

Report to the Joint Legislative Education Oversight Committee

Evaluation of the High Priority Schools Initiatives

SL 2003-284 Section 7.10 (c)

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GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 2001 SESSION LAW 2001-424 SENATE BILL 1005

(excerpt)

IMMEDIATE ASSISTANCE TO THE HIGHEST PRIORITY ELEMENTARY SCHOOLS

SECTION 29.1. Of funds appropriated from the General Fund to State Aid to Local School Administrative Units, the sum of ten million eight hundred seventy-six thousand four hundred thirty-eight dollars (\$10,876,438) for the 2001-2002 fiscal year and the sum of twelve million two hundred thirty-seven thousand nine hundred thirteen dollars (\$12,237,913) for the 2002-2003 fiscal year shall be used to provide the State's lowest-performing elementary schools with the tools needed to dramatically improve student achievement. These funds shall be used for the 37 elementary schools at which, for the 1999-2000 school year, over eighty percent (80%) of the students qualified for free or reduced-price lunches and no more than fifty-five percent (55%) of the students performed at or above grade level. Of these funds:

- (1) The sum of \$8,062,603 for the 2001-2002 fiscal year and the sum of \$8,062,603 for the 2002-2003 fiscal year shall be used to reduce class size at each of these schools to ensure that no class in kindergarten through third grade has more than 15 students;
- (2) The sum of \$973,455 for the 2001-2002 fiscal year shall be used to pay those teachers at these schools who elect to extend their contracts by five days for staff development, including staff development on methods to individualize instruction in smaller classes, and preparation for the 2001-2002 school year and the sum of \$2,334,930 for the 2002-2003 fiscal year shall be used to extend all teachers' contracts at these schools for a total of 10 days, including five additional days of instruction with related costs for other than teachers' salaries, for the 2002-2003 school year; and
- (3) The sum of \$1,840,380 for the 2001-2002 fiscal year and the sum of \$1,840,380 for the 2002-2003 fiscal year shall be used to provide one additional

instructional support position at each priority school.

No funds from the teacher assistant allotment category may be allotted to the local school administrative units for students assigned to these schools. Any teacher assistants displaced from jobs in these high-priority elementary schools shall be given preferential consideration for vacant teacher assistant positions at other schools, provided their job performance has been satisfactory. Nothing in this section prevents the local school administrative unit from placing teacher assistants in these schools.

Requested by: Senators Dalton, Lucas, Garrou, Carter, Plyler, Odom, Lee; Representatives Boyd-McIntyre, Rogers, Yongue, Hackney, Morgan, Easterling, Oldham, Redwine, Thompson

IMMEDIATE ACTIONS TO ADDRESS TEACHER SHORTAGE

SECTION 29.2.(a) Of the funds appropriated from the General Fund to State Aid to Local School Administrative Units, the sum of two million five hundred thousand dollars (\$2,500,000) for the 2001-2002 fiscal year and the sum of two million five hundred thousand dollars (\$2,500,000) for the 2002-2003 fiscal year shall be used to expand the pool of qualified teachers and to provide recruitment and retention incentives to attract and retain high-quality teachers to low-performing schools and schools with shortages of teachers in certain areas of certification. Of these funds:

- (1) The sum of \$1,000,000 for the 2001-2002 fiscal year and the sum of \$1,000,000 for the 2002-2003 fiscal year shall be used to provide additional scholarship funds for teacher assistants taking courses that are prerequisites for teacher certification programs. Notwithstanding G.S. 115C-468(c) and G.S. 115C-471(1), scholarships shall be awarded in amounts to be determined by the State Board of Education; and
- (2) The sum of \$1,500,000 for the 2001-2002 fiscal year and the sum of \$1,500,000 for the 2002-2003 fiscal year shall be used to provide annual bonuses of one thousand eight hundred dollars (\$1,800) to teachers certified in and teaching in the fields of mathematics, science, or special education at middle and high schools with eighty percent (80%) or more of the students eligible for free or reduced lunch or with fifty percent (50%) or more of students performing below grade level in Algebra

I and Biology. The bonus shall be paid monthly with matching benefits. Teachers shall remain eligible for the bonuses so long as they continue to teach in one of these disciplines at a school that was eligible for the bonus program when the teacher first received the bonus.

SECTION 29.2.(b) In accordance with G.S. 115C-325 and by way of clarification, it shall not constitute a demotion as that term is defined in G.S. 115C-325(a)(4), if:

- (1) A teacher who receives a bonus pursuant to this section is reassigned to a school at which there is no such bonus;
- (2) A teacher who receives a bonus pursuant to this section is reassigned to teach in a field for which there is no such bonus; or
- (3) A teacher receives a bonus pursuant to this section and the bonus is subsequently discontinued or reduced.

SECTION 29.2.(c) The Joint Legislative Education Oversight Committee shall study the effectiveness of providing benefits to part-time teachers as a means to recruit certified teachers back into the classroom. The Committee shall examine the effectiveness of different methods of providing these benefits. The Committee shall also examine the cost of the recruitment effort, including the cost of incorporating existing part-time teachers into the plan. The Committee shall make a report to the General Assembly by April 1, 2002.

SECTION 29.2.(d) The Joint Legislative Education Oversight Committee shall study the potential effectiveness of increasing the size of the Teaching Fellows Program to improve the supply of qualified teachers for the public schools. In its analysis the Committee shall consider the retention of Teaching Fellows in the teaching profession.

Requested by: Senators Dalton, Lucas, Garrou, Carter, Plyler, Odom, Lee; Representatives Boyd-McIntyre, Rogers, Yongue, Easterling, Oldham, Redwine, Thompson

COMPREHENSIVE ASSISTANCE TO CONTINUALLY LOW-PERFORMING SCHOOLS

SECTION 29.3. Chapter 115C of the General Statutes is amended by adding a new section to read:

- "§ 115C-105.37A. Continually low-performing schools; definition; assistance and intervention; reassignment of students.
- (a) Definition of Continually Low-Performing

- Schools. A continually low-performing school is a school that has received State-mandated assistance and has been designated by the State Board as low performing for at least two of three consecutive years. If the State Board identifies a school as continually low performing, the school improvement team at that school shall review its school improvement plan to ensure consistency with the plan adopted pursuant to G.S. 115C-105.38(3).
- (b) Assistance to Schools That Are Low Performing for Two Years. If a school that has received State-mandated assistance is designated by the State Board as low performing for two consecutive years or for two of three consecutive years, the State Board shall provide a series of progressive assistance and intervention strategies to that school. These strategies shall be designed to improve student achievement and to maintain student achievement at appropriate levels and may include, to the extent that funds are available for this purpose, assistance such as reductions in class size, extension of teacher and assistant principal contracts, extension of the instructional year, and grant-based assistance.
- (c) Intervention in Schools That Are Low
 Performing for Three or More Years. The State Board of
 Education shall develop and implement a series of actions for
 providing assistance and intervention to schools that have
 previously received State- mandated assistance and have been
 designated by the State Board as low performing for three or
 more consecutive years or for at least three out of four years.
 These actions shall be the least intrusive actions that are
 consistent with the need to improve student achievement at each
 such school and shall be adapted to the unique characteristics
 of each such school and the effectiveness of other actions
 developed or implemented to improve student achievement at each
 such school."

