction was achieved at the expense of a pay raise.

Teachers at Other Grade Levels. Roughly 80 percent of teachers at other grade levels reported that class size reduction was having a positive effect on grade 1 and 2 teachers. A largely positive attitude among the remaining interviewees was mitigated by concern about
continual reorganization to accommodate changing enrollment and about adverse impacts on special education and other programs.

When asked about the initial effect of the policy on their own attitudes, six of the 19 teachers indicated no immediate impact on them but wanted the policy expanded to their grade levels. Four teachers cited the negative effect of larger enrollments in their classes, and three simply said they supported class size reduction in grade 1 and 2 classrooms. Additional comments addressed large kindergarten enrollment and an increase in combination classes.

**Principals' Perceptions.** Administrators generally agreed that the initial impact of class size reduction was positive for grade 1 and 2 teachers. Six of the 18 principals reported that the teachers are demonstrating a higher level of energy, greater joy in working with their students, and greater enthusiasm about their work in general. Two principals observed that teachers are learning more about individual students and are giving them more individual help. On the other hand, one principal indicated that, while the teachers were initially elated, their attitudes changed sharply when they realized that the policy would be implemented without financial or facilities support. Two principals similarly reported that grade 1-2 teachers were positive until enrollment in their classrooms increased above the new 25.5 formula. Two additional administrators commented that their teachers have concluded that a reduction by just one or two students does not generate noticeable change.

Only three of the 18 principals reported that staff at grade levels other than 1 and 2 were generally positive and accepting of the class size reduction policy. Among their concerns were larger class sizes, less aide time, less assistance for students at other grade levels, an increase in combination classes, the loss of BSSAP services and other supplementary assistance, and the feeling that class size reduction should have begun at the kindergarten level.

Administrators held mixed opinions about the effects of the initial implementation of the policy on themselves. Seven reported generally positive attitudes; two others reported positive feelings mitigated by the negative impacts of the policy. Principals at the four sites where facilities and programs were highly impacted expressed the greatest frustration. One indicated that re-organization has been extremely difficult and has created considerable hardship. Another reported having to "work miracles with the budget to make it stretch even further" and having to "put credibility on the line to support a proposal that did not have a research base." An additional principal noted that the policy simply meant more work, more complications, more concern for morale, and fewer school activities.

**Chairpersons' Perceptions.** Thirteen of the 16 chairpersons felt that first- and second-grade teachers at their sites were very satisfied with class size reduction. However, they also thought that teachers at other grade levels were not as satisfied. Four chairpersons indicated that teachers whose classrooms had not been targeted for reduction inherited larger class size; three reported that kindergarten teachers were dissatisfied that the policy did not include their classrooms. Other miscellaneous concerns included teacher disappointment over the loss of various project funds, loss of facilities (e.g., library, auditorium, labs), an increased number of combination classes, and the top-down approach to the policy's decision making process.
Perceptions of Student Attitudes. Six principals conjectured that probably no difference in attitude and behavior had occurred among first- and second-grade students; four principals indicated that student morale appeared to be higher following class size reduction. One principal reported fewer behavioral problems, and another noted that "difficult children are difficult" regardless of class size.

Roughly half of the teachers noted that their students were responding positively to the increased attention. Others reported that smaller class size has fostered "faster" friendships and more focused learning. Among the teachers who reported no change in student attitude, three suggested that students may not be aware of the increased attention they were receiving.

Perceptions of Parent Attitudes. Approximately 70 percent of the teachers indicated that parents with students in grades 1 or 2 appeared satisfied with class size reduction and cognizant that their children are receiving more individual attention. One grade 1-2 teacher suggested that parents appeared to be more interested in volunteering now that class size was more manageable. Another teacher, however, noted that the parents of her students believe that the teaching staff has reaped greater benefits from class size reduction than have the students.

Ten principals suggested that parents of first- and second-grade students were very positive about the change; four administrators felt that parents were generally unaware of class size reduction. Parent concerns were felt to include the "disappearance" of shared decision making, higher class size at other grade levels, and programs that were lost or moved to less than adequate facilities.

Seven chairpersons indicated that parents of first- and second-grade students at their sites held positive opinions about class size reduction; two reported that their school site council members, and parents in general, were very dissatisfied with the "top-down directive from the district." Other chairpersons mentioned that parents have either mixed reactions or have said little about the policy.

Staff Development Related to Class Size Reduction

A broad majority of grade 1 or 2 teachers (14 out of 17) reported that no district staff development related to the policy's implementation occurred. Small numbers of teachers reported attendance at site-level informational staff meetings (without discussion), participation in site-level informational brainstorming sessions, informal assistance from their area assistant superintendent, and district-level inservices unrelated to the policy but helpful in the areas of second language, thematic instruction, whole language, learning styles, and special needs.

Nine of the 18 principals indicated that they had provided inservice on class size reduction; seven did not. Less than one out of three principals reported that appropriate site staff had attended district-level training.
Policy's Implementation Planning Process

Interview data revealed that site-level planning for the implementation of the class size reduction varied widely, ranging from no planning to full participation of the site's governance team, the school site council, and all staff. Half of the administrators said that planning involved every one on the staff; three indicated working primarily with teachers with some involvement from other groups. The two principals who reported no planning at their sites explained that either space was not a problem or that low enrollment would likely eliminate probable space constraints. Teacher and chairperson interviewees largely confirmed the various processes described by principals.

Policy's Decision-Making Process

Interviewee responses showed that sites also varied widely with respect to which individuals or groups ultimately made decisions related to the policy. Almost half of the administrators reported that decision making was reached through consensus following open discussion. Less frequently cited approaches included decision by the principal, after advice from other groups; governance team decision, following staff input; and decision based on suggestions from the site’s subcommittees and governance team. One principal noted that site teachers withdrew from the governance team process in response to the top-down nature of the policy directive. Other groups of interviewees again generally confirmed the various decision making processes described by site administrators.

Extent of Policy Implementation

When asked the extent to which the site's plan for class size reduction was implemented as intended, 70 percent of the interviewees overall indicated that their site plan was fully implemented (Figure 11). This view was shared by a broad majority of principals (83 percent), roughly three out of four teachers, and half of the chairpersons. "Not applicable" responses generally reflected space availability that eliminated the need for a plan.

![Figure 11. Extent to Which Policy Has Been Implemented, As Reported by Principals, Teachers, and Chairpersons](image)
Overall Policy Appraisal

Positive appraisals outweighed more negative assessment of class size reduction among all interviewed groups. Many of the 70 percent of first- and second-grade teachers who gave a positive overall appraisal reiterated numerous already-mentioned positive impacts on their classrooms. A small number of teachers additionally cited more expedient parent feedback and spending less personal money on supplies given fewer students. On the other hand, teachers again noted overcrowded kindergarten classes — a problem ultimately inherited by first grade teachers in terms of less prepared students — and the loss of support services. A large majority of teachers at other grade levels (15 out of 19) and 11 of 18 chairpersons also gave a positive overall appraisal. Their assessment of the advantages and disadvantages of the policy largely paralleled responses to earlier interview questions.

Suggestions for Policy Revision

Interviewees were asked to suggest changes in the class size reduction policy that would improve its planning, communication processes, decision making, and implementation. Roughly 40 percent of the teachers and chairpersons indicated that no change was necessary; only 4 of the 18 principals agreed with that assessment.

Specific recommendations for improving the process included more broad-based involvement in the development of district policy, closer communication between the central office and sites, greater central office assistance in planning and decision making, greater sensitivity to the complexity of unique school communities, more site flexibility in implementing the policy, more planning time, increased funding and assistance with facilities, clearer guidelines with respect to the site's role in decision making, better planning to protect key facilities, and greater recognition of exemplary sites and teachers.

Expanding Implementation of the Policy

Almost all of the interviewees favored expansion of the implementation of the class size reduction policy, particularly if it did not require them to make undesirable trade-offs. Most of them recommended a number of changes that should precede such expansion which will ensure (1) adequate facilities and support, (2) "revenue neutral" expansion, (3) salary increases for teachers and other staff members, and (4) broader involvement in decision making.

A number of interviewees noted concern over the potential loss of district credibility if expansion is not continued, particularly at grades 3-6. Specific recommendations included (1) a limited expansion of the implementation of the policy to one grade level at a time, and (2) expansion to grade 3 before conducting another review of the policy's implementation. Some interviewees also expressed the need to limit creation of more combination grade classrooms — an opinion which raises questions about the extent to which sites value developmental learning. However, others (primarily principals) suggested that the developmental learning philosophy, and more developmental combination classes, be expanded to upper grade levels.

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When asked to identify specific changes related to personnel, programs, and facilities that should precede further expansion, interviewee groups indicated a need for more aide time and additional classified staff, reinstatement of programs that were eliminated or cut back, and more classrooms or upgraded support facilities including playground space, bathrooms, office space, and parking. Concerns over facilities (or the lack thereof) reiterate the diversity in impact among district sites: many have room for further expansion in their physical plants, while many do not. The facility issue also suggests the domino effect that occurred at some schools where facility changes led to undesirable revisions in school programs and activities.

When asked to recommend specific changes related to site budgets and the utilization of funds to expand class size reduction, almost all interviewees stressed the need for additional funds and for greater site flexibility in expending these funds. Specifically cited was funding for new classroom facilities, classroom and guidance aides, staff development, classroom custodial support and supplies, developmental materials, and equipment. Almost all interviewees predicted an adverse impact on the total school program if sites were required to use existing budgets to support further class size reductions.

Final Reflections

Interviewees were given an opportunity to offer culminating observations about class size reduction; roughly three out of four principals and two out of three first- and second-grade teachers responded. Most comments reflected opinions provided in previous questions. Principals' comments, for example, suggested that the policy was "a step in the right direction;" that additional resources are needed before expansion of the implementation of the policy should be considered; that parents and teachers should be involved in all aspects of planning, decision making, and implementation processes; that the district should conduct a follow-up study to determine the effectiveness of the implementation of the policy; and that the district should seek legislative support for class size reduction.

Teachers additionally noted that, while class size reduction is "on the right track," it should be expanded slowly and with greater input from teachers and parents. A number of teachers called for salary increases and additional instructional supplies before expanding the implementation of the policy. One teacher reported that she preferred 30 students and a classroom aide to 25 students and no aide. Another said that the district should "follow through" with expansion to other grades to disprove perceptions that the policy was simply a "fad."
Suggestions for Class Size Reduction Assessment

Most frequently recommended among options for future assessments of the class size reduction policy was the use of attitudinal surveys/questionnaires (Figure 12). Other alternatives included the use of report card grades or portfolios, traditional standardized testing, and classroom observations. Roughly ten percent also indicated that the policy should be assessed over a long period of time.

![Bar chart showing suggested approaches to class size reduction assessment](chart).

Figure 12. Suggested Approaches to Class Size Reduction Assessment, As Reported by Principals, Teachers, and Chairpersons

Summary of Interview Findings

Drawing on the data provided by interviewees, the findings indicate that:

1. In general, positive appraisals outweighed more negative assessment of class size reduction among all interviewed groups. First- and second-grade teachers, in particular, are very satisfied with the initial effects of class size reduction, citing many benefits to students, teachers, and parents.
2. Within the school community, general satisfaction with the policy's impact is mitigated by undesirable schoolwide ramifications.

3. Benefits from reduced class size that were reported by classrooms with first- and second-grade students include (a) improved classroom management, (b) more individual and small group instruction, (c) increased contact with parents, (d) more team teaching and collaboration, (e) an expansion of developmental learning and combination classes, (f) an increased use of more diverse instructional methods, and (g) higher morale among first- and second-grade teachers.

4. Trade-offs to the advantages generated by class size reduction include (a) an increase in class size at other grade levels; (b) a decrease in support services to students at other grade levels; (c) the reorganization of sheltered and bilingual classrooms — and continual reorganization in general — to maintain a 25.5:1 ratio in first- and second-grade classrooms; (d) the reduction or elimination of valued programs and support services; (e) a reduction in key support personnel; (f) the loss of space used for support functions (e.g., libraries, labs, pullout rooms, auditoriums, nurses' rooms); (g) the loss of scheduling flexibility; and (h) uncertainty and frustration among teachers at other grade levels.

