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AUTHOR Sharp, Mark A.
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ABSTRACT

The purpose of this paper was to share findings from an earlier study and to provide a framework for administrators to use in the implementation of class-size reduction (CSR) in their buildings. The study examined actual and average class size (CS), pupil-teacher ratios (PTR), and their differences. A primary goal was to clarify the ramifications of this for educational leaders. Another purpose of the study was to clarify the referents for the two concepts, CS and PTR. The study consisted of seven components that included analyses of research, literature, and several specific studies. The data from the research and the results of one of the studies (a feasibility study) suggest that staffs in many schools could reduce CS by reexamining the present allocation of human and financial resources. The paper is divided into three sections: (1) a summary of the original study; (2) understanding CS and PTR differences and using these differences to reduce CS at the K-3 grade levels; and (3) a model for reallocation of human and financial resources to allow for CSR. Appended is a class-size and pupil-teacher-ratio analysis instrument. (Contains 26 references.) (AUTHOR/WFA)

SUMMARY OF
AN ANALYSIS OF PUPIL-TEACHER RATIO
AND CLASS SIZE:
DIFFERENCES THAT MAKE A DIFFERENCE
AND ITS IMPLICATIONS
ON STAFFING FOR CLASS-SIZE REDUCTION

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Mark A. Sharp, EdD
Eastern Michigan University
Presenter

Co-presenters:

C. M. Achilles, EdD, Eastern Michigan University and Seton Hall University
J. D. Finn, PhD, SUNY. Buffalo, NY
Jean Krieger, PhD, Woodlake Elementary, Mandeville, LA

Presentation Draft

Mark A. Sharp
0-80 Westview
Ypsilanti, MI 48197

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Email: masharp@online.emich.edu

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ABSTRACT

The main purpose of this paper was to share the findings from an earlier study (Sharp, 2002), and to provide a framework for school administrators to use in the implementation of class-size reduction (CSR) in their buildings. The study examined “actual” and “average” class size (CS), pupil-teacher ratios (PTR), and their differences. A primary goal was to clarify the ramifications of this for educational leaders. Another purpose of the study was to clarify the referents for the two concepts, CS and PTR.

This study consisted of seven components: 1) an analysis of existing research and literature related to CS and PTR; 2) a national pilot study (1998) and a follow-up study (2001); 3) the state of Michigan study (1999); 4) a structured survey (1999) and a follow-up survey (2002) of an inner-city school district; 5) a multi-level review of CS and PTR at the international, national, state, and local levels; 6) a feasibility study to reduce CS in one school district; and 7) an on-site visitation to assess the CS and PTR difference in one district (Burke County Schools, North Carolina) and to review the process that was used in Burke County to reduce CS at the primary level.

The results of the study showed that, at the elementary level, there was a difference of about $n=9$ between a building’s average CS and its PTR in Michigan schools. There was a difference of about $n=10$ at the elementary level in the national studies; a difference of about $n=10$ in the inner-city studies; and a difference of about $n=5$ in the Burke County study. The above data and the results of the feasibility study suggest that staffs in many schools could reduce CS by reexamining the present allocation of human and financial resources.

In conclusion, the data examined by this researcher suggest that at the primary (K-3) level, students who receive small class treatments (one teacher to 15 to 18 students) obtain cognitive, affective, and possible health-related benefits. The data also suggest that teachers derive benefits as well. In addition, this study clearly showed that CS and PTR are not the same and, therefore, should not be used as synonyms. This paper is divided into three sections: 1) A summary of the original study, 2) Understanding CS and PTR differences and using these differences to reduce CS at the K-3 grade level, and 3) A model for reallocation of human and financial resources to allow for CSR.