Requested by: Senators Dalton, Lucas, Garrou, Carter, Plyler, Odom, Lee; Representatives Boyd-McIntyre, Rogers, Yongue, Easterling, Oldham, Redwine, Thompson

ADDITIONS TO THE LOCAL SUPERINTENDENT'S PLAN TO IMPROVE A LOW-PERFORMING SCHOOL

SECTION 29.4.(a) G.S. 115C-105.37(a1) reads as rewritten:

"(a1) By July 10 of each year, each local school administrative unit shall do a preliminary analysis of test results to determine which of its schools the State Board may identify as low-performing under this section. The

superintendent then shall proceed under G.S. 115C-105.39. In addition, within 30 days of the initial identification of a school as low-performing by the local school administrative unit or the State Board, whichever occurs first, the superintendent shall submit to the local board a preliminary plan for addressing the needs of that school, school, including how the superintendent and other central office administrators will work with the school and monitor the school's progress. Within 30 days of its receipt of this plan, the local board shall vote to approve, modify, or reject this plan. Before the board makes this vote, it shall make the plan available to the public, including the personnel assigned to that school and the parents and guardians of the students who are assigned to the school, and shall allow for written comments. The board shall submit the plan to the State Board within five days of the board's vote. The State Board shall review the plan expeditiously and, if appropriate, may offer recommendations to modify the plan. The local board shall consider any recommendations made by the State Board."

SECTION 29.4.(b) This section becomes effective when this act becomes law.

Requested by: Senators Dalton, Lucas, Garrou, Carter, Plyler, Odom, Lee; Representatives Boyd-McIntyre, Rogers, Yongue, Easterling, Oldham, Redwine, Thompson

APPROPRIATIONS FOR CONTINUALLY LOW-PERFORMING SCHOOLS

SECTION 29.5. Of funds appropriated from the General Fund to State Aid to Local School Administrative Units, the sum of one million eight hundred seven thousand two hundred fifty-six dollars (\$1,807,256) for the 2001-2002 fiscal year and the sum of one million nine hundred eighty-six thousand six hundred ninety-one dollars (\$1,986,691) for the 2002-2003 fiscal year shall be used to provide the State's chronically low-performing schools with tools needed to dramatically improve student achievement. These funds shall be used to implement any of the following strategies at the schools that have not previously been implemented with State or other funds:

- (1) The sum of \$471,366 for the 2001-2002 fiscal year and the sum of \$471,366 for the 2002-2003 fiscal year shall be used to reduce class size at a continually low-performing school to ensure that the number of teachers allotted for students in grades four and five is one for every 17 students; and
- (2) The sum of \$1,207,595 for the 2001-2002 fiscal year

and the sum of \$1,207,595 for the 2002-2003 fiscal year shall be used to reduce class size at a continually low-performing school to ensure that the number of teachers allotted in grades six through eight is one for every 17 students, and that the number of teachers allotted in grades nine through twelve is one for every 20 students; and

- (3a) The sum of \$128,295 for fiscal year 2001-2002 shall be used to extend teachers' contracts at these schools by five days for staff development, including methods to individualize instruction in smaller classes and preparation for the 2001-2002 school year. Of these funds, the sum of \$10,175 shall be used for the extension of contracts of the additional teachers in grades four and five provided in subdivision (1) of this section and the sum of \$118,120 shall be used for the extension of all teachers' contracts at continually low-performing middle and high schools for the 2001-2002 school year; and
- (3b) The sum of \$307,730 for fiscal year 2002-2003 shall be used to extend teachers' contracts for a total of 10 days, including five days of additional instruction with related costs for other than teachers' salaries for the 2002-2003 school year. Of these funds, the sum of \$24,405 shall be used for the extension of contracts of the additional teachers in grades four and five provided in subdivision (1) of this section and the sum of \$283,325 shall be used for the extension of all teachers' contracts at continually low-performing middle and high schools for the 2002-2003 school year.

Notwithstanding any other provision of law, the State Board of Education may implement intervention strategies for the 2001-2002 school year that it deems appropriate.

Requested by: Senators Dalton, Lucas, Garrou, Carter, Plyler, Odom, Lee; Representatives Boyd-McIntyre, Rogers, Yongue, Hackney, Morgan, Easterling, Oldham, Redwine, Thompson

EVALUATION OF INITIATIVES TO ASSIST HIGH-PRIORITY SCHOOLS

SECTION 29.6.(a) In order for the high-priority schools identified in Section 29.1 of this act to remain eligible for the additional resources provided in this section, the schools must meet the expected growth for each year and must

achieve high growth for at least two out of three years based on the State Board of Education's annual performance standards set for each school. No adjustment in the allotment of resources based on performance shall be made until the 2004-2005 school year.

SECTION 29.6.(b) All teaching positions allotted for students in high-priority schools and continually low-performing schools in those grades targeted for smaller class sizes shall be assigned to and teach in those grades and in those schools. In grades K-3 in high-priority schools, the maximum class size for the portion of the 2001-2002 school year beginning with January 1, 2002, shall be no more than two students above the allotment ratio in that grade. The maximum class size for subsequent school years in grades K-3 in high priority schools and in grades K-5 in continually low-performing schools shall be no more than one student above the allotment ratio in that grade. The Department of Public Instruction shall monitor class sizes at these schools at the end of the first month of school and report to the State Board of Education on the actual class sizes in these schools. If the local school administrative unit notifies the State Board of Education that they do not have sufficient resources to adhere to the class size maximum requirements, the State Board shall verify the accuracy of the request. If additional resources are determined necessary, the State Board of Education may allocate additional teaching positions to the unit from the Reserve for Average Daily Membership Adjustments.

SECTION 29.6.(c) If a local board of education determines that the local school administrative unit is unable to implement the class-size limitation in accordance with this section for any high-priority school located in the unit, the local board may request a waiver for the school for the 2001-2002 school year. The request shall include the documentation required in G.S. 115C-105.26(a). If the State Board grants the waiver, the State Board shall withdraw the additional teacher positions allotted to the local school administrative unit for the school and reinstate the regular allotment for teacher assistants for the school.

SECTION 29.6.(d) Of funds appropriated from the General Fund to State Aid to Local School Administrative Units, the sum of five hundred thousand dollars (\$500,000) for fiscal year 2001-2002 and the sum of five hundred thousand dollars (\$500,000) for fiscal year 2002-2003 shall be used by the State Board of Education to contract with an outside organization to evaluate the initiatives set forth in this act.