5. The policy has dissimilarly impacted schools, depending largely on the availability of adequate facilities and financial resources. The unavailability of such facilities and resources has, in turn, necessitated undesirable changes in personnel, programs, and activities.

6. Staff development relevant to class size reduction has not been uniformly available to sites during the initial phase of policy implementation.

7. The extent to which reduced class size is responsible for many changes in classroom structure and practice is somewhat unclear.

8. All interviewed groups expressed criticism for the district's "top-down" approach with respect to the policy's decision-making and implementation processes — particularly given the district's recent efforts to promote shared and site-based decision making.

9. Schools generally favor expansion of class size reduction — but only if such a decision reflects the broad participation of key stakeholder groups and if additional facilities and funds are ensured.
III. CLASSROOM OBSERVATION DATA
(The classroom observation instrument is provided in Appendix I.)

Classroom Environment

Figure 13 shows the grade levels and language programs of the 36 classrooms where observations took place. A majority of observations were conducted in straight grade 1 and grade 2 general English classrooms. The number of enrolled students in the 36 classrooms ranged from 21 to 29, with an average of 25; the number of students present during the observations ranged from 14 to 29, with an average of 23.

In 21 of the 36 classrooms, classroom seating was configured in table groups with an average of five students at each table. In a majority of the other classrooms (n=10), students were seated at tables in a combination of small and large clusters. The teacher was supported by an aide, parent volunteer, or student teacher in 30 classrooms; two classrooms implemented a team teaching approach.
Table 5 provides an overview of other aspects of the physical environment of the classrooms, particularly the use of space. The data showed that almost all observations took place in classrooms that were originally designed for classroom use (n=35); most also were judged to have adequate spacing to permit easy movement (n=33). A broad majority of the classrooms incorporated a rug area, one or more activity centers, and a library corner. Most classrooms also exhibited student work and accomplishments and provided displays that provoked interest and curiosity.

### Table 5

**FEATURES OF CLASSROOM ENVIRONMENT IN OBSERVED CLASSROOMS**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Number of classrooms</th>
<th>Feature</th>
<th>Number of classrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room originally designed for classroom use</td>
<td>35</td>
<td>Rug area</td>
<td>35</td>
</tr>
<tr>
<td>Adequate spacing between desks and tables to permit easy movement/access</td>
<td>33</td>
<td>Activity center(s)</td>
<td>26</td>
</tr>
<tr>
<td>Displays of student work and positive accomplishment</td>
<td>30</td>
<td>Library corner</td>
<td>25</td>
</tr>
<tr>
<td>Displays provoking interest/curiosity</td>
<td>29</td>
<td>Quiet corner for independent work</td>
<td>16</td>
</tr>
</tbody>
</table>

**Teacher-Student Interaction**

Figures 14-19 graphically summarize interactions between the teaching/aide staff and students in the 36 classrooms. The observers reported that (1) a broad majority of students was actively engaged in learning; (2) 3-5 interruptions for disciplinary or management reasons occurred, on average, during the 45 minute observations; (3) students were given adequate supportive feedback and (4) timely attention when requested; (5) teachers and/or aides interacted with most students at some point during the observation; and (6) classroom management with regard to discipline was generally very good.
All students involved
All but 1-2
All but 3-4
All but 5
6 or more not involved

Figure 14. Level of Active Involvement in Learning in Observed Classrooms

No interruptions
1-2 interruptions
3-5 interruptions
6-8 interruptions
More than 8 interruptions

Figure 15. Level of Classroom Interruption in Observed Classrooms

Very often
Often
Occasionally
Seldom
Could not determine

Figure 16. Level of Supportive Feedback from Teacher/Aide in Observed Classrooms
Very often
Often
Occasionally
Seldom
Could not determine

Figure 17. Level of Timely Response from Teacher/Aide in Observed Classrooms

All students
Most students
About half the students
Just a few students

Figure 18. Level of Interaction Between Teacher/Aide and Students in Observed Classrooms

Excellent management
Very good management
Good management
Fair management
Poor management

Figure 19. Perceptions of Classroom Management in Observed Classrooms
Table 6 summarizes the various kinds of teacher/student activities that were observed during the 45-minute language arts period. Most classrooms exhibited a combination of whole group instruction, small group instruction, and independent learning. Reading, writing, and oral language activities were integrated in roughly two-thirds of the classrooms; language arts instruction was integrated with another subject area in one in every three classrooms. Activities related to cooperative grouping, activity center learning, long-term projects, manipulatives, audio/visual technology, higher-level thinking strategies, and individual learning styles were also reported, but in less than one-third of the observed classrooms.

Where observed, manipulatives included games, math supplies, counters, scales, weights, shapes, dolls, puppets, scissors, glue, playdough, feathers, letter blocks, sentence strips, dominoes, play money, puzzles, rulers, and assorted center activity materials. Audio/visual technology in evidence consisted of a record player, TV, VCR, CD player, story on tape, overhead, and word processor/computer. Paper and pencil activities were evidenced with artwork, spelling worksheets, journal writing, sentence completion worksheets, math worksheets, "turkey" booklets, constructing sentences, writing thank you letters, language arts workbooks, copying sentences from board, and storywriting.

The observers noted evidence of strategies to encourage higher-order thinking skills in 10 classrooms. These techniques were described as sequencing, brainstorming, drawing conclusions, deducting, categorizing, ranking, developing ranges, comparing, and contrasting.

Adaptations to various learning styles were noted in seven classrooms, such as activity centers which allowed audio or visual selection, a "self-set" work pace, and individual work space. Accommodations to special needs populations were also noted in one-third of the classrooms, including the use of resource specialists, one-on-one tutoring, small group instruction, and the use of various learning aids.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Number of classrooms</th>
<th>Activity</th>
<th>Number of classrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole group instruction</td>
<td>30</td>
<td>Activity center instruction/learning</td>
<td>14</td>
</tr>
<tr>
<td>Small group instruction</td>
<td>24</td>
<td>Real world application of lessons</td>
<td>12</td>
</tr>
<tr>
<td>Independent learning</td>
<td>20</td>
<td>Long-term project/sustained work</td>
<td>9</td>
</tr>
<tr>
<td>Pairs or peer tutoring/learning</td>
<td>8</td>
<td>Cooperative group activity(ies)</td>
<td>8</td>
</tr>
<tr>
<td>Cross-age tutoring</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing activities</td>
<td>26</td>
<td>Teacher demonstration/modeling</td>
<td>25</td>
</tr>
<tr>
<td>Reading activities</td>
<td>24</td>
<td>Teacher read-aloud</td>
<td>17</td>
</tr>
<tr>
<td>Oral language activities</td>
<td>21</td>
<td>Use of manipulatives</td>
<td>13</td>
</tr>
<tr>
<td>Integrated language arts instruction</td>
<td>21</td>
<td>Use of audio/visual technology</td>
<td>12</td>
</tr>
<tr>
<td>Language arts instruction integrated with another subject area</td>
<td>12</td>
<td>Use of paper/pencil materials</td>
<td>21</td>
</tr>
<tr>
<td>Use of strategies which encourage higher-level thinking skills</td>
<td>10</td>
<td>Accommodation to special needs population</td>
<td>12</td>
</tr>
<tr>
<td>Use of strategies which consider individual learning styles</td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Very little assessment activity was observed during the 45-minute observation period, and the observers' intent to be as unobtrusive as possible limited their ability to ascertain assessment techniques being used in the classroom. However, where an assessment strategy could be ascertained, portfolios were evidenced most frequently (Table 7).

### Table 7

**ASSESSMENT STRATEGIES IDENTIFIED IN OBSERVED CLASSROOMS**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Number of classrooms</th>
<th>Strategy</th>
<th>Number of classrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance-based assessment</td>
<td>10</td>
<td>Traditional testing techniques</td>
<td>1</td>
</tr>
<tr>
<td>Performance task</td>
<td>2</td>
<td>Teacher-recorded observations</td>
<td>3</td>
</tr>
<tr>
<td>Portfolios</td>
<td>8</td>
<td>Demonstration/exhibition</td>
<td>1</td>
</tr>
</tbody>
</table>

**Use of Supplemental Staff and Volunteers**

The observers reported that, in classrooms where teachers were assisted by aides, parent volunteers, and student teachers, these adults were usually involved in small group and individual instruction. Table 8 shows that supplemental staff in a number of classrooms also assisted in materials preparation, grading papers, and whole group instruction.

### Table 8

**USE OF SUPPLEMENTAL STAFF OR VOLUNTEERS IN OBSERVED CLASSROOMS**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Number of classrooms</th>
<th>Activity</th>
<th>Number of classrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small group assistance</td>
<td>21</td>
<td>Grading papers</td>
<td>7</td>
</tr>
<tr>
<td>Individual (one-on-one) assistance</td>
<td>16</td>
<td>Activities taking person out of room</td>
<td>5</td>
</tr>
<tr>
<td>Materials preparation</td>
<td>10</td>
<td>Whole group assistance</td>
<td>4</td>
</tr>
</tbody>
</table>
Eight of the 36 teachers offered personal, written comments following the observation (see Appendix J). The teachers noted that the class size reduction policy has enabled them to (1) provide more individual attention, (2) better serve students with learning disabilities, (3) spend more time to assess needs and skills, (4) offer more hands-on activities, (5) provide more individual enrichment for the more accomplished and remediation for the less ready, and (6) feel less fatigued. On the other hand, they also mentioned that the policy has created (1) less space and more noise for classrooms at other grade levels, (2) excessive pressure for increased achievement at grades 1 and 2, and (3) lack of sufficient materials for all classrooms. Teachers also commented on various constraints to effective implementation of the policy including (1) ever-changing enrollments, (2) lack of adequate parental support, (3) socio-economic burdens that students bring to the classroom, and (4) the compelling and time-consuming requirements of special needs populations. The teachers' "wish lists" focused on increased para-professional classroom support and improved working conditions.

Summary of Classroom Observation Findings

In reviewing the classroom observation data, it is important to note the limited nature of the brief 45-minute observations. The tendency to depart from customary behavior to improve one's presentation while being observed — referred to in the literature as the Hawthorne Effect — should also be noted. In addition, the absence of evidence of a particular aspect of classroom culture — assessment strategies, for example — does not indicate that it is not being addressed. Based on what was observed in the 45-minute literacy period, the findings indicated that, in a broad majority of the 36 classrooms:

1. The classroom teacher was supported by another adult — either an aide, parent volunteer, or student teacher — in the classroom (n=30).

2. The classrooms were originally designed for classroom use (n=35) and provided adequate space to permit easy movement and access (n=33).

3. Students were actively engaged in learning (n=34) and were given adequate (n=31) and timely assistance (n=31).

4. Disciplinary management was "very good" to "excellent" (n=26).

5. The literacy period was comprised of a combination of whole group instruction, small group instruction, and independent learning.

6. Strategies to promote higher-level thinking skills were not evidenced (n=26).
OVERALL SUMMARY OF FINDINGS

Results of the review of the initial implementation of the class size reduction policy (Phase I) suggest that:

1. Positive appraisals outweigh more negative assessment of class size reduction among all stakeholder groups. A majority of principals, teachers, chairpersons, and parents think that the policy has had a positive impact on teaching and learning opportunities in grades 1 and 2. (Source: Interview and survey data)

2. First- and second-grade teachers, in particular, are very satisfied with the advantages that class size reduction has afforded their classrooms. Observational data from 36 first- and second-grade classrooms indicated that students were actively engaged in learning and that disciplinary management was very effective. (Source: Survey, interview, and observation data)

3. Site staff believe that reduced class size in grades 1 and 2 has resulted in (a) improved classroom management, (b) more individual and small group instruction, (c) increased contact with parents, (d) more team teaching and collaboration, (e) an expansion of developmental learning and combination classes, (f) an increased use of more diverse instructional methods, and (g) higher morale among first- and second-grade teachers. (Source: Survey and interview data)

4. Roughly two out of three teachers and principals believe that class size reduction is likely to improve student mastery of reading achievement by grade 3. Eighty-five percent of parent respondents also believe that the policy will help their students' reading ability.