I. Overview of “An Analysis of Pupil-Teacher Ratio and Class Size” Study (Sharp, 2002): Differences That Make A Difference

Introduction

The use of a clear referent when discussing or defining a concept, idea, theory, proposition, or object is critical to understanding and the ability to discuss it clearly, concisely, objectively, and intelligently. Referents and descriptors for class size (CS) and pupil-teacher ratio (PTR) are extremely important. Clarification of the concepts would contribute significantly to the ongoing debate about the effect that CS has on student achievement, and the potential costs of class-size reduction (CSR). Additionally, many conclusions about the effects of CS on student achievement at the primary school level have been made using data generated from PTR studies conducted in the upper grade levels (Betts, 1996). Generalizations about the effects of CS on the achievement of primary-age students from elementary and secondary-level PTR data may be invalid.

Scientific studies on the effects of CS on student achievement were conducted in the 1980s and 1990s and showed improved student achievement (e.g. Prime Time, 1984-1986; STAR, 1985-1990, SAGE, 1995-2002). This paper summarizes a study done by Sharp (2002) that examined and compared CS and PTR and helps to clarify issues surrounding CS, PTR, and achievement. Confusion about and possible misuse of these terms may be promoting: a) inequities and inequalities in education, b) uncertain or punitive policy, and c) poor decisions by school administrators and boards of education.

Statement of the Problem

Educators are constantly looking for school improvement initiatives that will have positive benefits for the highest number of students at the lowest cost to the district. CSR, directed at the primary level (K-3), has been placed on center stage. Debated at the local, state, and national levels, the issue is extremely complex in that it has short and long-range political, economic, and educational implications. Central in this debate is clarity between the two concepts, CS and PTR. How similar or different are these terms? Does one, neither, or both influence student outcomes positively, and to what degree?

Surprisingly, little attention has been given in this debate to the definitions and use of the terms PTR and CS. Are they often used interchangeably and therefore incorrectly? The problem for this study was the apparent conflict between CS and PTR.

Purpose of the Study

The main purpose of this study was to examine the difference between the PTR and the actual CS at the primary level (K-3) in a single state. Another purpose of the study was to clarify the referents for the two concepts, CS and PTR. The researcher sought answers to the following research questions to achieve the study's purpose.

Research Questions

1. What, if any, are the differences between PTR and actual class sizes as described in:
 - a) publications, literature, research, and databases?
 - b) elementary schools in the U.S.?
 - c) an actual sample of school systems in a single state?
 - d) a large urban school district?
2. How might a district implement a CSR initiative using existing resources, and what steps might a district follow to reduce CS at a minimum cost?

The researcher also addressed some ancillary questions and issues to help clarify CS/PTR issues. Secondary questions included:

3. What are the possible positive benefits of:
 - a) clarifying the concepts of PTR and CS?
 - b) developing standard definitions for the two concepts?
 - c) comparing outcomes of CS and PTR changes separately?
4. How do discussions of these differences:
 - a) hinder or facilitate policy decisions at the local, state, and national levels?
 - b) hinder or facilitate decision making in school districts and buildings?
5. What are the implications for policy makers and educational leaders?

Significance of the Study

Clarifying the concepts of CS and PTR could bring more precision in propositions that use these two concepts. These terms are often used as synonyms, and the data analyses of one concept are often misused to draw conclusions about the effects of the other concept. Policy makers, researchers, and school administrators have used the conclusions drawn from the effects of PTR and achievement as a basis for their lack of support for, and often their opposition to, reduced CS.

Study results could benefit researchers, policy makers, and practitioners by:

1. bringing focus to the debate on the effects of CS on student achievement by clearly defining the terms CS and PTR and their outcomes.
2. promoting the need for additional research on CS, and PTR as separate concepts.
3. highlighting the implications for traditional intervention programs (i.e. Title I, special education, etc.).
4. helping to promote funding of present class-size initiatives.
5. demonstrating potential problems of making generalizations about CS from data related to PTR and student achievement.
6. promoting increased class-size initiatives and the importance of careful assessment of those initiatives.
7. assisting school administrators and staff in decisions related to class-size initiatives and to PTR interventions.
8. illuminating the difficulty of collecting accurate data related to CS and PTR.