The evaluation shall include:

- (1) An assessment of the overall impact these initiatives have had on student achievement;
- (2) An assessment of the effectiveness of each individual initiative set forth in this act in improving student achievement;
- (3) An identification of changes in staffing patterns, instructional methods, staff development, and parental involvement as a result of these initiatives;
- (4) An accounting of how funds and personnel resources made available for these schools were utilized and the impact of varying patterns of utilization on changes in student achievement;
- (5) An assessment of the impact of bonuses for mathematics, science, and special education teachers on (i) the retention of these teachers in the targeted schools, (ii) the recruitment of teachers in these specialties into targeted schools, (iii) the recruitment of teachers certified in these disciplines into teaching, (iv) student achievement in schools at which these teachers receive these bonuses; and
- (6) Recommendations for the continuance and improvement of these initiatives.

The State Board of Education shall make an initial report to the Joint Legislative Education Oversight Committee regarding the results of this evaluation by December 1, 2002, and annually thereafter. The State Board of Education shall submit its recommendations for changes to these initiatives to the Committee at any time.

GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 2003 SESSION LAW 2003-284 HOUSE BILL 397

EVALUATION OF INITIATIVES TO ASSIST HIGH-PRIORITY SCHOOLS

SECTION 7.10.(a) In order for the high-priority schools identified in Section 7.9 of this act to remain eligible for the additional resources provided in this section, the schools must meet the expected growth for each year and must achieve high growth for at least two out of three years based on the State Board of Education's annual performance standards set for each school. No adjustment in the allotment of resources based on performance shall be made until the 2004-2005 school year.

SECTION 7.10.(b) All teaching positions allotted for students in high-priority schools and continually low-performing schools in those grades targeted for smaller class sizes shall be assigned to and teach in those grades and in those schools. The maximum class size in grades K-3 in high-priority schools and in grades K-5 in continually low-performing schools shall be no more than one student above the allotment ratio in that grade. The Department of Public Instruction shall monitor class sizes at these schools at the end of the first month of school and report to the State Board of Education on the actual class sizes at these schools. If the local school administrative unit notifies the State Board of Education that they do not have sufficient resources to adhere to the class size maximum requirements and requests additional teaching positions, the State Board shall verify the need for additional positions. If the additional resources are determined necessary, the State Board of Education may allocate additional teaching positions to the unit from the Reserve for Average Daily Membership adjustments.

SECTION 7.10.(c) Of funds appropriated from the General Fund to State Aid to Local School Administrative Units, the sum of five hundred thousand dollars (\$500,000) for fiscal year 2003-2004 and the sum of five hundred thousand dollars (\$500,000) for fiscal year 2004-2005 shall be used by the State Board of Education to contract with an outside organization to evaluate the initiatives set forth in this section. The evaluation shall include:

- (1) An assessment of the overall impact these initiatives have had on student achievement;
- (2) An assessment of the effectiveness of each

- individual initiative set for this section in improving student achievement;
- (3) An identification of changes in staffing patterns, instructional methods, staff development, and parental involvement as a result of these initiatives;
- (4) An accounting of how funds and personnel resources made available for these schools were utilized and the impact of varying patterns of utilization on changes in student achievement;
- (5) An assessment of the impact of bonuses for mathematics, science, and special education teachers on (i) the retention of these teachers in the targeted schools, (ii) the recruitment of teachers in these specialties into targeted schools, (iii) the recruitment of teachers certified in these disciplines, and (iv) student achievement in schools at which these teachers receive these bonuses; and
- (6) Recommendations for the continuance and improvement of these initiatives.

The State Board of Education shall make a report to the Joint Legislative Education Oversight Committee regarding the results of this evaluation by December 1 of each year. The State Board of Education shall submit its recommendations for changes to these initiatives to the Committee at anytime.



North Carolina Department of Public Instruction

Second Annual Evaluation Report of the High Priority Schools Initiatives 2003-2004

September 2004

Metis Associates

...making a meaningful difference

North Carolina Department of Public Instruction

Second Annual Evaluation of the High Priority Schools Initiatives 2003-2004

September 2004

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EVALUATION OF THE HIGH PRIORITY SCHOOLS INITIATIVE OMMISSIONED BY NORTH CAROLINA'S DEPARTMENT OF PUBLIC INSTRUCTION

METIS ASSOCIATES' FINAL EVALUATION REPORT - EXECUTIVE SUMMARY

Introduction

With the passage of State legislation in 2001, North Carolina's 36 highest priority elementary schools were provided with supplementary funds to reduce class size in kindergarten to grade 3 (component 1); extend teacher contracts by 10 days, including five days for professional development (component 2) and five additional days of instruction (component 3); and provide one additional instructional support position at each school (component 4). In response to the legislation's requirements for information regarding the impact of these four components, known collectively as the High Priority (HP) Schools Initiative, on student achievement, the North Carolina Department of Public Instruction (NCDPI) selected Metis Associates, Inc., an independent research organization, to conduct the multi-year evaluation study through a collective bidding process. This document summarizes the results of the second year of the evaluation.

METHODOLOGY

During the first evaluation year (which was the second year of the HP Initiative implementation), Metis conducted a comprehensive qualitative and quantitative analysis of the initial implementation and impacts of the HP Initiative. The study emphasized results within and across the HP schools, but also included quantitative comparisons of HP student achievement with the achievement of students in a group of nine comparison schools. The comparison schools were selected (by Metis and DPI) using the same criteria that were used to identify the 36 HP schools in 1999-2000 but applied to 2000-2001 data. For the second year evaluation, the initial comparison school design was expanded to include all of the school-based qualitative data collections, and included the gather of a parallel set of data from both the HP and comparison schools. What was learned from these efforts was that the comparison schools did not reduce class size by as much as the HP schools, but they have actually been implementing a number of programs and instructional initiatives over the past three years that parallel the implementation of the other components of the HP Schools Initiative.

SUMMARY OF KEY FINDINGS

The second annual evaluation found that the HP Schools Initiative had been fully implemented in almost all HP schools and districts by 2003-2004. This may be attributable to the fact that both district and school stakeholders appeared to be more aware of the requirements of the HP Initiative during Year 3, compared to the prior two years of implementation. However, the HP districts and schools continued to report a number of challenges and constraints to implementation, including: recruiting, hiring, and retaining fully certified and experienced teachers; finding additional rooms and sufficient funding to expand school facilities; stretching limited resources to pay for ancillary costs associated with the implementation of the four components of the HP Initiative; addressing issues related to the reallocation of the teaching assistant positions; and developing strategies for improving parental involvement and support. It was also learned that this year the HP schools will be re-evaluated to determine which schools can be removed from the list based on the original criteria identified in the statute. (Note that a list of eligible schools is included in the Appendix to the main report).

As indicated above, within the Initiative's target grade levels (K-3), the HP schools, on average, had significantly fewer students per class than did the comparison schools for all three years of implementation. In addition, the evaluation revealed that K-3 teachers at the HP schools are taking advantage of smaller classes to tailor instruction and give students more individualized time and attention in their classes. For example, greater numbers of HP teachers reported that they have more time to provide individualized attention to their students as well as more time to plan small group instructional activities than did teachers in the comparison schools.