5. Among study subjects who expressed dissatisfaction with various aspects of the class size reduction policy, reasons included (a) an increase in class size at other grade levels; (b) a decrease in support services to students at other grade levels; (c) inadequate supplies and equipment; (d) the reorganization of sheltered and bilingual classrooms, and continual reorganization in general, to maintain a 25.5:1 ratio in first- and second-grade classrooms; (e) the reduction or elimination of valued programs and support services; (f) a reduction in key support personnel; (g) the loss of space used for support functions (e.g., libraries, labs, pullout rooms, auditoriums, nurses' rooms); (h) the loss of scheduling flexibility; and (i) uncertainty and frustration among teachers at other grade levels. (Source: Survey and interview data)

6. The policy has dissimilarly impacted schools, depending largely on the availability of adequate facilities and financial resources. The unavailability of such facilities and resources has, in turn, necessitated undesirable changes in personnel, programs, and activities. (Source: Interview data)

7. One out of three chairpersons and slightly less than half the principal respondents support the trade-off between the benefits of class size reduction at grades 1 and 2 and the loss of space and services at their sites. (Source: Survey data)
8. Roughly two-thirds of the principals indicated that, given present facilities and budget constraints, their sites could not accommodate expansion of the implementation of the class size reduction policy to additional grade levels. (Source: Survey data)

9. Roughly two out of three parent respondents reported knowledge of the policy; one out of four indicated awareness that parents had been involved in planning for class size reduction at their site. (Source: Survey data)

10. A majority of teachers and chairpersons reported that the planning process to reduce class size has been effective at their site. However, slightly more than half of the teacher subjects reported either little or no involvement in this process. (Source: Survey data)

11. Staff development relevant to class size reduction has not been uniformly provided by the sites during the initial phase of policy implementation. Where staff development has been available, perception about its effectiveness is largely favorable. (Source: Survey and interview data)

12. All interviewed groups are critical of the district's "top-down" approach with respect to the decision-making and implementation processes related to the policy — particularly given the district's recent efforts to promote shared and site-based decision making. (Source: Survey and interview data)

13. Schools generally favor expansion of class size reduction — but only if such a decision reflects the broad participation of key stakeholder groups and if additional facilities and funds are ensured. (Source: Survey and interview data)

CONCLUSIONS

Study data demonstrate that perceptions about class size reduction are largely positive. These perceptions are likely a product of both realized effects of the policy on teaching and learning during these first few months of implementation, as well as beliefs that individuals held prior to the policy's initial implementation given little time to factually assess its impact. Study subjects express satisfaction, in general, with the advantages of reduced class size in grades 1 and 2 and — all else being equal — would like to see its expansion to other grade levels. The initial implementation, however, has not been accomplished without considerable cost at both operational and attitudinal levels. While subjects, overall, suggest that the benefits outweigh the costs, a significant level of concern among key stakeholders invites serious consideration of strategies to minimize these costs if the policy is to be more fully embraced.

Of operational concern is a variety of schoolwide ramifications that have impacted space, organization, equipment and supplies, personnel, services, and programs. With additional financial assistance, the district can likely mitigate these considerable obstacles to facilitate a more effective implementation of reduced class size at grades 1 and 2. Expansion of the policy's implementation to other grade levels, however, will require an even larger investment of district resources — resources that must be assured before stakeholders (particularly those at highly impacted sites) will support such expansion. As evidenced in the
literature, implementation of class size reduction is expensive, particularly a reduction that is likely to benefit student achievement to a reliably significant degree. Unfortunately, the policy coexists with diminishing state and district resources.

Just as salient are perceptions that the policy's implementation followed a decision-making process which excluded the involvement of key stakeholders, namely the site communities. This approach rendered the recent emphasis on shared and site-based decision making, at very least, difficult to understand. The resulting skepticism among site staff compounds operational hardships that together restrain full acceptance of the policy. Study subjects indicate that their acceptance of expanding class size reduction will be based, in part, on their participation in that decision.

Apart from perceptions and acceptance of the policy by stakeholder groups is the issue with respect to what reduced class size can achieve and what it perhaps cannot. The policy will likely be judged successful if the district's measures focus on increased interest and energy among teachers and increased satisfaction among parents. However, cumulative research data suggest that class size must be very small before any significant increase in student achievement will appear, and that smaller class size does not guarantee that teachers adapt their teaching practices to take advantage of the smaller classes. (The reader is reminded to review the Summary of Relevant Literature provided earlier in the report.) Whereas dramatically reducing class size is probably unfeasible given available resources, strategies to improve teacher competence may offer more affordable options.

Discussions regarding expansion of the implementatation of the class size reduction policy will undoubtedly focus on how to address the undesirable ramifications of the policy that this initial phase has manifested, how to proceed in the decision-making process with an appreciation of the perspectives of key stakeholder groups, and how to define the scope of what the policy is intended to achieve. Given a reasoned response to these paramount issues, the policy is likely to enjoy broad acceptance and effectiveness.

**RECOMMENDATIONS**

Based on the review's findings, it is recommended that the district:

1. Provide sufficient district support to address schoolwide ramifications of implementing class size reduction at grades 1 and 2. Ensure that any further expansion of the implementation of the policy provides such support.

   **Rationale:** Insufficient facilities and resources have necessitated a number of undesirable changes in personnel, programs, and activities at some sites. These inadequacies must be addressed before effective class size reduction at grades 1 and 2 can be fully realized and before the policy should be expanded to other grade levels.

2. Consider unique site characteristics in the refinement and application of the class size reduction policy and its potential expansion.
Rationale: Interview and survey data revealed that sites have been dissimilarly impacted by class size reduction. The availability of suitable space and the presence of specialized programs (e.g., bilingual instruction) are inextricably related to the extent to which the policy is being successfully implemented at individual sites. Clearly, where the policy has negatively impacted space and programs, its acceptance has been compromised.

3. Ensure a sufficient level of district staff development to promote instructional competence and to explore the particular advantages of class size reduction.

Rationale: Reduced class size provides a wide variety of teaching and learning opportunities — the advantages of developmental learning, combination class structures, and strategies associated with higher order thinking skills, in particular. Since study data indicated that staff development efforts at individual sites have been somewhat uneven, district support to assist schools in disseminating relevant information is both practical and judicious. Relevant literature emphasizes that ongoing teacher training lies at the heart of improved student achievement — with or without smaller classes.

4. Include stakeholder groups (site administrators, teachers, and parents) in further decisions regarding class size reduction.

Rationale: Success of the policy depends, in large part, on its broad acceptance among stakeholder groups, namely the site communities. The lack of such involvement in early phases of the policy's conceptualization has resulted in disenfranchisement, in general, and in cynicism about the district's commitment to shared decision making, in particular.

5. Define what specific benefits to the quality of public education the district intends to realize as a result of class size reduction.

Rationale: The effectiveness of reducing class size continues to be controversial within the education research community. Realistic benefits of the policy should be articulated to bring expectations into clearer focus.

Given the inconclusive nature of research which has attempted to correlate smaller class size and improved student achievement, the district should continue to explore relevant school reform literature.

6. Conduct follow-up evaluation of the impact of the class size reduction policy, for which elements of this review will provide baseline data, after two years of implementation (to be completed Fall 1996).

Rationale: This review of the initial phase of the implementation of the policy is extremely limited in the degree to which it can adequately assess the impact of the policy. It provides very early perceptions about both costs and benefits of reduced class size and about the processes that brought the policy thus far. It does not provide an assessment of a complex range of effects — student achievement foremost among them — that only a long-term study permits.
BIBLIOGRAPHY


APPENDIX A

ERS OVERVIEW OF CLASS SIZE REDUCTION STUDIES
ERS Overview of Research

Despite substantial efforts to establish the link, the educational benefits that would offset the higher costs of smaller classes have been difficult to prove. In 1980, the Educational Research Service (ERS) published a review of research on the effects of class size on achievement in elementary and secondary schools. The review essentially concluded that research on class size and achievement was inconclusive. The 1986 ERS Research Brief, which summarized the results of a cluster analysis designed to identify and summarize all applicable research available on the effects of class size, indicated that:

1. The grades that show the most promising effects of small classes on pupil learning are the early primary grades (the studies were somewhat evenly divided among those that demonstrated increased achievement and those that did not).

2. Research shows a more modest relationship at the intermediate level (4-8) with 38 percent showing higher achievement in smaller classes.

3. Only 18.2 percent of the senior grade classes showed a relationship between class size and achievement.

4. In reading, 50 percent of the K-3 and 33 percent of the 4-8 classes found achievement greater in smaller classes than in larger.

5. In math, 35 percent of the K-3, 40 percent of the 4-8, and 0 percent of the 9-12 classes found achievement greater in smaller classes than in larger.

6. In language arts, 25 percent of the K-3, 14.3 percent of the 4-8, and 28.6 percent of the 9-12 classes found achievement greater in smaller classes than in larger.

7. In science, 14.3 percent of the 9-12 classes found achievement greater in smaller classes than in larger.

8. There is evidence that lower-achieving students in life and physical science do better in larger classes with a highly qualified teacher.

9. The limited research tends to indicate that students of lesser academic ability achieve more in smaller classes. The evidence is mixed concerning students of average or higher academic abilities.

10. Sixty-seven percent of the comparisons dealing with disadvantaged or ethnic students found that academic achievement of students was higher in smaller classes — 55 percent for K-3 and 80 percent for 4-9.
11. Where "small" meant 22 students or less, 71.4 percent of the studies found that students in the early primary grades, 50 percent for the intermediate grade studies, and 0 percent for the senior grade studies showed that students tended to learn more in smaller classes than in larger.

12. Sixty percent of the studies indicated that a majority of teachers favored smaller classes.

13. Forty percent of the studies found that teachers did not teach any differently in smaller classes than they had in larger classes.

14. In general, smaller classes appeared to promote the use of desirable teaching practices; however, smaller classes did not guarantee that teachers adapted their teaching practices to take advantage of the smaller classes.

15. In the cluster of student behavior and attitudes, 66.7 percent of the K-3 students favored small classes, while 33.3 percent of the intermediate students and 25 percent of the high school students had more positive attitudes in smaller classes.

16. In 70 percent of the national studies, teachers identified smaller class size as a contributor to high teacher morale, feelings of effectiveness, and more positive teacher attitudes.

17. Public opinion regarding class size from Gallup Polls Public Attitudes Toward Education during the 1970s ranked "size of school/classes" from fourth to seventh as a problem priority from a survey containing from 12 to 23 items. The percentage of respondents considering class size a significant problem ranged from five to ten percent.
APPENDIX B

TEACHER SURVEY
Dear Teacher:

The purpose of this survey is to gather information about the implementation of Phase I of the district's class size reduction policy. As you know, Phase I initiated class size reductions at grades one and two in all elementary schools this year. We are asking for your opinion in order to review the effectiveness of Phase I implementation.

Please use a number 2 pencil to fill in the bubbles on the answer sheet. Do not put your name on the survey or answer sheet. Your response will be handled confidentially.

In BOX 1 of the IDENTIFICATION area, write the number from below which indicates your role. Fill in the bubble under the number which is the same as the number in the box.

1 = classroom teacher  
2 = other (explain in white portion of the answer sheet)

In BOX 2, write the number from below which indicates the size of your school.

1 = under 500  
2 = 501-800  
3 = Over 801

In BOX 3, indicate how the class size reduction policy was implemented:

1 = Instituting smaller self-contained classes  
2 = Deployment of teachers or students for basic skills instruction  
3 = Both  
4 = Don't know

In BOX 4, indicate the grade level you teach.

1 = K  
2 = K-1  
3 = 1  
4 = 1-2  
5 = 2  
6 = 2-3  
7 = 3 or 3-4  
8 = 4 or 4-5  
9 = 5 or 5-6  
10 = other (explain)

Please complete the survey on the next page and return your answer sheet in the envelope provided to your school secretary by November 15, 1994. Thank you for your participation in this study.
Indicate your opinion on the following statements relating to the implementation of the Class Size Reduction Policy in grades 1 and 2 in the core subject areas at your school:

1. The planning process to reduce class size at grades 1 and 2 at my school has been...

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<tr>
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<th>Somewhat Effective</th>
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2. My participation in developing our site plan to reduce class size at grades 1 and 2 has been...