Summary of the Methods

The researcher conducted a review of research and literature related to PTR and CS to determine the consistency in the use of these two terms. Data obtained from U.S. Department of Education reports, as well as from other sources, were used to make comparisons between the various levels examined in this study (i.e., local, state, national). This study incorporated both quantitative and qualitative methods.

The researcher examined international, national, and state data to determine what differences (if any) exist between CS and PTR and to demonstrate the levels of consensus and confusion that surround PTR and CS.

A pilot study employing a convenience sample in 12 states was used to obtain initial CS and PTR data and to refine a survey instrument. The researcher used this survey to examine CS and PTR in one state (Michigan), a sample of schools in one large inner-city district, and one Southeastern school district, to determine actual differences between PTR and CS. Data on PTR were compared to class-size data.

A feasibility study was conducted in a single school district to determine if reducing class size (K-3) was possible using existing district funds. In addition, this researcher visited a Southeastern district to assess the process used by them in their CSR initiative.

Delimitations of the Study

In this study, the researcher:

- examined CS in public schools in Michigan; this did not include charter or private schools.
- studied only the K-3 grade levels.
- whenever possible relied upon reported data that are available in statistical reports rather than collecting data anew.

Limitations of Study

- The random sampling of CS in K-3 classrooms in Michigan public elementary schools limits the ability to make valid generalizations from these data to this level in public schools in Michigan.
- Valid generalizations cannot be made to states using aggregated national PTR and CS averages.
- Valid generalizations cannot be made about CS and PTR conditions in other states using Michigan PTR and CS data.
- Valid generalizations cannot be made to other districts using Burke County School District's PTR and CS data.
- Valid generalizations, outside of the sample schools, cannot be made in regard to CS and PTR using the inner-city school study data.

Definitions of Relevant Terms

The following is a list of terms and definitions that are important in this study.

Average Class Size - Average class size is derived by dividing a unit's (i.e., grade level, building, etc.) total student enrollment by the number of general education classroom teachers.

Churning - The coming and going of students and adults throughout the school day and throughout the school year (Monk, 1992).

Class Size (CS) - The number of children listed on a regular education teacher's attendance book and for whom the teacher is responsible.

Effect Size (ES) - The size of the treatment effect is the number of standard deviations the experimental population mean is from the true population mean (Grimm, 1993).

Production Function - The achievement level of an individual school or district related to costs and other inputs (Boozer & Rouse, 1995)

Pupil-Teacher Ratio (PTR) – Pupil-teacher ratio is the total student enrollment (in a district or school) divided by the total number of certified staff (McRobbie et al., 1998).

Regular Classroom Teacher - A certified teacher who teaches in traditional DK-12th grade classrooms.

Support Teacher - Any certified teacher who supports the regular program (e.g., Title 1, resource room, or other special education classroom teachers, and teachers of projects, or who teach in specific areas such as music, gifted, etc.).

Hypothesis

The main purpose of this study was to determine the relationship between PTR and CS. Based upon the confusion in the existing literature and research, both in definitions of CS and PTR and in the available conflicting results of analyses using these terms, the researcher believed that the following hypothesis should guide the study.

H1: There is a measurable difference in elementary class sizes as compared to the building PTR.

Research Design and Methods

This study contains both quantitative and a qualitative components. One portion of the study was a survey. The researcher used seven separate approaches in this investigation. These seven areas include:

1. Analyses of existing research and literature.
2. A national pilot study (1997-98) and a national follow-up study (2001) related to CS and PTR.
3. A structured survey related to CS and PTR in a single state (Michigan).
4. A structured survey (1998) of one large inner-city school district and a follow-up survey (2002).
5. Analyses of data comparing PTR to CS in schools at varying levels (i.e., international, national, state, and local).
6. A case study to model how CS can be reduced using existing building revenue.
7. Examination and analysis of a low-wealth district in a Southeastern state that had reduced CS (avg. n=14) in grades 1,2, and 3 district-wide at little or no extra costs.

Variables for the Study

This study involved making comparisons between two concepts (PTR and CS) to determine where differences exist between the two, and how large the differences are. The two concepts can be thought of as variables or concepts.