While we believe that there is a need for continued longitudinal evaluation before definitive conclusions may be drawn, the quantitative analyses presented in the full report provide some evidence that lower class size may be having a positive influence on student achievement, particularly in grade 3. Examples of grade 3 findings include the following:

- o Longitudinal analyses showed that HP students in grade 3 made significant improvements in both reading and mathematics from Year 2 to Year 3 of the Initiative.
- o HP students in grade 3 showed greater positive movement in performance levels on the EOG reading from Year 2 to Year 3 than did grade 3 students at the comparison schools.
- o For grade 3, membership in the HP schools proved to have an effect on gains in both reading and math. In both subject areas, the HP students outperformed their peers in the comparison schools at the close of Year 3.
- In Year 3, grade 3 students at the HP schools that received waivers during the first year of implementation showed significantly higher achievement in math than did their peers at the comparison schools.

Additional findings for grade 3 as well as findings for the remaining grade levels are included in the full report.

RECOMMENDATIONS

The following recommendations derive from the full set of findings and are being suggested to assist DPI as it moves forward with the continuance and improvement of the different components of the HP Schools Initiative.

- o Offer guidance on best practices for implementing the four components of the HP Schools Initiative, so that these tools might have the greatest potential for impact on student achievement.
- Provide the HP districts and schools with more flexibility to design the extended school year component in a way that best meets local needs.
- Explore the extent to which the HP districts may already be using a K-2 assessment (such as the formative K-2 assessments developed by NCDPI) that could provide useful evaluation data for those target grade levels.
- Continue to examine what else can be learned from the multi-year evaluation database regarding the relationship between the reduced class size component and student achievement outcomes at the HP schools.

High Priority Schools Initiative, North Carolina Department of Public Instruction

METIS ASSOCIATES' FINAL EVALUATION REPORT

The second in a series of evaluation studies on North Carolina's High Priority Schools Initiative

I. Introduction

History of the High Priority (HP) Schools Initiative

Aiming to provide the state's highest priority elementary schools with immediate assistance, in 2001 the North Carolina General Assembly passed legislation that appropriated supplementary funds for the state's lowest performing elementary schools. Approximately \$10.8 million for the 2001-2002 fiscal year and \$12.2 million for the 2002-2003 fiscal year were to be used to provide these schools with tools needed to substantially improve student achievement, creating the High Priority Schools Initiative. The set of high priority schools targeted for this assistance was defined as those in which over 80% of students qualified for free or reduced-price lunches and no more than 55% of the students performed at or above grade level during the 1999-2000 school year. Across the state, 36 elementary schools were identified as high priority (HP) schools.

The HP schools legislation specified that funds be used to:

- Reduce class size in kindergarten to grade 3 so that there is a 15:1 student-teacher ratio (component 1);
- Pay teachers to extend all teacher contracts at these schools by 10 days, including five days for professional development (component 2) and five additional days of instruction (component 3); and
- Provide one additional instructional support position at each HP school (component 4).

Importantly, the legislation did not allow funds for teaching assistants to be allotted to these schools. Rather, the school districts' teaching assistant allotments were to be reduced based on average daily membership (ADM) for each of the HP schools. In place of the teaching assistant allotments, additional teaching positions were to be allocated to each HP school so that all classrooms at the targeted grade levels reached an allotment ratio of 15:1.

Given the late approval of the legislation in 2001-2002, a waiver clause was included that allowed districts to "opt out" of implementing the class size reduction component for Year 1. Among the 36 HP schools, 17 applied to NCDPI for a waiver. With all waivers being approved by NCDPI, those schools' allotments were reversed — withdrawing the additional teaching position allotments and reinstating the teaching assistant position allotments. In Year 2, despite not being afforded waiver status again, one elementary school (Wadesboro Primary, Anson County) opted not to accept the HP resources and did not implement any of the HP components. Thus, in Years 1 and 2, the total pool of HP schools was reduced to 35 elementary schools, representing 15 school districts across the state. In Year 3, no waivers were granted, and all 36 schools were to be fully implementing all four of the components that comprise the HP Schools Initiative.

Evaluation Background

This same legislation authorized the North Carolina Department of Public Instruction (NCDPI) to contract with an outside organization to evaluate the High Priority Schools Initiative. In December 2002, Metis Associates, Inc., an independent research organization headquartered in New York City, was contracted by NCDPI to conduct an evaluation of the impact of the HP components on improving student achievement. The experiences of the HP schools during the first two years of implementation are detailed in the September 2004 "First Annual Evaluation Report: 2001-2002 and 2002-2003." For Years 1 and 2 of the Initiative, this report provides information on challenges of implementation of reduced class size, various stakeholders' perceptions of the HP Schools Initiative, uses of allocated funds and personnel resources by the HP schools, preliminary findings regarding impact on student achievement, and recommendations for improving implementation.

During the second year of the evaluation, the 2003-2004 school year (Year 3 of implementation), Metis continued to examine issues related to the implementation of the four legislatively prescribed components at the HP schools. Metis was also asked to examine carefully the impact of the HP components and resource utilization on student achievement and other outcomes. The second annual evaluation report presents a more complete picture of the implementation and impact of a more fully implemented HP Schools Initiative.

II. Report Structure

The remainder of this report is organized into five sections. Section III presents a discussion of the evaluation approach and methodology that were used. Section IV describes what was learned about the comparison schools, including the different initiatives these schools have been implementing over the past three years to improve student achievement. Section V presents findings organized by the four evaluation areas, including the changes that have occurred in the implementation of the four HP components across the 36 HP schools, the impact of resource utilization at the HP schools, evidence of student achievement and other outcomes, and the impact of the HP Initiative on student achievement and other positive outcomes for students. Finally, Sections VI and VII offer conclusions of the various evaluation results and recommendations, respectively.

III. Evaluation Design

The overall approach to the evaluation was participatory in nature. The Metis evaluation team worked closely with the DPI Evaluation Committee over the course of the past year, holding regularly scheduled progress meetings. As during the first year of the evaluation, the DPI Committee was comprised of a core group of members that included Brad McMillen, Senior Evaluation Consultant, Division of Accountability Service; Elsie Leak, Associate Superintendent for Curriculum and School Reform Services; Marvin Pittman, Director of School Improvement; Jackie Colbert, Assistant Director of School Improvement; and Charlotte Hughes, Section Chief for Effective Practices.

Through the progress meetings, the Metis team engaged members of the DPI Committee in discussions about designing the teacher log instrument and implementation plan, refining previously developed survey instruments and interview protocols, and assisting with instrument development for the set of comparison schools. The meetings also served as a means for sharing formative evaluation information with DPI, such as preliminary findings, challenges

encountered in data collection, and impressions from the field. In addition, the evaluation team submitted periodic status reports to DPI, describing challenges and successes with data collection activities underway and providing written summaries of preliminary findings.