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<th>Moderate</th>
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3. Pupil-teacher ratio has been lowered in my classroom to 25.5 as a result of implementing the class size reduction plan.

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<tr>
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4. In preparation for reducing class size at grades 1 and 2, staff development at my school has been...

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5. The class size reduction is likely to improve student mastery of reading achievement by grade 3.

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6. Classroom instructional practices in grades 1 and 2 remain basically the same as before the class size reduction.

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7. The benefits of grades 1 and 2 class size reduction outweigh the loss of space and/or support services.

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8. The impact of the class size reduction on teaching and learning opportunities in grades other than 1 and 2 has been . . .

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9. The impact on existing site programs of reducing class size at grades 1 and 2 has been . . .

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Due to . . . .
(Select from the list below and write the number(s) on the white portion of your answer sheet.)

1. Loss of space (auditorium, prep, nurse)
2. Reallocation of personnel
3. Discomfort with teaming
4. Lack of adequate supplies/equipment for all classrooms
5. Inadequacies at upper-grade levels
6. Excessive pressure on teachers for improved student achievement
7. Disruption in routine site functions
8. Others

10. The impact of the class size reduction on teaching and learning opportunities in grades 1 and 2 has been . . .

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Due to . . . .
(Select from the list below and write the number(s) on the white portion of your answer sheet.)

1. Less classroom disruption
2. More supportive feedback from teacher
3. More corrective feedback from teacher
4. More timely response/assistance by teacher
5. More activity centers
6. More subject-integrated instruction
7. More time for special needs population (English-learners, spec ed, comp ed, GATE)
8. More time for portfolio work
9. More time for teacher-recorded observations
10. More teaming opportunities
11. More one-on-one interaction
12. Improved classroom management
13. More whole group instruction
14. More small group instruction
15. More cooperative group activities
16. Greater use of manipulatives
17. Greater use of audio/visual technology
18. Greater use of thinking/meaning-centered curriculum
19. Greater use of strategies to encourage higher-level thinking skills
20. Greater use of strategies which consider individual learning styles
21. Others

Please make any additional comments on the white space of your answer sheet.
APPENDIX C

PRINCIPAL SURVEY
Dear Principal:

The purpose of this survey is to gather information about the implementation of Phase I of the district's class size reduction policy. As you know, Phase I initiated class size reductions at grades one and two in all elementary schools this year. We are asking for your opinion in order to review the effectiveness of Phase I implementation.

Please use a number 2 pencil to fill in the bubbles on the answer sheet. Do not put your name on the survey or answer sheet. Your response will be handled confidentially.

In BOX 1 of the "IDENTIFICATION" area, write the number from below which indicates your role. Fill in the bubble under the number which is the same as the number in the box.

6 = principal 7 = other (explain on white portion of the answer sheet)

In BOX 2, indicate the size of your school.

1 = under 500 2 = 501-800 3 = Over 801

In BOX 3, indicate how the class size reduction policy was implemented:

1 = Instituting smaller self-contained classes
2 = Deployment of teachers or students for basic skills instruction
3 = Both

In BOX 4, indicate the number of teachers your site gained as a result of the class size reduction policy:

1 = none 2 = one 3 = two 4 = three 5 = four or more 6 = don't know

In BOX 5, indicate whether additional site funds have been reallocated to fund more classroom teachers for fall, 1994:

1 = yes 2 = no 3 = no funds available to reallocate

Please complete the survey on the next page and return it in the enclosed envelope to your school secretary by November 15, 1994. Thank you for your participation in this study.
Indicate your opinion on the following statements relating to the implementation of the Class Size Reduction Policy in grades 1 and 2 in the core subject areas at your school:

1. Classroom pupil-teacher ratio has been lowered in grades 1 and 2 as a result of implementing the class size reduction plan.

   5  4  3  2  1
   Strongly Agree  Agree  No Opinion  Disagree  Strongly Disagree

2. In preparation for reducing class size at grades 1 and 2, staff development at my school has been . . .

   5  4  3  2  1
   Very Effective  Effective  Somewhat Effective  Somewhat Ineffective  Ineffective or Non-existent

3. The class size reduction is likely to improve student mastery of reading achievement by grade 3.

   5  4  3  2  1
   Strongly Agree  Agree  No Opinion  Disagree  Strongly Disagree

4. Classroom instructional practices in grades 1 and 2 remain basically the same as before the class size reduction.

   5  4  3  2  1
   Strongly Agree  Agree  No Opinion  Disagree  Strongly Disagree

5. The benefits of grades 1 and 2 class size reduction outweigh the loss of space and/or support services.

   5  4  3  2  1
   Strongly Agree  Agree  No Opinion  Disagree  Strongly Disagree

6. The impact of the class size reduction on teaching and learning opportunities in grades other than 1 and 2 has been . . .

   5  4  3  2  1
   Very Positive  Positive  No Impact  Negative  Very Negative

7. Further class size reduction in additional grade levels could occur using existing space on our campus.

   5  4  3  2  1
   Strongly Agree  Agree  No Opinion  Disagree  Strongly Disagree
8. Choose the answer which best describes the impact of the class size reduction in grades 1 and 2 on non-resident (i.e., VEEP) enrollment:

1 = Unaffected by class size reduction
2 = Slightly decreased
3 = Decreased about one classroom
4 = Decreased more than one classroom

9. The impact on existing site programs of reducing class size at grades 1 and 2 has been .

Due to .

(Select from the list below and write the number(s) on the white portion of your answer sheet.)

1. Loss of space (auditorium, prep, nurse)
2. Reallocation of personnel
3. Discomfort with teaming
4. Lack of adequate supplies/equipment for all classrooms
5. Inadequacies at upper-grade levels
6. Excessive pressure on teachers for improved student achievement
7. Disruption in routine site functions
8. Others

10. The impact of the class size reduction on teaching and learning opportunities in grades 1 and 2 has been .

Due to .

(Select from the list below and write the number(s) on the white portion of your answer sheet.)

1. Less classroom disruption
2. More supportive feedback from teacher
3. More corrective feedback from teacher
4. More timely response/assistance by teacher
5. More activity centers
6. More subject-integrated instruction
7. More time for special needs population (English-learners, spec ed, comp ed, GATE)
8. More time for portfolio work
9. More time for teacher-recorded observations
10. More teaming opportunities
11. More one-on-one interaction
12. Improved classroom management
13. More whole group instruction
14. More small group instruction
15. More cooperative group activities
16. Greater use of manipulatives
17. Greater use of audio/visual technology
18. Greater use of thinking/meaning-centered curriculum
19. Greater use of strategies to encourage higher-level thinking skills
20. Greater use of strategies which consider individual learning styles
21. Others

Please make any additional comments on the white space of your answer sheet.
APPENDIX D

CHAIRPERSON SURVEY
Dear Chairperson:

The purpose of this survey is to gather information about the implementation of Phase I of the district's class size reduction policy. As you know, Phase I initiated class size reductions at grades one and two in all elementary schools this year. We are asking for your opinion in order to review the effectiveness of Phase I implementation.

Please use a number 2 pencil to fill in the bubbles on the answer sheet. Do not put your name on the survey or answer sheet. Your response will be handled confidentially.

In BOX 1 of the "IDENTIFICATION" area, write the number from below which indicates your role. Fill in the bubble under the number which is the same as the number in the box.

3 = governance team chair
4 = school site council chair
5 = other (explain in white portion of answer sheet)

In BOX 2, write the number from below which indicates the size of your school.

1 = under 500
2 = 501-800
3 = over 801

In BOX 3, indicate how the class size reduction policy was implemented:

1 = Instituting smaller self-contained classes
2 = Deployment of teachers or students for basic skills instruction
3 = Both
4 = Don't know

Please complete the survey on the next page and return your answer sheet in the envelope provided to your school secretary by November 15, 1994. Thank you for your participation in this study.
Indicate your opinion on the following statements relating to the implementation of the Class Size Reduction Policy in grades 1 and 2 in the core subject areas at your school:

1. The planning process to reduce class size at grades 1 and 2 at my school has been ...  
   - 5: Very Effective  - 4: Moderately Effective  - 3: Somewhat Effective  - 2: Not very Effective  - 1: Not at all Effective

2. My participation in developing our site plan to reduce class size at grades 1 and 2 has been ... 
   - 5: High  - 4: Moderately High  - 3: Moderate  - 2: Moderately Low  - 1: Low or None

3. Classroom pupil-teacher ratio has been lowered in grades 1 and 2 as a result of implementing the class size reduction plan. 
   - 5: Strongly Agree  - 4: Agree  - 3: No Opinion  - 2: Disagree  - 1: Strongly Disagree

4. In preparation for reducing class size at grades 1 and 2, staff development at my school has been ...  
   - 5: Very Effective  - 4: Somewhat Effective  - 3: Somewhat Ineffective  - 2: Ineffective or Non-existent

5. The class size reduction is likely to improve student mastery of reading achievement by grade 3. 
   - 5: Strongly Agree  - 4: Agree  - 3: No Opinion  - 2: Disagree  - 1: Strongly Disagree

6. Classroom instructional practices in grades 1 and 2 remain basically the same as before the class size reduction. 
   - 5: Strongly Agree  - 4: Agree  - 3: No Opinion  - 2: Disagree  - 1: Strongly Disagree

7. The benefits of grades 1 and 2 class size reduction outweigh the loss of space and/or support services. 
   - 5: Strongly Agree  - 4: Agree  - 3: No Opinion  - 2: Disagree  - 1: Strongly Disagree
8. The impact of the class size reduction on teaching and learning opportunities in grades other than 1 and 2 has been . . .

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9. The impact on existing site programs of reducing class size at grades 1 and 2 has been . . .

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<td></td>
<td>Negative</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Very Negative</td>
<td></td>
</tr>
</tbody>
</table>

Due to . . . .

(Select from the list below and write the number(s) on the white portion of your answer sheet.)

1. Loss of space (auditorium, prep, nurse)
2. Reallocation of personnel
3. Discomfort with teaming
4. Lack of adequate supplies/equipment for all classrooms
5. Inadequacies at upper-grade levels
6. Excessive pressure on teachers for improved student achievement
7. Disruption in routine site functions
8. Others

10. The impact of the class size reduction on teaching and learning opportunities in grades 1 and 2 has been . . .

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very</td>
<td>Positive</td>
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<td>No Impact</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Negative</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Very Negative</td>
<td></td>
</tr>
</tbody>
</table>

Due to . . . .

(Select from the list below and write the number(s) on the white portion of your answer sheet.)

1. Less classroom disruption
2. More supportive feedback from teacher
3. More corrective feedback from teacher
4. More timely response/assistance by teacher
5. More activity centers
6. More subject-integrated instruction
7. More time for special needs population (English-learners, spec ed, comp ed, GATE)
8. More time for portfolio work
9. More time for teacher-recorded observations
10. More teaming opportunities
11. More one-on-one interaction
12. Improved classroom management
13. More whole group instruction
14. More small group instruction
15. More cooperative group activities
16. Greater use of manipulatives
17. Greater use of audio/visual technology
18. Greater use of thinking/meaning-centered curriculum
19. Greater use of strategies to encourage higher-level thinking skills
20. Greater use of strategies which consider individual learning styles
21. Others

Please make any additional comments on the white space of your answer sheet.
APPENDIX E

PARENT SURVEY
Dear Parent:

Reductions in class size to 25.5 students in core subjects were begun this year in grade 1 and 2 classrooms at district elementary schools. We are asking for your opinion about class size reduction in your child's Grade 1 or Grade 2 classroom on this survey. Please circle one number for each of the following questions:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>2</th>
<th>Disagree</th>
<th>3</th>
<th>Don't Know</th>
<th>4</th>
<th>Agree</th>
<th>5</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I am aware that class size reduction to 25.5 students per class in Grades 1 and 2 has occurred at my child's school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Parents have been involved in planning the class size reduction at my child's school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>The pupil-teacher ratio in my child's classroom is improved this year because of the class size reduction.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I believe that reducing class size to 25.5 will make my child's teacher more effective.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>I believe that reducing class size to 25.5 will create more opportunities for my child to learn.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>I believe that reducing class size to 25.5 will help my child in reading.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>I believe that reducing class size to 25.5 will increase the teacher's contact with me about my child's progress.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>I believe that reducing class size to 25.5 will increase my satisfaction with the overall instructional program for my child.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I believe that instructional practices in my child's classroom will remain basically the same as before class size reduction to 25.5.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>I believe that reducing class size to 25.5 will have a negative impact on existing programs at my child's school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. An important effect of reducing class size in my child's classroom is: __________________________

12. A concern I have about the class size reduction plan at my child's school is: __________________________

My child is male ____/female ____ and attends ______________________ School.