Survey Handling Procedures

1. the initial mailing,
2. another mailing three weeks later to principals who had not responded,
3. and the mailing of another survey a week later.

Data Handling and Analysis Procedures

Using the data provided on the returned survey instrument, the researcher calculated the PTR for each site and determined the average PTR for all buildings involved in the study. The same procedure was followed to determine class-size averages for individual buildings, the average for all buildings, and also the average for each grade level involved in the study (K-3). The data were examined and verified. Grade-level means from the survey were compared to international, national, state, and district PTRs. From this, the researcher was able to describe any differences in PTR and CS at each level of analysis.

Descriptive and comparative analyses were used to interpret the data in both the quantitative and the qualitative components of this study. These results were then recorded (written, tabled, or graphed).

Data Collection Procedures

A survey assured that a uniform data collection procedure was maintained in this study. Surveys were mailed to the sample of elementary principals in early 1999. A survey was cost-effective and provided a quick means of retrieving data. Sites were selected randomly, thus allowing for generalizations to be made to the total population of K-3 classrooms in public schools in Michigan. Because of the large geographic area being surveyed, mailings were a practical means of gathering the data. Surveys were also used in the national pilot study, in the inner-city school district study, and in the Burke County, North Carolina, Study.

Recommendations for Future Research and Study

At this point, it seems reasonable to interject areas for future study. This study showed both the complexity of the CS/PTR debate and the actual numerical differences of these concepts. Research in the following areas may help to bring additional focus to this debate:

- Conduct similar surveys of CS and PTR at the primary (K-3) level in other states to determine the differences between and within states.
- Conduct studies and make comparisons of PTR and CS at the upper-elementary, middle-school, and high-school level in Michigan, and in other states and countries.
- Conduct studies on PTR and CS in different types of school districts and compare the findings (i.e., rural, small city, suburban, urban, and inner-city).
- Improve the evaluation components of future CS and PTR studies (i.e., collect pre-test data as well as post-test). Take analyses down to the building, classroom, and student level.
- Incorporate better use of research design and methodology (such as that used in the STAR study).

Policy makers (i.e., legislators, board members, etc.) should push for the collection of actual and average CS data at the district (local), state, and national levels in addition to collecting PTRs at these levels. This would allow for the viewing of the whole picture and would provide data showing the actual conditions related to enrollment and staffing in the schools. Working with these data would allow for better assessment of programs and staff assignment.

Discussion, and Recommendations

This study found important differences between the two concepts, PTR and CS; the two terms do *not* mean the same thing. A review of the literature found that many researchers and policy makers use the two terms as synonyms and regularly juxtapose the two concepts. For example, in his policy perspective, When Money Matters, Wenglinsky (1997) used the terms as synonyms throughout his discussion. His conclusions, however, do support and call for CSR.

Although the main emphasis of this study was the elementary level, related data consistently showed a difference between CS and PTR throughout K-12. Because one viable strategy to reduce CS is through reallocation of existing human and financial resources, school leaders do not have to rely solely on outside or additional support to begin to address this important school reform measure. In fact, this measure may produce more efficient and effective use of funds by redirecting existing funds and personnel before new monies are obtained. Miles (1995) explained why: "Although educators often argue for more funds and critics counter that school spending is already too high, neither group has looked systematically at the use of existing resources" (p. 496). This reality should compel school leaders to rethink the traditional use of staff and to re-allocate human and financial resources to bring down *actual* CS to the effective ranges demonstrated in long-term research. Research supports a reduction in pull-out programs such as those found in many Title 1 projects (e.g., McDill & Natriello, 1997; Abt, 1997; Borman & D'Agostino, 1996), phasing out the use of classroom aides (e.g., Gerber, et al., 2001; Word et al., 1990) staffing to use the benefits of small K-3 classes (such as a reduction in need for remedial projects) could provide added classrooms and teachers (Achilles & Sharp, 1998).

H1: There is a measurable difference in "actual" and "average" CS as compared to the PTR in public schools.

