

California Kindergarten Association  
Informational Update - December, 1996

## CLASS SIZE IN KINDERGARTEN

### *IMPLICATIONS FOR TEACHING*

The kindergarten and primary teachers and students in California have been given an important gift this fall - reduced class size. Now districts must choose between implementing reduced classes in kindergarten through second grade or in first through third grade. A majority of the State of California's youngest students will be assigned to classes with twenty students. The impact of this fundamental change in class size will be felt throughout the State.

#### **What Does the Research Show?**

Research shows the most impressive results are gained when classes are reduced in size in kindergarten and primary classes (Pate-Bain et al. 1992). Minority and economically deprived children, as well as others, reap great benefits from class size reduction.

However, research also shows clearly that the gains achieved in reducing class size only happen when teaching strategies and expectations are changed to take advantage of the smaller classes (Pate-Bain et al., 1992; Mitchell and Beach, 1990). Teachers in California can help make this class size reduction successful with the implementation of the early literacy initiative programs.

It must be noted that impressive gains have been accomplished through similar initiatives in several states, but it takes

time. Nothing is accomplished in a year or two. The impressive gains accomplished by Project STAR in Tennessee and other similar initiatives increased with the length of time the students experienced smaller classes (Underwood and Lumsden, 1994). It is hoped that the California Legislature has read the research thoroughly.

As noted earlier, research indicates that unless teaching strategies are changed from what is observed in a class of 25-30 students to a more individualistic approach in classes under 20, there is little or no gain in student achievement. Teachers may change their teaching strategies when given a smaller class, but it is not automatic. There are indications that many of the characteristics of successful teachers in smaller classes can be directly attributed to the fact that the teachers and students are working in an improved learning atmosphere. In an intensive case study of teacher behavior in small classes (Odden, 1990), the following were documented:

- Teachers felt they could present lessons in more depth and move into more enrichment activities simply by having fewer children. Lessons did not take as long to complete.
- Classes functioned more smoothly. Less time was spent on discipline.

- Students received more personal attention, including more encouraging, counseling and monitoring.
- Students were more attentive to their class work, had to wait less time for help, and had more opportunity to participate in group lessons.

In reviewing a number of research studies about the effects of lowering class size, a list of important professional characteristics which benefit students' learning emerged (Pate-Bain, 1992; Mitchell and Beach, 1990; Odden, 1990):

- High expectations
- Clear focused instruction
- Close monitoring of student learning and progress
- Use of alternative methods for at-risk students
- Efficiency in classroom routines
- High standards for classroom behavior, and
- Personal interactions with students

### **High Expectations for Student Learning**

Research in teacher expectations and student achievement has given us valuable insight into how children respond to teachers who expect them to succeed (Bennett, 1990). Getting to know and supporting the learning of twenty children are major responsibilities. Smaller class size can help to implement a high quality curriculum, discover what students can do and provide time to encourage individuals.

Learning improves when the following strategies for the expectation of success

are present in the classroom (Bennett, 1990):

- Periodic individual conferences in which the child's progress is discussed and celebrated and goals are set for future achievement.
- Individual interests and achievements are celebrated publicly in the classroom. Children learn to recognize each individual's areas of expertise.
- Children are given a chance to work together and get to know each other's strengths and personal attributes.
- Involvement of parents in class projects, celebrations, and goal setting increases each child's opportunity for success.

### **Clear, Focused Instruction**

The balanced language program recommended in the new reading task force report, Teaching Reading, makes it very clear that effective teachers begin by identifying the levels at which students are working and build well-planned lessons based on knowledge of the individual student. All students can make progress and experience success, even though they arrive with varied backgrounds and knowledge in relation to language arts. The sequence of instruction and paying attention to prerequisite skills in order to ensure success are vital factors. The early literacy initiative across the state will help teachers recognize important factors in reading and writing success and widen the knowledge of approaches available to teachers of young students.

Some of these approaches follow:

- High quality children's literature must be introduced on a daily basis. The integration of literature into all aspects of language arts instruction is vital.
- Phonemic awareness precedes phonics instruction. Rhyming, word segmentation, and sound blending are used in the oral mode before presenting the sound/symbol relationships.
- The teaching of phonics in a functional way connects sounds and symbols which are used to write and decode words in authentic ways.
- The daily modeling of writing, reading and conventional spelling in the classroom help children understand how language arts contribute to the learning enjoyment.
- The use of a variety of grouping strategies for teaching includes the most effective combination of one-to-one pairs, small group, cooperative groups and whole group instruction. Determination of the appropriate grouping is based on the needs and interests of the students.
- Support of learning through a model moves from the concrete to semi-concrete and into the abstract and happens when the students demonstrate their readiness to do so.
- Assessment includes a heavy reliance on observation which enables a teacher to develop an understanding of students and their ability to move forward in instruction.