He/She is:   African American ____ Asian ____ Filipino ____ Hispanic ____ Indochinese ____
Native American ____ Pacific Islander ____ White ____ Other ____

Thank you for completing this survey. Please return it in the enclosed envelope by November 15, 1994. No postage is needed.
STRATEGIES FOR REDUCING CLASS SIZE
By Respondent Group

<table>
<thead>
<tr>
<th>Implementation Strategy</th>
<th>Principals</th>
<th>Teachers</th>
<th>Chairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smaller Classes</td>
<td>56</td>
<td>425</td>
<td>52</td>
</tr>
<tr>
<td>Deployment of teachers</td>
<td>1</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>for Basic-Skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both</td>
<td>7</td>
<td>35</td>
<td>14</td>
</tr>
<tr>
<td>Don't know</td>
<td>1</td>
<td>24</td>
<td>5</td>
</tr>
</tbody>
</table>

PARENT RESPONSES BY SCHOOL ENROLLMENT SIZE

Statement 1: I am aware that class size reduction to 25.5 students per class in grades 1 and 2 has occurred at my child's school.

Statement 2: Parents have been involved in planning the class size reduction at my child's school.
Statement 3: The pupil-teacher ratio in my child's classroom is improved this year because of the class size reduction.

Statement 4: I believe that reducing class size to 25.5 will make my child's teacher more effective.

Statement 5: I believe that reducing class size to 25.5 will create more opportunities for my child to learn.

Statement 6: I believe that reducing class size to 25.5 will help my child in reading.
Statement 7: I believe that reducing class size to 25.5 will increase the teacher's contact with me about my child's progress.

Statement 8: I believe that reducing class size to 25.5 will increase my satisfaction with the overall instructional program for my child.

Statement 9: I believe that instructional practices in my child's classroom will remain basically the same as before reduced class.

Statement 10: I believe that reducing class size to 25.5 will have a negative impact on existing programs at my child's school.
PARENT RESPONSES BY ETHNICITY

Statement 1: Parent Awareness of Class Size Reduction.


Statement 3: Parent Opinion that the Pupil-Teacher Ratio is Improved.
Statement 4: Parent Belief About Increased Teacher Effectiveness.

Statement 5: Parent Belief About Increased Learning Opportunities.

Statement 6: Parent Belief About Improvement in Reading Achievement
Statement 7: Parent Belief About Increased Teacher Contact with Parent.

Statement 8: Parent Belief About Increased Satisfaction with the Overall Instructional Program.

Statement 9: Parent Belief That Instructional Practices Remain Basically the Same.
Parent Comments. In response to an open-ended question about positive effects of class size reduction, 857 parents (66 percent) made comments. These comments fell into 12 broad categories with respect to impact. Some parent comments were coded as belonging to multiple categories; therefore, the total number of comments (881) is greater than the number of respondents.
Parent concerns in response to an open-ended survey question about the negative effects of class size reduction fell into 14 broad categories. Slightly more than 40 percent of parent respondents identified such concerns.
Teacher Survey

Teacher Survey Responses

Teacher survey statements:

1. The planning process to reduce class size at grades 1 and 2 at my school has been...
2. My participation in developing our site plan to reduce class size at grades 1 and 2 has been...
3. Pupil-teacher ratio has been lowered in my classroom to 25.5 as a result of implementing the class size reduction plan.
4. In preparation for reducing class size at grades 1 and 2, staff development at my school has been...
5. The class size reduction is likely to improve student mastery of reading achievement by grade 3.
6. Classroom instructional practices in grades 1 and 2 remain basically the same as before the class size reduction.
7. The benefits of grades 1 and 2 class size reduction outweigh the loss of space and/or support services.
8. The impact of the class size reduction on teaching and learning opportunities in grades other than 1 and 2 has been...
9. The impact on existing site programs of reducing class size at grades 1 and 2 has been...
10. The impact of the class size reduction on teaching and learning opportunities in grades 1 and 2 has been...
Teacher Survey Responses By Grade Level

Statement 1: The planning process to reduce class size at grades 1 and 2 at my school has been...

Statement 2: My participation in developing our site plan to reduce class size at grades 1 and 2 has been...

Statement 3: Pupil-teacher ratio has been lowered in my classroom to 25.5 as a result of implementing the class size reduction plan.

Statement 4: In preparation for reducing class size at grades 1 and 2, staff development at my school has been...
Statement 5: The class size reduction is likely to improve student mastery of reading achievement by grade 3.

Statement 6: Classroom instructional practices in grades 1 and 2 remain basically the same as before the class size reduction.

Statement 7: The benefits of grades 1 and 2 class size reduction outweigh the loss of space and/or support services.

Statement 8: The impact of the class size reduction on teaching and learning opportunities in grades other than 1 and 2 has been...
**Statement 9**: The impact on existing site programs of reducing class size at grades 1 and 2 has been...

**Statement 10**: The impact of the class size reduction on teaching and learning opportunities in grades 1 and 2 has been...

### TEACHER IDENTIFIED IMPACTS ON EXISTING SITE PROGRAMS
**By Grade Level**

<table>
<thead>
<tr>
<th>Impact</th>
<th>Total (n=497)</th>
<th>Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Gr.K/1,2/3 (n=61) %</td>
</tr>
<tr>
<td>Loss of space</td>
<td>92</td>
<td>18.0</td>
</tr>
<tr>
<td>Reallocation of personnel</td>
<td>97</td>
<td>19.7</td>
</tr>
<tr>
<td>Discomfort with teaming</td>
<td>17</td>
<td>1.6</td>
</tr>
<tr>
<td>Lack of supplies/equipment</td>
<td>88</td>
<td>16.4</td>
</tr>
<tr>
<td>Inadequacies at upper grades</td>
<td>88</td>
<td>18.0</td>
</tr>
<tr>
<td>Excessive pressure on teachers for improved student achievement</td>
<td>70</td>
<td>9.8</td>
</tr>
<tr>
<td>Disruption in routine site functions</td>
<td>43</td>
<td>6.6</td>
</tr>
</tbody>
</table>
### TEACHER IDENTIFIED IMPACTS ON TEACHING AND LEARNING OPPORTUNITIES AT GRADES 1 AND 2

<table>
<thead>
<tr>
<th>Impact</th>
<th>Total (n=497) n</th>
<th>Grade Level</th>
<th>Gr. K/1,2/3 (n=61) %</th>
<th>Gr. 1&amp;2 (n=354) %</th>
<th>Gr. K,3-6 (n=75) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Less classroom disruption</td>
<td>167</td>
<td></td>
<td>32.8</td>
<td>35.9</td>
<td>26.7</td>
</tr>
<tr>
<td>2. More supportive feedback from teacher</td>
<td>221</td>
<td></td>
<td>49.2</td>
<td>47.5</td>
<td>30.7</td>
</tr>
<tr>
<td>3. More corrective feedback from teacher</td>
<td>197</td>
<td></td>
<td>39.3</td>
<td>43.5</td>
<td>25.3</td>
</tr>
<tr>
<td>4. More timely response/assistance by teacher</td>
<td>253</td>
<td></td>
<td>55.7</td>
<td>54.2</td>
<td>36.0</td>
</tr>
<tr>
<td>5. More activity centers</td>
<td>148</td>
<td></td>
<td>26.2</td>
<td>33.6</td>
<td>17.3</td>
</tr>
<tr>
<td>6. More subject-integrated instruction</td>
<td>111</td>
<td></td>
<td>24.6</td>
<td>22.9</td>
<td>20.0</td>
</tr>
<tr>
<td>7. More time for special needs population</td>
<td>173</td>
<td></td>
<td>31.1</td>
<td>37.3</td>
<td>29.3</td>
</tr>
<tr>
<td>8. More time for portfolio work</td>
<td>119</td>
<td></td>
<td>21.3</td>
<td>26.3</td>
<td>17.3</td>
</tr>
<tr>
<td>9. More time for teacher-recorded observations</td>
<td>150</td>
<td></td>
<td>23.0</td>
<td>33.9</td>
<td>21.3</td>
</tr>
<tr>
<td>10. More teaming opportunities</td>
<td>95</td>
<td></td>
<td>19.7</td>
<td>19.2</td>
<td>20.0</td>
</tr>
<tr>
<td>11. More one-on-one interaction</td>
<td>293</td>
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<td>50.8</td>
<td>64.1</td>
<td>46.7</td>
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<tr>
<td>12. Improved classroom management</td>
<td>231</td>
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<td>37.7</td>
<td>51.1</td>
<td>36.0</td>
</tr>
<tr>
<td>13. More whole group instruction</td>
<td>108</td>
<td></td>
<td>18.0</td>
<td>24.3</td>
<td>14.7</td>
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<tr>
<td>14. More small group instruction</td>
<td>212</td>
<td></td>
<td>27.9</td>
<td>48.9</td>
<td>29.3</td>
</tr>
<tr>
<td>15. More cooperative group activities</td>
<td>162</td>
<td></td>
<td>26.2</td>
<td>37.3</td>
<td>18.7</td>
</tr>
<tr>
<td>16. Greater use of manipulatives</td>
<td>198</td>
<td></td>
<td>39.3</td>
<td>43.2</td>
<td>28.0</td>
</tr>
<tr>
<td>17. Greater use of audio/visual technology</td>
<td>61</td>
<td></td>
<td>8.2</td>
<td>14.1</td>
<td>8.0</td>
</tr>
<tr>
<td>18. Greater use of thinking/meaning-centered curriculum</td>
<td>121</td>
<td></td>
<td>26.2</td>
<td>27.1</td>
<td>12.0</td>
</tr>
<tr>
<td>19. Greater use of strategies to encourage high-level thinking skills</td>
<td>153</td>
<td></td>
<td>26.2</td>
<td>33.9</td>
<td>22.7</td>
</tr>
<tr>
<td>20. Greater use of strategies which consider individual learning styles</td>
<td>200</td>
<td></td>
<td>37.7</td>
<td>44.9</td>
<td>24.0</td>
</tr>
</tbody>
</table>
The comments of teachers who responded to the "other" category, with respect to impacts on existing site programs, were coded into nine additional categories.

### Teacher Identified Impacts on Existing Site Programs

- **Negative effect on other grades/programs/aides:** 0.2
- **Reorganizing effect on space/funding/staff:** 4.0
- **Supportive:** 2.8
- **Teacher/class restructuring:** 2.2
- **Negative effect on attitude/staff/work:** 1.2
- **None/no comment:** 0.8
- **Other:** 0.8
- **Effect on child's attitude:** 0.4
- **Ratio should be 25 or less:** 0.4

Percentage of Teachers

Teacher Identified Impacts on Existing Site Programs
Teacher responses to the open-ended "other" option of statement 10 were assigned to one of 16 categories.

Percentage of Teachers

Teacher Identified Impacts on Teaching and Learning Opportunities in Grades 1 and 2

11.3
10.0
1.2
1.4
1.4
1.0
1.8
1.2
1.0
1.0
1.0
0.8
0.4
Chairperson Survey

Chairperson Survey Responses

Chairperson survey statements:

1. The planning process to reduce class size at grades 1 and 2 at my school has been...
2. My participation in developing our site plan to reduce class size at grades 1 and 2 has been...
3. Classroom pupil-teacher ratio has been lowered in grades 1 and 2 as a result of implementing the class size reduction plan.
4. In preparation for reducing class size at grades 1 and 2, staff development at my school has been...
5. The class size reduction is likely to improve student mastery of reading achievement by grade 3.
6. Classroom instructional practices in grades 1 and 2 remain basically the same as before the class size reduction.
7. The benefits of grades 1 and 2 class size reduction outweigh the loss of space and/or support services.
8. The impact of the class size reduction on teaching and learning opportunities in grades other than 1 and 2 has been...
9. The impact on existing site programs of reducing class size at grades 1 and 2 has been...
10. The impact of the class size reduction on teaching and learning opportunities in grades 1 and 2 has been...
Question 1: The planning process to reduce class size at grades 1 and 2 at my school has been...