H1 Response: Yes. These differences are about n=9 in Michigan (elementary only level); about n=10 in the 1998 National Pilot Study (elementary only level); about n=10 in the 2001 National Follow-up Study (elementary only level), about n=10 in the 1999 inner-city study (elementary only level), about n=12 in the 2002 inner-city follow-up study (elementary only level); and about n=5 (K-5 level) and about n=2 (grades 1-3) in Burke County.

The results (at all levels) support the research hypothesis for this study. The state study provides empirical data with a 90% confidence level and a sampling error of 10% or less. All

components of the study support the notion that it is possible to reduce CS by reallocating staff and resources. The literature review suggests that CSR, directed at the primary grade level (K-3), is a viable means to improve schooling outcomes, such as to increase student test-score achievement, reduce student in-grade retention, and improve student discipline. The literature review found affective benefits derived by students and teachers as a result of being in classrooms with fewer students (Glass & Smith, 1978; Smith & Glass, 1979; Bloom, 1984; Word et al., 1990; Achilles, Nye, & Zaharias, 1995; Finn & Achilles, 1999; Sutton, 2000; Terry, 2002). In addition to the cognitive and affective benefits of CSR, Prout (2000) found that there are health benefits for both students and teachers from being in small classes.

Finally, based on the various findings of this study, this researcher developed the following hypotheses. This researcher believes the response to each of them is accurate. However, additional study and research is necessary to substantiate the responses:

H2: As class size decreases, student achievement and other outcomes increase.

H2 Response: Yes. Results of earlier studies related to CS and achievement (K-3) suggest that students in small classes (around 15) outperform students in regular size classes (around 24). There are also affective, health, and long-term benefits (e.g., adult earnings, increased graduation rates from high school, improved attendance, etc.) associated with being in small classes.

H3: As PTR becomes “more” favorable, student achievement and other outcomes increase.

H3 Response: According to the research related to a “more” favorable PTR (around 15:1), and student achievement and other outcomes, there is no significant relationship. This is because a more favorable PTR does not assure reductions in CS.

The results of this study's comparison of CS and PTR are clear: the two concepts are not the same. Furthermore, they should not be used as synonyms. These findings are important and should serve to refocus this important debate.

II. Using CS and PTR Differences to Reduce CS in Grades K-3

Common Questions and Uncommon Answers:

Q: *Why focus CSR on K-3?*

A: It's elementary, Watson! Numerous studies (e. g., Indiana's Prime Time, Malloy & Gillman, 1999; Tennessee's Student Teacher Ratio [STAR] Study, Word, et al., 1990; Tennessee's Project Challenge, Achilles, Nye, & Zahariou, 1995; Tennessee's Lasting Benefits Study [LBS], Finn, Gerber, Achilles, & Boyd-Zaharias, 2001; Texas' CSR Initiative, Cortez, 2000; Wisconsin's Project SAGE, Molnar, et al., 2001; and Burke County, North Carolina's CSR Initiative, Egelson, Harmon, & Achilles, 1996) as well as several comprehensive meta-analyses (e. g., Glass & Smith, 1978; & Smith & Glass, 1979) provide compelling evidence of the positive effect that CSR (K-3) has on both student academic achievement and student affect.

Q: *How do you determine a building's PTR and its CS, and how do you use these differences to reduce CS?*

A: Appendix A is a form that was developed to assist in the computations necessary to determine a building's PTR, "average" CS, and "actual" CS. A building's PTR is determined by taking the total building (student) enrollment and dividing it by the total number of certified staff.

"Average" CS is derived by dividing a unit's (i. e., grade level, building, etc.) total student enrollment by the number of general education classroom teachers. "Actual" CS is the number of children on a regular education teacher's attendance book.

Note: For this exercise, it is important to calculate the building PTR two ways: 1) with only certified staff, and 2) with both certified and non-certified staff. The importance of this will become evident as you begin to examine the allocation of financial and human resources. The following example details the process.