In addition, this year's evaluation was also guided by a specially selected group of national experts in the field of research and evaluation, known as the Technical Work Group (TWG). While full biographical summaries can be found in the Appendix to this report, the particular expertise of each TWG member is briefly described below.

- Dr. Carolyn Cobb (Raleigh, NC) currently serves as the Director of the Governor's More at Four statewide pre-kindergarten program, and was the former Chief of Evaluation and Research for the North Carolina Department of Public Instruction.
- Dr. Jim Emshoff (Atlanta, GA) is an Associate Professor of Psychology and the Director of the Community Psychology Program at Georgia State University. He also founded and serves as the Director of Research at EMSTAR Research, Inc.
- Robert Tobias (New York, NY) is currently a clinical professor and the Director of the Center for Research on Teaching and Learning at New York University's Steinhardt School of Education. For over fourteen years, Mr. Tobias was the Executive Director of the Division of Assessment and Accountability for the New York City Department of Education.
- Dr. Paulette Poncelet (Cleveland, OH) is the Director of Program Research and Evaluation of the Cleveland Municipal School District, and has directed the evaluations of several large-scale school improvement and curriculum reform initiatives in Cleveland.

Throughout the evaluation, Metis and DPI engaged the TWG in different activities to inform the evaluation, including critiquing the evaluation's research questions and methods, reviewing draft data collection instruments, and shaping the data analysis plan.

Comparison Group Design

When it is not possible to assign schools randomly to control and treatment conditions, similarly situated comparison groups can be used to approximate the impacts that are attributable to the intervention (i.e., treatment). For example, a comparison group might be constituted of like schools from the same or comparable districts. The schools in the comparison group are then measured with the same instruments that are used for the treatment group.

During the first year of the evaluation, Metis worked with DPI to develop a process for selecting a comparison group of schools. Since the HP schools were initially identified using 1999-2000 data, Metis applied the HP selection criteria to 2000-2001 data and generated a list of elementary schools that had over 80% of their students eligible for free or reduced price lunch and ABCs performance composites at or below 55%. In other words, this list represents schools that would have been identified as HP had the 2000-2001 data been available when DPI originally determined the list of HP schools. Of the 34 schools on the list, 17 were HP schools that were already involved in the evaluation. Of the remaining 17 schools, nine were selected as the set of comparison schools for the study; eight could not be used as comparison schools because they were alternative schools. The schools and their districts are listed in Table 3.1. (Note that a list of the 36 HP schools can be found in the appendix to this report.)

Table 3.1 – Selected Comparison Schools

District	School		
Durham Public Schools	C.C. Spaulding Elementary (PK-5) Y. E. Smith Elementary (PK-5)		
Guilford County Schools	Foust Elementary (PK-5) Oak Hill Elementary (PK-5)		
Hoke County Schools	West Hoke Elementary (K-5)		
Nash-Rocky Mount Schools	Swift Creek Elementary (PK-5)		
Pitt County Schools	Belvoir Elementary (PK-5)		
Washington County Schools	Pines Elementary (PK-5)		
Weldon City Schools	Weldon Elementary (PK-5)		

Since comparison schools were similar at baseline to the treatment schools on a number of key variables, all things being equal, any subsequent detected differences would more likely be attributable to the intervention (i.e., the HP Schools Initiative). In the following table we present key student-level characteristics of the comparison schools and the HP schools for four years: 2000-2001 (baseline), 2001-2002 (Year 1), 2002-2003 (Year 2), and 2003-2004 (Year 3).

Table 3.2 – Key Characteristics of HP and Comparison Schools (CS)
Grades 3-5 Combined

Demographics	2000-2001		2001-2002		2002-2003		2003-2004	
	HP	CS	HP	CS	HP	CS	HP	CS
Number of Students	6,647	2,012	6,566	1,796	6,193	1,746	5,855	1,587
% African-American	83.9	78.6	82.1	80.3	80.9	75.5	76.5	73.9
% Hispanic	6.7	4.8	8.8	4.5	10.1	6.5	12.8	6.8
% White, Asian & American Indian	9.3	16.6	9.1	15.2	9.0	18.0	10.7	19.3
% Limited English Proficient	3.7	2.4	4.1	2.2	5.1	4.1	6.9	4.7
% Eligible for Free/Reduced Lunch	86.2	79.9	87.0	81.1	83.2	73.8	82.9	75.5
% Eligible or Title I	95.4	79.8	97.5	100.0	99.8	85.9	99.9	89.8
% Special Education	16.1	16.3	15.8	18.4	16.7	17.8	16.1	17.8
% Gifted	4.1	4.1	4.6	4.8	4.8	4.5	4.3	5.2

The data in Table 3.2 show that:

- In general, the comparison schools most closely reflect the HP schools in the proportion of special education, limited English proficient, and gifted students.
- When looking at the baseline year, it can be seen that the HP schools have a slightly greater concentration of African-American students, although this difference diminishes somewhat over time.
- At baseline and during each subsequent year, the HP schools enrolled a slightly larger percentage of low-income students than did the comparison schools.

For the current evaluation, Metis expanded the initial comparison school design (which was used solely in the quantitative component of the evaluation) to include all of the qualitative data collection that was school-based, using an overall approach of collecting parallel sets of data from both the HP and comparison schools. These activities are described more fully in the section below.

Data Collection

The evaluation team used the following methods to collect data relevant to the research questions:

Review of Extant Data: Each HP school was asked to maintain a file for Metis that would contain information about the content and delivery of the professional development that was offered to teachers during the five contract extension days required by the HP Schools Initiative. Examples of the types of documentation that Metis received across the schools included training content descriptions, professional development agendas, planning meeting agendas and minutes, and sign-in-sheets. In addition to the professional development documents, Metis collected various testing and student information files and financial spreadsheets from DPI. Electronic database files that were initially constructed during the first annual evaluation were updated to contain test results and other student outcome data for all 36 HP schools as well as for the comparison schools for four academic years: 2000-2001 (baseline), 2001-2002 (Year 1), 2002-2003 (Year 2), and 2003-2004 (Year 3).

Individual Interviews with District-Level Stakeholders: Beginning in April 2004, the evaluation team began conducting individual interviews with District Finance Officers (DFOs) in school districts with HP schools. These interviews continued through June 2004 until the DFOs at all 16 participating school districts had been interviewed. The evaluation team used a semi-structured set of questions, and the interviews averaged one hour in length.

During the same time period, telephone interviews were also conducted with district-level administrators who had oversight for the HP Schools Initiative in all 16 participating districts. This included Directors of Instruction, Directors of Curriculum or Instructional Support, Directors of Elementary Education, Assistant Superintendents, Deputy Superintendents, and Directors of School Improvement. All of the interviews were conducted using a structured protocol to guide the discussion and were about 45 minutes in length.