Question 2: My participation in developing our site plan to reduce class size at grades 1 and 2 has been...

Question 3: Pupil-teacher ratio has been lowered in my classroom to 25.5 as a result of implementing the class size reduction plan.

Question 4: In preparation for reducing class size at grades 1 and 2, staff development at my school has been...
Question 5: The class size reduction is likely to improve student mastery of reading achievement by grade 3.

Question 6: Classroom instructional practices in grades 1 and 2 remain basically the same as before the class size reduction.

Question 7: The benefits of grades 1 and 2 class size reduction outweigh the loss of space and/or support services.

Question 8: The impact of the class size reduction on teaching and learning opportunities in grades other than 1 and 2 has been...
Question 9: The impact on existing site programs of reducing class size at grades 1 and 2 has been...

Question 10: The impact of the class size reduction on teaching and learning opportunities in grades 1 and 2 has been...
Chairperson Identified Impacts on Existing Site Programs: "Other" Category

<table>
<thead>
<tr>
<th>Impact</th>
<th>Total (n=78)</th>
<th>1-500 (n=33)</th>
<th>501-800 (n=21)</th>
<th>801+ (n=23)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Loss of space</td>
<td>24</td>
<td>21.2</td>
<td>33.3</td>
<td>43.5</td>
</tr>
<tr>
<td>2. Reallocation of personnel</td>
<td>26</td>
<td>36.4</td>
<td>38.1</td>
<td>26.1</td>
</tr>
<tr>
<td>3. Discomfort with teaming</td>
<td>2</td>
<td>0.0</td>
<td>9.5</td>
<td>0.0</td>
</tr>
<tr>
<td>4. Lack of supplies/equipment</td>
<td>20</td>
<td>21.2</td>
<td>28.6</td>
<td>30.4</td>
</tr>
<tr>
<td>5. Inadequacies at upper grades</td>
<td>17</td>
<td>24.2</td>
<td>23.8</td>
<td>17.4</td>
</tr>
<tr>
<td>6. Excessive pressure on teachers for improved student achievement</td>
<td>12</td>
<td>12.1</td>
<td>19.0</td>
<td>17.4</td>
</tr>
<tr>
<td>7. Disruption in routine site functions</td>
<td>10</td>
<td>12.1</td>
<td>9.5</td>
<td>17.4</td>
</tr>
</tbody>
</table>
### CHAIRPERSON IDENTIFIED IMPACTS ON TEACHING AND LEARNING OPPORTUNITIES IN GRADES 1 AND 2

<table>
<thead>
<tr>
<th>Impact</th>
<th>Total (n=78)</th>
<th>1-500 (n=33)</th>
<th>501-800 (n=21)</th>
<th>801+ (n=23)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>1. Less classroom disruption</td>
<td>19</td>
<td>30.3</td>
<td>23.8</td>
<td>17.4</td>
</tr>
<tr>
<td>2. More supportive feedback from teacher</td>
<td>21</td>
<td>33.3</td>
<td>28.6</td>
<td>17.4</td>
</tr>
<tr>
<td>3. More corrective feedback from teacher</td>
<td>21</td>
<td>33.3</td>
<td>23.8</td>
<td>21.7</td>
</tr>
<tr>
<td>4. More timely response/assistance by teacher</td>
<td>24</td>
<td>36.4</td>
<td>28.6</td>
<td>26.1</td>
</tr>
<tr>
<td>5. More activity centers</td>
<td>12</td>
<td>12.1</td>
<td>14.3</td>
<td>21.7</td>
</tr>
<tr>
<td>6. More subject-integrated instruction</td>
<td>11</td>
<td>18.2</td>
<td>9.5</td>
<td>13.0</td>
</tr>
<tr>
<td>7. More time for special needs population</td>
<td>18</td>
<td>24.2</td>
<td>23.8</td>
<td>21.7</td>
</tr>
<tr>
<td>8. More time for portfolio work</td>
<td>15</td>
<td>21.2</td>
<td>19.0</td>
<td>17.4</td>
</tr>
<tr>
<td>9. More time for teacher-recorded observations</td>
<td>15</td>
<td>21.2</td>
<td>23.8</td>
<td>13.0</td>
</tr>
<tr>
<td>10. More teaming opportunities</td>
<td>11</td>
<td>9.1</td>
<td>9.5</td>
<td>26.1</td>
</tr>
<tr>
<td>11. More one-on-one interaction</td>
<td>31</td>
<td>48.5</td>
<td>42.9</td>
<td>26.1</td>
</tr>
<tr>
<td>12. Improved classroom management</td>
<td>26</td>
<td>33.3</td>
<td>28.6</td>
<td>39.1</td>
</tr>
<tr>
<td>13. More whole group instruction</td>
<td>10</td>
<td>18.2</td>
<td>9.5</td>
<td>8.7</td>
</tr>
<tr>
<td>14. More small group instruction</td>
<td>21</td>
<td>33.3</td>
<td>23.8</td>
<td>21.7</td>
</tr>
<tr>
<td>15. More cooperative group activities</td>
<td>18</td>
<td>30.3</td>
<td>19.0</td>
<td>17.4</td>
</tr>
<tr>
<td>16. Greater use of manipulatives</td>
<td>13</td>
<td>24.2</td>
<td>9.5</td>
<td>13.0</td>
</tr>
<tr>
<td>17. Greater use of audio/visual technology</td>
<td>8</td>
<td>6.1</td>
<td>14.3</td>
<td>13.0</td>
</tr>
<tr>
<td>18. Greater use of thinking/meaning-centered curriculum</td>
<td>10</td>
<td>21.2</td>
<td>4.8</td>
<td>8.7</td>
</tr>
<tr>
<td>19. Greater use of strategies to encourage higher-level thinking skills</td>
<td>13</td>
<td>21.2</td>
<td>9.5</td>
<td>17.4</td>
</tr>
<tr>
<td>20. Greater use of strategies which consider individual learning styles</td>
<td>21</td>
<td>30.3</td>
<td>14.3</td>
<td>34.8</td>
</tr>
</tbody>
</table>
Principal survey statements:

1. Classroom pupil-teacher ratio has been lowered in grades 1 and 2 as a result of implementing the class size reduction plan.
2. In preparation for reducing class size at grades 1 and 2, staff development at my school has been...
3. The class size reduction is likely to improve student mastery of reading achievement by grade 3.
4. Classroom instructional practices in grades 1 and 2 remain basically the same as before the class size reduction.
5. The benefits of grades 1 and 2 class size reduction outweigh the loss of space and/or support services.
6. The impact of the class size reduction on teaching and learning opportunities in grades other than 1 and 2 has been...
7. Further class size reduction in additional grade levels could occur using existing space on our campus.
8. Choose the answer which best describes the impact of the class size reduction in grades 1 and 2 on non-resident (i.e. VEEP) enrollment (decreased about one classroom, slightly decreased, unaffected). *
9. The impact on existing site programs of reducing class size at grades 1 and 2 has been...
10. The impact of the class size reduction on teaching and learning opportunities in grades 1 and 2.

* Choose the answer which best describes the impact of the class size reduction in grades 1 and 2 on non-resident (i.e. VEEP) enrollment (decreased about one classroom, slightly decreased, unaffected).
Statement 1: Classroom pupil-teacher ratio has been lowered in grades 1 and 2 as a result of implementing the class size reduction plan.

Statement 2: In preparation for reducing class size at grades 1 and 2, staff development at my school has been...

Statement 3: The class size reduction is likely to improve student mastery of reading achievement by grade 3.

Statement 4: Classroom instructional practices in grades 1 and 2 remain basically the same as before the class size reduction.
Statement 5: The benefits of grades 1 and 2 class size reduction outweigh the loss of space and/or support services.

Statement 6: The impact of the class size reduction on teaching and learning opportunities in grades other than 1 and 2 has been...

Statement 7: Further class reduction in additional grade levels could occur using existing space on our campus.

Statement 8: Choose the answer which best describes the impact of the class size reduction in grades 1 and 2 on non-resident enrollment.
Statement 9: The impact on existing site programs of reducing class size at grades 1 and 2 has been...

Statement 10: The impact of the class size reduction on teaching and learning opportunities in grades 1 and 2 has been...

<table>
<thead>
<tr>
<th>Impact</th>
<th>Total (n=65)</th>
<th>School Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>1-500 (n=30)</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>1. Loss of space</td>
<td>15</td>
<td>18.2</td>
</tr>
<tr>
<td>2. Reallocation of personnel</td>
<td>16</td>
<td>31.8</td>
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<tr>
<td>3. Discomfort with teaming</td>
<td>3</td>
<td>9.1</td>
</tr>
<tr>
<td>4. Lack of supplies/equipment</td>
<td>12</td>
<td>22.7</td>
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<tr>
<td>5. Inadequacies at upper grades</td>
<td>15</td>
<td>31.8</td>
</tr>
<tr>
<td>6. Excessive pressure on teachers for improved student achievement</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>7. Disruption in routine site functions</td>
<td>3</td>
<td>4.5</td>
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</table>
# Principal Identified Impacts on Teaching and Learning Opportunities in Grades 1 and 2

<table>
<thead>
<tr>
<th>Impact</th>
<th>Total (n=65)</th>
<th>School Enrollment</th>
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<th></th>
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</thead>
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<tr>
<td></td>
<td>n</td>
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<td>501-800 (n=18)</td>
<td>801+ (n=17)</td>
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<tr>
<td>1. Less classroom disruption</td>
<td>18</td>
<td>22.7</td>
<td>22.2</td>
<td>53.8</td>
</tr>
<tr>
<td>2. More supportive feedback from teacher</td>
<td>35</td>
<td>59.1</td>
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<td>84.6</td>
</tr>
<tr>
<td>3. More corrective feedback from teacher</td>
<td>25</td>
<td>40.9</td>
<td>25.9</td>
<td>69.2</td>
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<tr>
<td>4. More timely response/assistance by teacher</td>
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<td>59.1</td>
<td>29.6</td>
<td>92.3</td>
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<tr>
<td>5. More activity centers</td>
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<td>18.2</td>
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<td>46.2</td>
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<tr>
<td>6. More subject-integrated instruction</td>
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<td>9.1</td>
<td>11.1</td>
<td>38.5</td>
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<td>7. More time for special needs population</td>
<td>21</td>
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<td>33.3</td>
<td>61.5</td>
</tr>
<tr>
<td>8. More time for portfolio work</td>
<td>9</td>
<td>18.2</td>
<td>7.4</td>
<td>23.1</td>
</tr>
<tr>
<td>9. More time for teacher-recorded observations</td>
<td>14</td>
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<td>10. More teaming opportunities</td>
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<td>13.6</td>
<td>14.8</td>
<td>38.5</td>
</tr>
<tr>
<td>11. More one-on-one interaction</td>
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<td>72.7</td>
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<td>12. Improved classroom management</td>
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<td>50.0</td>
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<td>76.9</td>
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<td>13. More whole group instruction</td>
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<td>27.3</td>
<td>3.7</td>
<td>23.1</td>
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<td>22.2</td>
<td>53.8</td>
</tr>
</tbody>
</table>
Disruptions in site functions
Excessive pressure on teachers
Inadequacies at upper-grades
Lack of supplies/equipment
Discomfort with teaming
Reallocation of Personnel
Loss of space

Impacts On Existing Site Programs As Reported By Teachers, Chairpersons, And Principals
Impacts On Teaching And Learning Opportunities In Grades 1 And 2
As Reported By Teachers, Chairpersons, And Principals
APPENDIX G

INTERVIEW FORM
CLASS SIZE REDUCTION STUDY
INTERVIEW FORM

School Name: ____________________________

Interviewee: ___ Principal
___ Governance Team Chairperson (or) ___ SSC Chairperson
(____ parent, ____ teacher, ____ other school staff)_____

(If a parent, in what grade is your child? ________)

___ Teacher in ___ regular class, ___ bilingual class, or _____________
___Gr. 1, ___Gr. 2, ___K-1, ___1-2, ___2-3, or _____________
___Gr. K, ___Gr. 3, ___Gr. 4, ___Gr. 5, ___3-4, ___4-5, or _____________

Years teaching at this grade level _____, at this school _____, total years teaching _____
(as of the beginning of the school year)

Do you teach in a developmental primary program? ___ Yes ___ No

What was your position last year? ____________________________

How many students are in your class this year? _____ How many last year? _____

Interviewer: ____________________________ Date: __________

INTRODUCTION:

- Thank you for agreeing to participate in this interview. It should take between 45 minutes and an hour of your time.
- The interview questions are divided into 4 sections: (1) Site Implementation of the Class Size Reduction Policy; (2) Impact on Classroom Structure and Instructional Practices, (3) Planning and Decision-Making for Site Implementation, and (4) the Degree to Which the Policy was Implemented as Planned. (For Gr. 1 & 2 teachers only: There is an additional section which addresses the personal impact of the policy on you and your classroom.)
- Please let me know if you want me to rephrase any of the interview questions, just as I may ask you to expand on your answers to particular items.
- All of your responses will be kept anonymous, but the information you provide will serve to help the district's efforts to plan and implement future class size reductions in the district.