Example:

(Certified staff only) Student enrollment : 400
 Regular classroom teachers: 16
Average class size: 25

Student enrollment: 400
 Total number of certified staff: 25
Building's PTR: 16:1

Avg. CS (25) minus the PTR (16) equals a difference of "9"

(Certified and non-certified staff)

Student enrollment: 400
 Total number of certified staff: 25
 Total number of non-certified staff: 12
400 divided by 37 equals a PTR of 11:1

Avg. CS (25) minus the PTR (11) equals a difference of "14"

Note: As you can see, the difference between the average CS and the PTR is greater when non-certified staff are factored in. The goal for an administrator is to get the PTR as close as possible to the average CS and to get the "average" CS as close as possible to the "actual" CS

Q: *What are the implications of this for your building(s)?*

A: Do the math! It most likely will amaze you!

Q: *What are common concerns and important considerations that administrators should be aware of?*

A: The following section will address this.

III. The Reallocation of Human and Financial Resources to Allow for CSR

Seven leadership concerns were identified to provide a framework for educational leaders as they begin to examine the possibilities and need for CSR. Depending on your district, other areas may also need to be considered as well: 1) research-based decision-making, 2) the ethics of providing small classes, 3) space, 4) school-community relations, 5) possible negotiation with union interests, 6) cost factors (including PTR and CS possibilities) and short- and long-term benefits, and 7) trade-offs using research results as a basis for choices. Whether you are examining CSR voluntarily, or in response to a state or district mandate, it is important to consider the above.

Building PTR

One strategy for reducing CS without raising present building costs dramatically is to reallocate existing staff and funds. A review of staff data will show the PTR and the average CS in a given building. Staff and administration should look at the allocation of staff (e. g., Title 1 teachers, Title 1 aides, support staff, specials teachers, specialists, administration, etc.) and funds (i. e., general, state & federal grants, etc.) to determine if they could better serve the students and buildings. Research on CS suggests that the money used in funding these positions might serve the students and district better by being directed toward reducing CS in K-3.

Decisions Based on Research

School improvement is complex. Research results are often mixed and inconclusive. Of importance is that leaders rely on as much good data as possible when deciding on a course of action. Students learn more when they have more of their teachers' attention, or, stated differently, teachers can teach students more when they are able to spend more time with the learner (Bloom, 1984). Research on the effects of CS (K-3) suggests that student achievement will increase when classes move from a range of 25-30 students to a range of 15-18 (Word et al., 1990, Finn & Achilles, 1999). Teacher stress is greatly reduced and morale is significantly improved (Smith & Glass, 1979; Terry, 2002). Student attendance, behavior, attention, involvement, and a feeling of connectedness also increase (Smith & Glass, 1979; Finn, 1993; Achilles & Finn, In press; Sutton, 2000; Terry, 2002). Along with this, the students' likelihood

for success increases and they are much more likely to stay in school. This also translates into the likelihood for increased earnings as the students move into adulthood (Boozer & Rouse, 1995).

Ethical Considerations

Research and common sense suggest that all students in K-3 receive immediate benefits from classes of about 18 students (e.g., Glass & Smith, 1978; Word et al., 1990; Achilles, 1996; Egelson, Harmon, & Achilles, 1996; Molnar, et al., 2001). In addition, research results show that students learn more and initial benefits grow as the child continues through the grades (Boozer & Rouse, 1995; Finn et al., 2001). Along with increased student academic achievement, other benefits occur: (a) reduced absenteeism; (b) reduced retention; (c) earlier diagnosis and remediation of learning difficulties; (d) increased feelings of students' connectedness to their peers, teachers, and school; (e) increased parent involvement; (f) decreased stress for the teachers; (g) increased teacher morale; and (h) student-centered classrooms (Sutton, 2000; Smith & Glass, 1979; Word et al., 1990). In combination, this list provides a significant number of reasons for reducing CS to a range of around 15-18 students per classroom at the K-3 level.