Classroom Teacher Log - Pilot Study: Since a key focus of the second year evaluation was to explore changes in teaching practices that may have resulted from reducing class size, an addition to the evaluation design for this past year was the development and pilot administration of a Classroom Teacher Log. Metis worked closely with the DPI Committee to design a Classroom Teacher Log that would create a daily record of participants' teaching in reading and language arts. Since this was to be a pilot study, Metis began the process of deciding what schools to select from the three school districts that had both HP and comparison schools: Durham, Guilford, and Nash-Rocky Mount. After a careful review of a site selection matrix that contained demographic and academic characteristics of the HP and comparison schools within these districts, Metis and DPI selected a total of six schools (three HP schools and three comparison schools) to participate in the Teacher Log pilot administration. In turn, teachers at these schools were asked to fill out the Teacher Logs at the end of the day for one full week. Taken together, across the schools, the teachers began completing the Logs during the week of March 22, 2004, and continued through the week of May 17, 2004. The grade levels of the participating teachers ranged from kindergarten through five, with kindergarten having the most representation (almost 28%).

The Teacher Logs recorded various activities and descriptive information about the reading and language arts lessons taught each day. Of the six schools selected for the pilot, four agreed to

participate and submitted completed logs to Metis. Among these, two were HP schools and two were comparison schools. In total, Metis received 374 Teacher Logs. Of these 374, 257 were from teachers from the HP schools, and 117 were from teachers at the comparison schools.

Surveys of HP School Principals and Teachers: The Metis evaluation team asked the principals at the HP schools to complete an Administrator Survey and to assist in disseminating an HP Teacher Survey to all instructional staff at their schools. Both surveys were designed to obtain detailed information about the implementation of the four HP schools components, as well as their perceptions of the impacts the Initiative is having on students, teachers, and the school as a whole. Administrator Surveys were returned from 32 of the 36 participating school principals. Approximately 951 teachers, representing 33 of the 36 HP schools, returned a completed survey to Metis. The number of Teacher Surveys returned from each school ranged from 11 to 62, with an average of 29 per school.

Comparison School Principal Interviews: Principals from eight of the nine comparison schools were interviewed by Metis staff, using a structured interview protocol. The purpose of these interviews was to obtain descriptive information about what programs and initiatives were being implemented at the comparison schools that might explain outcomes or findings from the quantitative analyses of student achievement data. The interviews were approximately 20 to 30 minutes in length.

Surveys of Comparison School Teachers: Teachers at the comparison schools were asked to complete a Staff Survey that followed a set of questions similar to those included in the HP Teacher Survey. The questionnaire asked about classroom climate and instruction, roles of the teaching assistants, and teachers' experiences with professional development and reduced class size at their current school. In total, 180 Comparison School Teacher Surveys were returned to Metis, representing seven of the nine comparison schools.

Teaching Assistant Survey: Finally, a Teaching Assistant (TA) Survey was developed and administered to all teaching assistants on staff at both the HP and the comparison schools during the 2003-2004 school year. The TA Survey was designed to capture detailed information about the various types of assistance these staff are providing in the classroom with respect to academic support, administration, and classroom management. The survey also asked the teaching assistants to rate their skill level in using a variety of teaching strategies and areas. A total of 277 TA Surveys were received from 33 of the 36 HP schools, while another 97 TA Surveys were obtained from seven of the nine comparison schools.

Table 3.3 – Sample Size and Response Rates for School-Based Data Collection

Respondent Group	Population	Achieved Sample	Response Rate
HP Principals	36	32	88.9%
HP Teachers	1,034	951	92.0%
HP Teaching Assistants	377	235	82.7%
CS Principals	9	8	88.9%
CS Teachers	283	180	63.6%
CS Teaching Assistants	144	97	67.4%

At the onset of the second year of the evaluation, Metis convened an initial meeting with members of the DPI Team and the Technical Work Group to review the first year findings and to shore up the project's broad set of research questions. The final set of evaluation questions that were generated for the second year evaluation study is as follows:

Question 1 – What changes, if any, have occurred in the implementation of the four legislatively prescribed components (reduced class size, extended contract professional development for teachers, extended school year for students, and added instructional support position) at the HP Schools?

- How effective is the implementation of the class size reduction component in the HP schools?
- How did the HP schools use the one additional instructional support position provided by the legislation?
- To what extent has parent involvement increased at the HP schools? What types of strategies are being used to engage and involve parents at the HP schools?
- To what extent have the HP schools/districts been able to retain their teaching assistant positions through other funds? What functions do teaching assistants serve in these schools?
- What is the nature of the support being provided by both state- and district-level staff to the HP schools to help shore up implementation of the Initiative?
- To what extent are districts and the HP schools still encountering resource, facility, and other constraints to implementing reduced class size?

Question 2 — What impact does resource utilization have on student achievement and other outcomes at the HP schools? What changes in resource utilization have occurred at the HP schools in Year 3?

- To what extent has DPI improved the tracking of allocations and expenditures in the HP Schools Initiative? How have the financial systems been improved over the life of the HP Schools Initiative?
- For each year of the Initiative, what processes do the districts use to allocate HP funds to the schools?

Question 3 – What student achievement outcomes occurred in the HP schools?

 To what extent did the HP schools achieve their stated growth targets in ABCs performance levels and make adequate yearly progress in spring 2004? What differences (if any) exist between the HP schools and the comparison schools on these indicators?

- To what extent do students at the HP schools show greater positive movement in performance levels in reading and math when compared to their peers at the comparison schools?
- To what extent have the HP schools made gains on state assessments in reading and math, in comparison to gains for the set of comparison schools, since the implementation of the Initiative?
- Taking into account relevant factors identified in the first annual evaluation, what effect (if any) is the implementation of the HP components having on individual student performance in reading and math over time?
- How does average class size at the HP schools compare to that of the comparison schools? What changes in class size (if any) have occurred in the comparison schools over time?
- What differences exist in achievement outcomes for different clusters of HP schools?
- What differences exist in the number and percent of children retained in grade at the HP schools vs. the comparison schools?
- Are some components more or less effective with different groups of students (e.g., limited English proficient students, students with special needs, minority vs. nonminority students, gender within minority vs. non-minority status) or in different types of schools (lower vs. higher poverty)?

Question 4 – What impact did each HP component have on promoting student achievement and other outcomes according to stakeholder perceptions?

IV. Comparison School Implementation

This section presents a summary of what was learned about the different programs and initiatives that have been implemented at the comparison schools to support improved student achievement over the past three school years. The discussion incorporates findings from both the interviews with the comparison school principals and surveys of comparison school teachers.

Reduced Class Size

All but two of the comparison schools noted that their school and/or district has supported and implemented smaller class sizes in grades K to 2. Among the funding sources for reduced class size cited by comparison schools were:

- State funding (e.g., the statewide reduced class size initiative for kindergarten) (4 schools);
- Local or district funding (e.g., a system-wide initiative where no class can exceed a student-teacher ratio of 15 to 1) (3 schools);
- o Title I funding (1 school);
- o Title II funding (1 school);
- Equity Plus funding (1 school);
- Remediation funding (1 school);
- o More at Four funding (for pre-kindergarten) (1 school); and
- o Smart Start funding (for pre-kindergarten) (1 school).