Section A: SITE IMPLEMENTATION OF CLASS SIZE REDUCTION POLICY

1. Given that your site received an additional allocation of ___ teaching positions to permit class size reductions at Grades 1 and 2 this year, what changes were made in the use of physical facilities at your site to accommodate these reductions?

Prompts:
- Did you make use of previously unavailable or unused space, re-designate or reschedule the use of existing space, find new ways to share existing space, etc.?
- Are you implementing class-size reduction by creating self contained, discrete classrooms which are smaller or by deploying teachers or students for basic skills instruction?

School: _______________ Interviewee: (Principal, GT, SSC, Teacher 1, 2 or Teacher K, 3, 4, 5)
2. (for principal and teachers) How have space changes that were made to accommodate class-size reductions at Grades 1 and 2 affected the over-all delivery of educational services across grade levels?

3. This is a four-part question. It will ask about other changes that may have taken place as a result of the class size reductions at your site, in addition to the allocation of any new teaching positions at grades 1 and 2. It also asks why the changes were made, and if they are being viewed as positive or negative changes.

   a) What other personnel changes, if any, were made as a result of the class size reductions at your site, and for what reasons?
   Prompt:
   • If there was an additional personnel change, for instance, did this result from budget modifications alone, from a desire to do something innovative, or what?

   b) What program changes, if any, were made as a result of the class size reductions at your site, and for what reasons?
   Prompts:
   • Did you make any changes in your School Based Coordinated Program (SBCP) or in your Chapter 1 program? For example, are you accepting fewer non-resident VEEP students?
   • Or, if you are a Chapter 1 School-Wide Project School, has the additional class size reduction affected the academic program you offer to students?

   c) What changes in school activities, if any, were made as a result of the class size reductions at your site, and for what reasons?

   d) Which of these changes (in personnel, programs, or in school activities) are seen as positive and which, if any, are seen as negative?
   Prompt:
   • If there was an additional personnel change, has this change proven to be good or bad for the overall school program? Or is it too early to make such a judgment?

4. This next question is also a multiple-part question. It relates to additional changes that would need to be made to facilitate further class size reductions in 1995-96 or beyond.

   a) What additional personnel changes would need to be made to expand class size reductions for future years?

   b) What additional program changes would need to be made to expand class size reductions for future years?

   c) What additional changes would need to be made in physical facilities to expand class size reductions for future years?

   d) What additional changes would need to be made in the site budget and the utilization of funds to expand class size reductions for future years?

   e) Which of these additional changes (in personnel, programs, physical facilities, or site budget) would most likely be viewed as positive and which would most likely be seen as negative?
Section B: IMPACT ON CLASSROOM STRUCTURE AND INSTRUCTIONAL PRACTICES
(Additional items on classroom impact are in Section E for Gr. 1 & Gr. 2 teachers)

5. What general changes have been made in the school's classroom structure and/or instructional practices as a result of the 1994-95 reductions in class size?
Prompts:
• Did the site change the physical organization of classrooms, implement a developmental primary, institute team teaching, increase the number of classroom aides or parent volunteers?
• Did the site implement instructional practices related to reading recovery, cooperative learning, learning styles, portfolio assessment, etc.?

6. What staff development, if any, was provided on site or through the district in relation to the class size reductions.
   a) on-site:
   b) through the district:

7. What are the initial schoolwide effects of the class size reductions on the general attitudes and behaviors of the following groups?
   a) Staff at Gr. 1 & 2:
   b) Staff at other grades:
   c) Students in Gr. 1 & 2:
   d) Students in other grades:
   e) Parents:
   f) Administrators:

8. What suggestions do you have regarding how the district should measure the overall effects of these Gr. 1 & Gr. 2 class size reductions?
Prompts:
• How should the district measure effects on student achievement?
• How should the district measure effects on student attitudes, staff attitudes, etc.?

Section C: THE PLANNING AND DECISION-MAKING FOR SITE IMPLEMENTATION

9. Briefly describe the process your site followed, between the Feb. 1, 1994 Board of Education decision and the beginning of the school year, in implementing the class size reductions?
Prompt:
• What process was followed to involve teachers, parents, governance team members, and the School Site Council (SSC/SAC) in planning for the class size reductions at your site?
10. Of the various groups involved in planning the implementation of class size reduction at your site, who was involved in giving advice and who was involved in a decision-making capacity?
   Prompt:
   • What roles were played by teachers, parents, the Governance Team, the School Site Council?

Section D: THE DEGREE TO WHICH THE POLICY WAS IMPLEMENTED AS PLANNED

11. To what extent was the site's plan for class size reduction implemented as intended?
   4 = Completely  3 = Mostly  2 = Partially  1 = Not At All  0 = Don't Know

12. What changes, if any, needed to be made in the implementation process, and why?
   Prompts:
   • Did someone not understand the site plan, not know how to implement it, etc.?
   • Did other site factors (e.g., increase or decrease in students) impact the implementation?

13. What changes, if any, would need to be made in the planning, decision-making, and communication processes to better facilitate additional class size reductions in 1995-96 or beyond?
   a) Site Processes:
   
   b) District Processes:

14. Overall, how has class size reduction process been at your site? What has been good? What has been bad?

15. If it was your decision, would you expand class size reduction? Why or why not?
   Prompts:
   • To what grade levels?
   • What trade-offs would you be willing to make?

   (NOTE: Last question for principal, Governance Team/SSC Chairperson, and non-Grade 1 or 2 teacher. For Grade 1 or 2 teacher, skip to question #17.)

16. Is there anything else you would like to share regarding the class size reduction policy and implementation process?
Section E: ADDITIONAL QUESTIONS FOR Gr. 1 & Gr. 2 TEACHERS ONLY

17. What do you do differently in your classroom as a result of the class size reductions at your site?
   Prompt:  
   * Have you personally made any changes in your classroom's structure or in your instructional practices?

18. What are the initial effects of the class size reductions on your general attitude, as well as on the attitudes of your students and their parents?
   a) Teacher:
   
   b) Students:
   
   c) Parents:

19. Did reducing class size by 5 or more students require or inspire you to change the delivery of instruction to your students? If so, how?

20. What type of training or staff development, if any, did you receive?
   Prompts (as appropriate):
   * As a brand-new teacher, what training or staff development did you receive?
   * In changing from a position as a BSSAP teacher to a regular classroom teacher, what training did you receive to prepare you for the change?
   * In moving from a non-classroom position to a position as a regular classroom teacher, what training did you receive to prepare you for the change?

(Note: Last question for Grade 1 or 2 teacher. It is the same last item, #16, that was asked of the other interviewees.)

(16.) Is there anything else you would like to share regarding the class size reduction policy and implementation process?
APPENDIX H

FACILITIES IMPACT OF CLASS SIZE REDUCTION POLICY:
PRELIMINARY DATA FOR 1994-95
ISSUE

How has the class size reduction policy affected school facilities?

BACKGROUND

The class size reduction proposal adopted by the board in February of 1994 specified that the existing facilities allocation formula would be maintained and additional facilities would not be allocated to accommodate the additional teachers. Each year, the planning unit surveys the use of classrooms to determine classroom needs and excess space based on District Procedure 3410. The results of this year's classroom survey will provide an overview of how sites accommodated additional teaching personnel within the existing facilities allocation policy.

DISCUSSION

In order to implement the class size reduction proposal at grades one and two, it was estimated in July of 1994 that 130 additional AA positions would be required. A tally in December of 1994 indicates that 139 additional AA positions were funded. In addition, 15 additional class-size reduction teachers were funded at school-wide project schools and three from integration funds for a total of 157 additional classroom teachers. Several schools had developed individual site plans which further reduced class sizes within existing available space. Following is a summary of how the additional classroom teachers were accommodated at sites.

Twenty-four of the district's 109 elementary schools had classroom space available to institute the new classrooms without displacement of any other function. This occurred in schools where enrollment decline occurred freeing up classroom space and in schools with existing surplus space.

In the remainder of the schools, modifications in the use of space occurred. The most frequent modification was the conversion of classroom space previously used for educational support purposes to classroom uses. Under District Procedure 3410, the district has authorized certain classrooms in schools to be used for core facilities and support functions. In addition, when classrooms become available at sites, sites will typically make use of the space to support their
educational programs. These are considered temporary uses by the district, and it is expected that these classrooms will be available for classroom uses when needed on the campus or be available to be moved to other campuses where there is a need.

In 61 instances, classrooms officially designated for core and support functions were converted to classroom use and the existing function relocated to a smaller space or disbanded. Following is a summary of the support spaces lost:

<table>
<thead>
<tr>
<th>Support Space</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Education resource specialist rooms</td>
<td>26</td>
</tr>
<tr>
<td>Libraries</td>
<td>8</td>
</tr>
<tr>
<td>Lounges</td>
<td>8</td>
</tr>
<tr>
<td>Counseling Centers</td>
<td>8</td>
</tr>
<tr>
<td>Basic Skills Pullout</td>
<td>3</td>
</tr>
<tr>
<td>Computer Labs</td>
<td>3</td>
</tr>
<tr>
<td>English as a Second Language Pullout</td>
<td>2</td>
</tr>
<tr>
<td>Pullout Labs</td>
<td>2</td>
</tr>
</tbody>
</table>

In 20 additional instances, classrooms which were available at schools the prior year for support uses, but are considered available for classroom use under District Procedure 3410, were reclaimed as classrooms. These uses included additional pull-out rooms, prep-time teacher rooms, parent rooms, and special education support rooms.

In thirteen other instances, classes were established in non-classroom spaces. Of these, nine classes were established in non-classroom spaces such as conference rooms and auditorium stage areas and four classes were added by further dividing existing loft spaces.

Other techniques used to accommodate additional teachers included instituting double session kindergartens where single-session classes had been accommodated the prior year. (The district expects double-session kindergarten classes to occur except in the court identified minority-isolated schools.) In multi-track year round schools, six additional teachers were flexed. In four instances, two classes shared one large classroom space. Additional techniques included reduction of nonresident enrollment and the use of classroom teachers to support instruction in classrooms.

A preliminary estimate of the classrooms that would have been required if classroom allocation would follow the teacher allocation formula is about 70 portable classrooms.