Eliminating and/or preventing gaps in student learning is important. It is equally important to assure that students do not progress throughout their K-12 experience without mastering the concepts and skills necessary for the next level. Increased emphasis at the K-3 level provides students with the skills and abilities to allow them to enjoy a successful and rewarding educational experience. The initial investment at the primary level would reap numerous rewards for students throughout their K-12 schooling and well into adulthood. The benefits of providing small classes (around 18) appear to outweigh the initial investment. CSR initiatives at the primary level make good business sense; they are also in the best interest of the children (Boozer & Rouse, 1995; Achilles, et al., 1995).

In summary, this paper provides a framework for educational leaders and researchers to use in determining whether or not it is feasible to implement a CSR initiative at a given site. One thing is clear: reducing CS in the early elementary (K-3) is an effective way to increase learning and improve overall student performance. In light of this, school administrators and policy persons should seriously examine the possibilities of CSR. Not only should no child be left behind, "no child deserves (or wants) to be left behind"!

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Class-size and Pupil-Teacher Ratio (PTR) Analysis**School Level:** *(Circle one)* Elem.; K-8; K-12**Building Name:** _____ **Total Student Enrollment:** _____**District:** _____ **Building Principal:** _____**Definitions of Importance:****Aides** – Adults who work with regular, remedial, or special education teachers.**Developmental Kindergarten (DK)** – also called, Early or Young-Fives, DK, Begingergarten, etc.
(School-age children)**FTE** – Full-Time Equivalence**Regular Classroom Teachers** – Teachers who teach in traditional, DK-12th grade classrooms. These can be inclusionary classrooms.**Specials Teacher** – e.g.: P.E., Media Specialist/Librarian, Art, Music, and Foreign Language.**Support teachers** – Any certified teacher who supports the regular program (e.g. LD, EI, EMI, Title I, Resource Room, or any other Special Education classroom that supports the regular program).**Instructions:** Please complete all portions of both pages of this survey. Page one pertains to building data. Page two pertains to individual classrooms up to third grade. Return in enclosed envelope.

<u>Building Data</u> <i>(Use FTE, where appropriate)</i>	<u>Total (N) FTE</u>
Regular Classroom Teachers -	_____
Support Teachers -	_____
Specials Teachers -	_____
Administrators, Counselors, Psychologists, etc. -	_____
Other Support Professionals* <i>(List positions)-</i>	_____
Total Professional Staff	_____
Aides -	_____
Secretaries -	_____
Total Non-Certified Staff	_____
* Do not count School Nurses, Doctors or Central Office Staff	

Official Use	
PTR: _____ <i>(Certified staff only)</i>	Average Class-size: _____
PTR _____ <i>(Certified and non-certified staff)</i>	_____

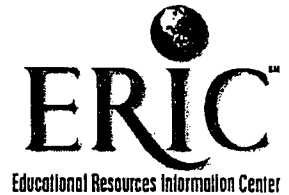
Please complete and fill in each classroom's enrollment using official counts (refer to the building's official records book).

"Individual" Classroom Counts

Grade Level	Enrollment	Grade Level	Enrollment
Dev. Kindergarten		2nd Grade	
Dev. Kindergarten		2nd Grade	
Dev. Kindergarten		2nd Grade	
Dev. Kindergarten		2nd Grade	
Dev. Kindergarten		2nd Grade	
Dev. Kindergarten		2nd Grade	
Dev. Kindergarten		2nd Grade	
Dev. Kindergarten		2nd Grade	
Dev. Kindergarten		2nd Grade	
Dev. Kindergarten		2nd Grade	
Kindergarten		3rd Grade	
Kindergarten		3rd Grade	
Kindergarten		3rd Grade	
Kindergarten		3rd Grade	
Kindergarten		3rd Grade	
Kindergarten		3rd Grade	
Kindergarten		3rd Grade	
Kindergarten		3rd Grade	
Kindergarten		3rd Grade	
1st Grade			
1st Grade			
1st Grade			
1st Grade			
1st Grade			
1st Grade			
1st Grade			
1st Grade			
1st Grade			
1st Grade			



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