- The use of a wide variety of instructional methods and materials helps students become actively involved in learning and understanding concepts.

### **Close Monitoring of Student Learning and Progress**

Effective teachers have used monitoring systems to support their knowledge of individual learning and the progress of their students (Pate-Bain, 1992; Herrell, 1996). Having twenty students makes this careful monitoring more feasible. In order to plan the most appropriate instruction for each child in the class, monitoring systems must be implemented that help the teacher individualize instruction when necessary, move students along at a pace which is challenging, but achievable, and provide opportunities to celebrate learning and set goals for future learning.

Some of these classroom strategies could include:

- Use of anecdotal records collected on an ongoing basis in the classroom;
- Use of a system that ensures that all students are observed and assessed in ways that contribute important information to the teacher's and parents' understanding of the child's interests, achievements and goals;
- Use of a portfolio system that allows the selection of representative samples of the child's progress including work samples, anecdotal records, audio and videotapes, photographs, records of conferences, oral presentations and goals;

- Periodic sampling of the child's progress in the use of reading strategies, problem solving, integration of knowledge in the form of challenging projects that involve the use of a combination of academic disciplines (math, language arts, social studies, art, music, PE, science);
- A systematic method of involving the children in the planning of their future areas of study, celebrating of their achievements and setting goals at planning conferences. (This fosters ownership and motivation on the part of the student).

### **Alternative Methods When Students Do Not Make Satisfactory Progress**

When a systematic monitoring program for documenting and celebrating children's growth is in place and functioning well, teachers and parents are kept well-informed of the progress of the students. A child who is not making satisfactory progress can be helped by use of intervention strategies at an early point in the school year. The involvement of parents, teacher and school support personnel such as the school psychologist, school nurse, social worker and counselor can be combined to create a plan of intervention that supports the child and family and begins to address the child's and family's needs.

Sometimes, the problem may be minor and only needs to be recognized quickly to prevent it from escalating. A smaller class size can be vital in assisting teachers to quickly identify potential difficulties and move swiftly to determine individual needs. Some of the following strategies

could be employed before the problem becomes crucial:

- An individualized teaching approach based on teacher observation, student assessment and parental input;
- Peer or cross-age tutoring;
- Involvement in an intervention program such as Title I or Reading Recovery;
- More individual attention from the teacher, even before or after school;
- Counseling or mentoring by school personnel;
- An individual program set up by the teacher and parents to ensure maximum study time and attention to areas of concern;
- Individual contracts or learning plans negotiated with the child and parents that might include tutoring, special assignments, individualized schedules, and a combination of other strategies.

Smaller class size enables the teacher to monitor the child's progress over time and to document attempts at intervention and parent involvement before involving support personnel.

### **Efficiency in Classroom Routines**

In large classrooms a great amount of time is used daily completing routines such as attendance, lunch count, transitions from activity to activity, and lining up to move through the halls. Teachers used to teaching large classes are some-

times amazed at the amount of instructional time that is gained simply by having fewer children involved in these routines. An efficient method of accomplishing daily routines, even with a small class, frees up an enormous amount of time over the period of a week.

Devising systems for accomplishing these routines at the beginning of the year is well worth the effort. The following routines are effective:

- Have the children indicate their presence and whether or not they are buying lunch as part of their check-in routine. They can check-in and put their name tags on a chart, which indicates their lunch plans if the chart is labeled "lunch buyers" and "lunch bringers." For younger children, pictures of a lunch box and lunch tray can indicate the same choice. A child can be assigned to fill out the attendance chart by copying the names left off the chart and complete the lunch count by counting the names under "lunch buyers."
- Have a set routine for dismissing students to line up, move to centers, or change activities. The use of classroom helpers, such as line leaders, and a method to indicate which groups should line up makes transitions go more smoothly.

### **High Standards for Classroom Behavior**

Classroom behavior should naturally improve when the number of students in the room is reduced. It only takes one or two children with poor behavior to make up for the ten or more other students in

the class. Expect good behavior and help students to understand exactly what their responsibilities are.

It is also important not to equate "good behavior" with "total teacher control." Quiet conversation and reasonable movement in the classroom can contribute to the learning that is taking place. A "busy hum" is more indicative of a rich learning environment than is total silence. Involve the students in determining which rules are necessary. Post and discuss the rules frequently.