Report prepared by Jan Hintzman
APPENDIX I

CLASSROOM OBSERVATION INSTRUMENT: GRADES 1 AND 2
# Classroom Observation Instrument: Grades 1 and 2 *

Class Size Reduction Review: Fall 1994

## Classroom Environment

<table>
<thead>
<tr>
<th>1. Please indicate evidence of the following:</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ Team teaching</td>
<td>___ Room originally designed for classroom use</td>
</tr>
<tr>
<td>___ Aide/parent volunteer</td>
<td>___ If no, specify</td>
</tr>
<tr>
<td>___ Activity center(s)</td>
<td>___ Adequate spacing between desks/tables to permit easy movement/access</td>
</tr>
<tr>
<td>___ Library corner</td>
<td>___ Display(s) provoking interest and curiosity</td>
</tr>
<tr>
<td>___ Rug area</td>
<td>___ Student work/positive accomplishments</td>
</tr>
<tr>
<td>___ Quiet corner for independent work</td>
<td></td>
</tr>
</tbody>
</table>

## Teacher-Student Interaction

### In general...

4. How many students were actively involved in learning?

<table>
<thead>
<tr>
<th>All involved</th>
<th>All but 1-2</th>
<th>All but 3-4</th>
<th>All but 5-6</th>
<th>Six or more not involved</th>
<th>Could not determine</th>
</tr>
</thead>
</table>

5. How often was instruction interrupted for disciplinary/management reasons (keep tally in adjacent space)?

<table>
<thead>
<tr>
<th>More than 8 times</th>
<th>6-8 times</th>
<th>3-5 times</th>
<th>1-2 times</th>
<th>Never</th>
</tr>
</thead>
</table>

* Observation conducted during literacy period

---

\* \* BEST COPY AVAILABLE
(Continued)

<table>
<thead>
<tr>
<th>In general ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. How often did students receive supportive feedback from the teacher or aide?</td>
</tr>
<tr>
<td>Very often</td>
</tr>
<tr>
<td>7. How often did students receive timely response/assistance from the teacher or aide (consider task requiring help)?</td>
</tr>
<tr>
<td>Very often</td>
</tr>
<tr>
<td>8. With how many students did the teacher or aide interact?</td>
</tr>
<tr>
<td>All students</td>
</tr>
<tr>
<td>9. Based on active engagement in learning (vs. time spent for disruptions), overall classroom management was ...</td>
</tr>
<tr>
<td>Excellent</td>
</tr>
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</table>
### Classroom Observation Instrument: Fall 1994

**10. Please indicate evidence of the following:**

<table>
<thead>
<tr>
<th>__</th>
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</thead>
<tbody>
<tr>
<td>Whole group instruction</td>
<td>Cooperative group activity(ies)</td>
</tr>
<tr>
<td>Small group instruction</td>
<td>Activity center instruction</td>
</tr>
<tr>
<td>Pairs or peer tutoring/learning</td>
<td>Real world application of lessons</td>
</tr>
<tr>
<td>Cross-age tutoring</td>
<td>Long-term project/sustained work</td>
</tr>
<tr>
<td>Individual/independent learning</td>
<td></td>
</tr>
<tr>
<td>Integrated language arts instruction</td>
<td></td>
</tr>
<tr>
<td>Writing activities</td>
<td>Teacher demonstration (modeling)</td>
</tr>
<tr>
<td>Reading activities</td>
<td>Teacher read-aloud</td>
</tr>
<tr>
<td>Oral language activities</td>
<td>Use of manipulatives (please specify →)</td>
</tr>
<tr>
<td>Language arts instruction</td>
<td>Use of audio/visual technology (please specify →)</td>
</tr>
<tr>
<td>integrated with another subject area</td>
<td>Use of paper/pencil materials (please specify →)</td>
</tr>
<tr>
<td>Use of strategies which encourage higher-level thinking skills (please specify →)</td>
<td></td>
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<tr>
<td>Use of strategies which consider individual learning styles (please specify →)</td>
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<td>Accommodation to special needs populations (English learners, special ed, comp ed, GATE)</td>
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### Assessment Strategies

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<td>Teacher-recorded observations</td>
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<td>Performance-based assessment (specify below):</td>
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<td>Performance task</td>
<td>Demonstration, exhibition</td>
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<td>Portfolios</td>
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<tr>
<td>Other</td>
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**10. Please summarize which activities predominated during your 45-minute observation:**

---

**Comments**

---

**BEST COPY AVAILABLE**
### Use of Supplemental Staff and Volunteers

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<th>Comments</th>
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<td>12. If applicable, the teaching assistant/aide or parent volunteer was used in the following way(s):</td>
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<tr>
<td></td>
<td>Whole class assistance</td>
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<td></td>
<td>Small group assistance</td>
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<td>Individual (one-on-one) assistance</td>
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### Observation Site and Grade Level

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<td>13. Site</td>
<td>14. Grade/Developmental level</td>
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### Classroom demographic information to be completed by central office:

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<th>Sheltered</th>
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<td>GATE cluster</td>
<td>Special education</td>
<td>General</td>
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</table>

15. Type of class

16. Number of assigned students

Observation completed by ____________________________

Please return completed observation form to Lollie or Marlene in Room 3107, Education Center.

October 25, 1994
APPENDIX J

VERBATIM TEACHER COMMENTS FOLLOWING CLASSROOM OBSERVATIONS
Advantages of Policy

"With the increasing amount of academic learning disabilities it is imperative that class size be reduced. Each child needs individual attention in order to be successful in school. Our society feels that effects of a failing education system. We need to find positive ways of turning our failures into successes. Lowering class size is a start!"

"With a class size of 25 first graders I am able to work with almost every child each day. It also seems that I'm able to assess their needs and skills quite early in the year because I'm able to work with them more or I should say 'get to them' each day. I'm fortunate at my school site to have an aide working 2 hrs. every day to me because my aide is paid for through Second Language and I'm the LEP teacher at my site for first grade. Because of having an aide and the class reduction, it has enabled me, for this year, to be able to spend a little more individual attention to children that need extra help and handle problem behavior students better."

"(My school) is a year-round school, so from July to Sept. 23 (summer quarter) I had 24-25 students. It was wonderful! I knew everything about every student — their needs and their strengths."

"Because of the lower class size, we are able to do more of the hands-on activities related to language arts; i.e. the mobiles, the large drawings for the core lit, puppet-making. Also I am able to monitor individual pupils at both ends of the achievement spectrum, providing enrichment for the more accomplished and remediation for the less ready. Perhaps, most important, the 'Fatigue Factor' is reduced for me by about 50%."

Liabilities of Policy

"I'm in a corner room at my site, so I have a little more room than my other colleagues. In our building we have 9 teachers sharing space that is meant only for 6. The noise level has increased due to the opening of more walls and being 'squished' together to make more room for additional classes."

"The impact of this reduction has meant loss of space, reallocation of personnel, lack of adequate supplies/equipment and most of all excessive pressure on teachers for student achievement. Our school site has such a lack of space and equipment that this has been most difficult."

Constraints to Implementing Policy

"After break (Oct.) we reorganized and I now have 28 students (one LH student is gone from 9:30-12:45 daily). Those additional few students have had a negative impact on our class.
Four more kids lessens my response time, interaction with kids, etc. I know 4 kids doesn't sound like that many more, but it truly does make it worse.

"In regards to the implementation of Phase I of the district's class size reduction policy, I am responding to some of the survey questions and the classroom observation during my language arts period. Responding to the statement that class size reduction is likely to improve student mastery of reading achievement by grade 3, I disagree with this due to the reading program now in use in grade 1. Books are not available at students read-ability level. Phonetic skills are not taught as decoding skills in a sequential manner nor is the vocabulary at the level of a six-year old student. Parents take no or very little responsibility to support reading at home or visit school and rooms at conferences and other times. Students come to grade 1 not prepared to be placed in a reading program that is essentially at Grade 2 or 3 reading ability. (I'm referring to Grade 1 Changes text.) Students also come to school with a multitude of health, family, and emotional problems that have need of utmost attention before learning can occur."

**For Future Consideration**

"Class reduction is great and even more beneficial if we teachers have additional help and support from other para-professionals too."

"Some things to be considered ... (1) more aide time, (2) use of aides at our grade level, (3) more parent involvement to support reading, (4) more time for special needs population (English learners — a program to teach ESL other than classroom teachers), (5) more assistance for English learners and African Americans with basic skills, (6) better working conditions, (7) less stress on teachers to expect student achievement — we are doing our best!! We cannot make more student observations and still teach every minute when so much direction is needed."

**Other Comments**

"The observer visited during my morning language arts period. She observed kindergarteners and first graders in reading groups and during slatework."

"I thoroughly enjoyed having ______ visit my classroom and am sorry we didn't have time to talk about the lesson, etc. Since this is my first year of second-grade teaching, I am still experimenting and 'feeling my way.' I honestly didn't accomplish all that I planned because I still can't estimate the necessary time allotment accurately. (I keep trying!). I'm still experimenting with partner reading and small groups and would like to see some other second grade classrooms. (Unfortunately the mentor teacher offering is a day we are going to the zoo.) Perhaps I'll see ______ again — I hope so!"

"It might have been more helpful to have a discussion with the observer of my classroom to know what questions needed her response and to contribute my thoughts to this class reduction. I may have been able to give more insight during a discussion rather than just an observation."

126
APPENDIX K

1994-95 PLANNING BUDGET:
REALLOCATION OF RESOURCES FOR IMPLEMENTATION OF CLASS SIZE REDUCTION
1994-95 PLANNING BUDGET
PROPOSED CLASS SIZE REDUCTION PROGRAM
POTENTIAL REALLOCATION OF RESOURCES
FOR IMPLEMENTATION

March 3, 1994
### 1994-95 Planning Budget

#### Summary
- Proposed Class Size Reduction Program
- Potential Reallocation of Resources
- For Implementation

#### General Fund: General Operations

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**Note:** TENTATIVE AND PRELIMINARY DRAFT

Best Copy Available
### GENERAL FUND - GENERAL OPERATIONS (continued)

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**TOTAL BUSINESS SERVICES DIVISION**

|               | (13.50) | (516,257) | 0.00 | 0 | 0.00 | (13.50) | (422,456) | 0 | (127,027) | (30,000) | 0 | 84,126 | 0 |

#### FINANCE DIVISION

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#### INFORMATION SERVICES BUREAU

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**TOTAL GENERAL FUND - GENERAL OPERATIONS**

|               | (47.95) | (3,233,139) | (16.50) | (774,418) | 0 | (31.45) | (981,420) | 0 | (468,377) | (1,032,430) | (40,211) | 64,126 | 0 |
### San Diego City Schools

Finance Division

Budget Management and Cost Controls Department

March 3, 1994

1994-95 Planning Budget

**Summary**

Proposed Class Size Reduction Program

Potential Reallocation of Resources

For Implementation

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**Master Plan for Special Education**

**School Services Division**

24 Special Education & Assessment Psychologists

27 Special Education Diagnostic Resource Teacher

28 Special Education Resource Teacher

29 Special Education Counselors

**Total School Services Division**

| 7.05 | (389,927) |
| 8.00 | (325,270) |
| 1.00 | (68,237)  |
| 0.00 | (13,223)  |

**Total Master Plan for Special Education**

| 7.00 | (343,860) |
| 8.00 | (278,570) |
| 1.00 | (24,310)  |
| 0.00 | (9,735)   |

**San Diego Plan for Racial Integration**

**School Services Division**

30 Gifted and Talented Resource Teacher

31 Guidance/Counselor

32 Second Language Media Dev/Release Time

33 Parent Involvement and Support Resource Teacher

34 Teaching and Learning Center - Res Tchr/Materials

35 Interg Pms Hourly & Materials Travel

36 Race Human Relations Consultant Res Tchr/Trav

37 Partnerships in Education - Resource Teacher

38 School Svcs - Area V - Res Tchr/Hrly & Supplies

39 Pupil Trans VEEP/Magnet Staff Dev Days

40 Pupil Trans Purchase Lease Buses

**Total School Services Division**

| 7.00 | (800,000) |
| 8.00 | (62,530)  |
| 1.00 | (142,500) |
| 0.00 | (57,500)  |

**Total San Diego Plan for Racial Integration**

| 7.00 | (800,000) |
| 8.00 | (62,530)  |
| 1.00 | (142,500) |
| 0.00 | (57,500)  |
**1994-95 Planning Budget**

**Summary**

Proposed Class Size Reduction Program
Potential Reallocation of Resources for Implementation

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### Gifted and Talented Education

**Gifted and Talented Resource Teacher**

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**Total Gifted and Talented Education**

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**Total Potential Reallocation of Resources for Implementation**

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REVIEW OF THE INITIAL PHASE OF THE IMPLEMENTATION OF THE CLASS SIZE REDUCTION POLICY

Susan Millett, Frank Morgan, & Ron Rode

San Diego City Schools, Evaluation Unit

March 7, 1995

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