Data from the comparison school Teacher Survey also show that increasing numbers of teachers reported that their class size has decreased over time, from 16.9% in 2001-2002 to 21.2% in 2002-2003 to 30.2% in 2003-2004.

When asked about the strategies used to physically accommodate the additional classrooms required to implement reduced class size, the comparison school principals reported the following:

- Moving teacher specialists from traditional classrooms to cubby-holes, annexes, or mobile carts (2 schools);
- o Moving some children to a newly constructed school (1 school);
- Establishing mobile units (1 school);
- o Decreasing enrollment to lower class size (1 school);
- Converting teacher lounges into classrooms (1 school);
- Using classroom dividers (1 school); and
- Implementing student tutoring and reading classes in non-traditional classroom space (e.g., stage/auditorium, multi-purpose room, computer lab, media room) (1 school).

Interestingly, none of the comparison school teachers described these changes as having a negative effect on classroom instruction. Rather, nearly 64% noted the change in classroom space had facilitated a positive effect on instruction, while another 36% indicated the change was neutral or didn't have any effect on instruction.

Only two of the comparison school principals reported other types of scheduling or programmatic changes to support smaller class size, mentioning that they used small group intervention as well as multi-age grouping. Among the comparison-school teachers, in addition to indicating that small group interventions were being used to support reduced class size, they also reported increased efforts in grade-level planning and tutoring and remediation.

Three comparison school principals noted that special staff development has been provided for teachers whose class size has been reduced. The major topic areas mentioned were reading strategies (funded through a Reading Excellence grant), balanced literacy, cooperative group learning, literacy centers, software programs, and the *Success for All* program.

When asked about changes they have observed in the classroom with respect to teaching and learning that they attribute to lower class size, the comparison school principals and teachers reported the following:

- Increased use of individualized instruction for students (3 CS principals; 57.4% of CS teachers)
- o Fewer problems with student discipline (2 CS principals);
- o Recognition as "high growth" school of progress (2 CS principals);
- o Greater use of alternative assessment and monitoring (2 CS principals);
- o Increased use of small group instruction (1 CS principal; 67.6% of CS teachers);
- Increased time spent on instruction (50.7% of CS teachers);
- Improved overall school climate (1 CS principal);
- o Greater attention to students' learning styles (1 CS principal);
- Greater focus on teaching literacy (1 CS principal);
- o Increased use of cooperative learning (1 CS principal); and
- o Greater student engagement (1 CS principal).

Regarding challenges or constraints encountered in attempting to reduce class size, the comparison schools principals and teachers reported:

- Inadequate funding (3 CS principals);
- Problems with inadequate or insufficient classroom space (3 CS principals; 32% of teachers);
- Recruiting and retaining qualified teachers/staff (2 CS principals; 12% of teachers);
- Opting to swap teaching assistant positions for additional teacher positions (1 CS principal; 20% of teachers);
- Meeting the needs of children living in poverty (1 CS principal);
- Scheduling changes (28.0% of teachers); and
- Student enrollment and attendance issues (16% of teachers).

The table below summarizes the different types of school-wide initiatives that are being or have been implemented at the comparison schools over the past three school years.

Table 4.1 – Instructional Initiatives at the Comparison Schools, by Funding Source

Initiative	Funding Source(s)
Implementation of federal grant programs	 Comprehensive School Reform Demonstration (CSRD) program (4 schools) Reading First (2 schools) 21st Century Community Learning Center program (2 schools)
Implementation of other special programs	 Literacy First Initiative (2 schools) Edison Management Company Belvoir Academy – after school program for grades 3-5 (Remediation funds) Incentive program – designed to motivate students to perform well on the EOG tests (PTA and local funds) Sylvan Learning Program (Title I School Improvement) Literacy Collaborative initiative (local funding) After school tutoring and transportation program (Title I School Improvement) Saturday Academy – academic tutoring program staffed by volunteer college students and senior citizens Reading Recovery program
Changes in specific instructional approaches	 Center-based instruction (2 schools) Balanced literacy (2 schools) Testing software programs (e.g., Orchard, Study Island, and Standards Master) Differentiated learning Data-driven instruction Teaming with grade level teams
Changes in curriculum for particular subject areas	 Success for All reading program (3 schools) Chicago Math (Everyday Math) Four Block Reading
Implementation of school-wide professional development (PD)	 Success for All training (2 schools) Workshops on the Quality Schools Initiative, an outgrowth of Quality Circles for Total Quality Management (TQM) Literacy First training Literacy training provided by the DPI State Assistance Team Balanced literacy training Team building District math coaches
Implementation of school-based health clinic and/or mental health services	 School nurse – 2 days a week (3 schools) Growing Up Fit – East Carolina University health program that includes school visits (once every other month) to raise nutritional awareness, reduce obesity, and increase physical fitness Partnership with community mental health department that provides on-site counseling for students integrated with the school's discipline plan

Among the comparison schools, three offered extended school year initiatives for students beyond before/after school programming during the 2003-2004 school year. These included two year-round program schools and one school that offered four academic enhancement days over and above the state-required 180 instructional days and added to the school's regular school year calendar. Informants from the school that offered additional academic enhancement days reported these initiatives had significant positive effects on student achievement, as reflected in test score gains. Interestingly, however, one of the year-round schools indicated that the extended year initiative had little impact on student achievement, citing substantial barriers associated with the school's year-round status, including conflicts between the school's calendar and the district's pre-school in-service days, insufficient time for finding qualified teachers and planning for the coming school year, and the fact that students

transferring into the school are often at a different place in the curriculum than the school's own students.

Parent Involvement

Six of the eight comparison school principals who were interviewed reported that their school had at least one designated staff person with specific responsibilities of planning and conducting school-wide parent involvement. These were the Title I Director/teacher (3 schools), school social worker (2 schools), Parent Involvement Coordinator (2 schools), and a Community in Schools staff person. The main responsibilities of these individuals were described as encouraging parents to attend school conferences and meetings (2 schools), promoting volunteerism in the school (2 schools), conducting parent/family workshops (3 schools), planning special breakfast or dinner programs (2 schools), making home visits, monitoring absences/tardiness, assisting with clothing needs, holding parent involvement days, and serving as a liaison between the classroom teachers and the parents. When asked to consider the effect of these staff persons on parental involvement, comparison schools reported mixed sentiments. Overall, principals reported that these staff persons had a positive impact on parent involvement in their schools.

When asked how satisfied they were with the level of parental involvement in their schools, the opinions of the comparison school principals were mixed. Their comments ranged from "We always invite more, but I think we have a very good level of parent involvement..." to "fairly well" to "I'm not satisfied." Teachers reported similar sentiments, with 48.3% indicating they were not satisfied with the level of parent involvement in their school, 37% reporting they were "somewhat" satisfied, and nearly 15% indicating they were more than "somewhat" or "very" satisfied with the parent involvement.