Remind students of your expectations and establish a signal to let them know when they need to listen or change activities.

The following suggestions can establish and maintain responsible behavior within classrooms.

- Involvement of the students in determining the level of noise acceptable for various activities. One teacher put up a stoplight with flaps over the red, yellow and green lights. She uncovered the red light when the activity required no talking, the yellow light when the activity required only whispering, and the green light when the activity required active conversation. She also used the lights to signal when the noise level was becoming too high.
- Encourage the children to use signals to help monitor the use of rules. One class had a list of five rules and the children would signal each other by raising fingers, 1-5, to indicate when they thought someone was breaking a rule. If the child did not respond,

several children would join in by displaying the proper number of fingers. All the teacher would have to say was, "John, I think your friends are trying to tell you something."

### **Excellent Personal Interactions with Students**

Increased teacher interaction with children is possibly the greatest gain of reduced class size. Language acquisition is easier to assimilate. The teacher can learn more about the individual children, and the rapport between teacher and child can be more quickly and effectively established.

The teacher and children are able to ask and answer more questions and celebrate together more frequently. All this hastens and enriches the progress of the children. Here are some suggestions to improve personal interactions.

- Talk to each child in the way that you hope your own children would be addressed.
- Develop a genuine interest in learning as much as you can about each child and help him or her to feel that interest.
- Use the information about each child to enrich your conversations with them. Talk about their interests and how you notice them using their growing knowledge in their work. Acknowledge their special gifts and talents.
- Thank them for kindnesses you see them giving to others in the classrooms.

- Focus on building a community of learners, acknowledge and celebrate the unique contributions of all of the students.

### **CKA Survey Response**

The responses of sixteen hundred California teachers surveyed by the California Kindergarten Association a year ago closely matched the research and suggestions in this article related to the way instruction must change in order for children to benefit from reduced class size. When asked how they would change their teaching strategies if they had a smaller class, four categories of responses were dominant in the California teachers' responses:

1. More one-on-one attention and instruction would be possible.
2. More active learning/hands-on activities would be implemented.
3. More small group instruction would be given.
4. More use of appropriate, observation-based, authentic assessment strategies would be possible.

### **Next Steps**

The advantages that accrue as a result of reducing class size need to be accorded kindergarten classes, as well as those of the first, second, and third grades. It is irresponsible and divisive to force districts to decide between including kindergarten or third grade in the class size reduction. Kindergarten is the beginning of formal education for the child. It is imperative, then, that children embarking on formal education be successful. In order to succeed, these children need close monitoring of their learning and

progress by teachers and personal interactions with their teachers. Research has shown the positive effects of productive literacy instruction in kindergarten. Research on class size has shown that the most impressive results are gained when classes are reduced in kindergarten and the primary grades (Pate-Bain, Achilles, Boyd-Zaharias, & McKenna, 1992).

To be successful, small classes must be continued over a period of time. Give the schools time to adjust, work out the wrinkles and establish the evaluation model to determine what is working and what needs to be adjusted.

It is also necessary to establish stronger links between the school districts and colleges to determine what changes need to be made in the credentialing process to ensure that teachers have the background they need when entering the profession. Teachers must be prepared to implement the strategies identified as necessary to ensure the success of all students.

## References

Bennett, C. (1990). Comprehensive Multicultural Education. *Theory and Practice*, 2nd ed. Boston: Allyn and Bacon.

Herrell, A. (1996). Portfolios and Young Children: A Natural Match. *Kindergarten Education: Theory, Research and Practice*. San Mateo, CA: California Kindergarten Association.

Mitchell, D., and Beach, S. (1990). How Changing Class Size Affects Classrooms and Students. *Policy Briefs*: 12. San Francisco, CA: Far West Labs.

Odden, A. (1990). Class Size and Student Achievement; Research-based Policy Alternatives *Educational Evaluation and Policy Analysis*. 12 (2) 213-327.

Pate-Bain, H., Achilles, C.M., Boyd-Zaharias, J., and McKenna, B. (1992). Class Size Does Make a Difference. *Phi Delta Kappa* November 1992. 253-256.

*Teaching Reading, A Balanced, Comprehensive Approach to Teaching Reading in Prekindergarten through Grade Three* (1996), Reading Program Advisory, Sacramento: California Department of Education.

Underwood, S., and Lumsden, L. (1994). Class Size, *Research Roundup*. Alexandria, VA: National Association of Elementary School Principals.

## Suggested Further Reading

Cotton, K. (1988) Summary of Research on Class Size. *School Improvement Research Series*. Portland, OR: Northwest Regional Educational Laboratory.