Comparison school principals reported a variety of successful parent involvement strategies as implemented by their schools, including:

- Student performances (5 schools);
- PTA/PTO meetings (4 schools);
- o Curriculum information events (3 schools);
- Events centered around a meal/food (3 schools);
- Parent workshops (2 schools);
- Outreach/home visits (2 schools);
- Parent-teacher conferences (2 schools);
- Ongoing sharing of student work (1 school);
- Report card pickup night (1 school);
- Multicultural events (1 school);
- o School clean-up days (1 school); and
- Parent newsletter (1 school).

Professional Development

Both the comparison school principals and teachers were asked to describe the major content areas of the professional development that were being offered to or being planned for the teachers at their school during the current school year. While there seems to be a major emphasis across these schools on developing teacher skills and knowledge in the areas of research-based reading strategies and literacy instruction, a wide variety of topics were noted

(e.g., balanced literacy/literacy instruction, mathematics instruction, small group instruction, cooperative learning strategies, building professional learning communities, and technology as a learning tool).

When probed about how it was decided which topics would be covered in professional development, the comparison schools principals mentioned the following:

- Teacher needs assessments (5 schools);
- County or system-wide mandates/initiatives (4 schools);
- Recommendations made by the School Improvement or Planning Team (4 schools);
- Student test data (3 schools); and
- Principal observation (1 school).

Regarding follow-up to these professional development sessions, several of the comparison school principals noted how teachers are required to "share with other teachers when they return from workshops." Four of the principals described specific follow-up activities, including:

- Demonstrations/modeling strategies or lessons (4 schools);
- o In-class support (2 schools);
- o Group discussions (2 schools);
- Class/grade-level meetings (2 schools);
- Lesson plan reviews/monitoring (2 schools);
- o Classroom observations (2 schools); and
- Videotaping teachers' lessons (1 school).

In summary, the nine comparison schools have been implementing a number of programs and instructional initiatives over the past three years to promote improved academic outcomes for their students, most of which parallel the implementation of the four components of the HP Schools Initiative. Despite this methodological contamination among the comparison schools, we followed through with the initial intent of the evaluation design, which was to draw comparisons between achievement outcomes at the HP schools with those of the comparison schools. However, given what was learned contextually about the comparison group of schools, we have serious concerns about making statistical inferences using this design and caution against over- interpreting the quantitative findings where these comparisons are made.

IV. Findings

This section contains the findings for each of the specified evaluation questions.

Question 1 – What changes, if any, have occurred in the implementation of the four legislatively prescribed components (reduced class size, extended contract professional development for teachers, extended school year for students, and added instructional support position) at the HP Schools?

In the paragraphs below, we discuss what changes have occurred in the implementation of the four HP components across the 36 schools for Years 1, 2, and 3. It is important to remember that in Years 1 and 2, the total number of schools that participated in the HP Schools Initiative was 35, because one elementary school obtained a waiver for the class size reduction component for both years. By Year 3, all 36 schools were to be implementing all four of the HP schools components.

Reduced Class Size

- In Year 1¹, 18 of the 35 HP schools implemented the class size reduction component; as noted earlier, the remaining 17 schools requested and were granted waivers for this component of the Initiative in Year 1.
- During Year 2, 35 of the HP schools had begun to reduce class size in grades K-3.
- By Year 3, all 36 HP schools were implementing the reduced class size component in grades K-3.

The data in Table 5.1.1 clearly show that the average class size for the target grade levels within the 36 HP schools has decreased steadily from the baseline year to Year 3, the most recent year of HP implementation, from 19.59 to 13.72 students.

Table 5.1.1 - Average Class Size for Grades K-3 at the HP Schools, Over Years

School Year	Average Class Size	
• 2000-2001 (Baseline)	19.59	
• 2001-2002 (Year 1)	17.48	
• 2002-2003 (Year 2)	14.56	
• 2003-2004 (Year 3)	13.72	

Importantly, the data in Table 5.1.2 also show that greater proportions of K-3 teachers report that the number of students in their classes has decreased because of the HP Schools Initiative over time. For example, when surveyed, more than 69% of the teachers in grades K-3 indicated that their overall class size had decreased in 2003-2004, compared to 37.9% in 2001-2002 and 62.2% in 2002-2003. Interestingly, these data also show that teachers in grades 4-6 are reporting a decrease in class size, though it is not as prevalent as in the target grade levels.

¹ In Year 1, the HP schools did not receive notifications or allocations of funding until after the school year had started, which means that implementation for that year does not represent a full year of intervention for many of the HP schools.

Table 5.1.2 - Number of Teachers Reporting Smaller Class Size, by School Year

	K-3 Teachers	4-6 Teachers	All Other Teachers
2001-2002 (Year 1)	163	43	70
	37.9%	30.3%	29.3%
2002-2003 (Year 2)	271	65	94
	62.2%	47.4%	40.0%
2003-2004 (Year 3)	325	67	102
	69.3%	44.4%	41.8%

Both principals and district-level staff reported different strategies used to accommodate the increased need for classroom space at the HP schools. These included:

- Converted non-traditional teaching space such as music rooms, art rooms, and media center rooms, with specialty teachers using rolling carts to deliver in-class instruction
- o Used/purchased mobile units/portable classrooms
- o Implemented a team teaching approach
- o Combined classes of students in a single room with two or more teachers
- Divided classroom space using some type of physical structure

Additionally, there were eight principals who reported having enough classroom space to house the additional classes. As such, it is not surprising that the majority of the responding teachers in grades K-3 (77.1%) reported that no changes were made to their own classroom space to allow for the newly established classes. Of those who reported that changes did occur, less than 1% characterized that change as having a negative effect on classroom instruction. Most viewed the change as either positive (68.7%) or having no effect (neutral) on their teaching (30.7%).

According to both the HP principals and teachers, a number of scheduling and other program-related changes were implemented to support reduced class size. Though the specific changes varied from school to school, some of the more frequently mentioned strategies used to accommodate the additional classes included grade-level planning (19 principals; 68.1% of teachers), small group instruction (19 principals; 63.5% of teachers), tutoring or remediation (19 principals; 66.9% of teachers), and use of small group, pull-out intervention (11 principals; 57.5% of teachers).

Extended Teacher Contracts for Professional Development

- In Year 1 (2001-2002), 19 (52.7%) of the 36 HP schools implemented the voluntary teacher contract extension for professional development. Of the 19, four were waiver schools and 15 were non-waiver.
- In Year 2 (2002-2003), this number increased to 30, with all but six of the 36 HP schools (83.3%) extending teacher contracts for the mandatory five days of professional development. Among these six schools, there were five that did not implement the professional development component in Year 1 and Year 2.

By Year 3, 34 of the 36 HP schools (94.4%) had planned and carried out the five days of contract extension teacher professional development. Note that there is one HP school that did not implement this component in any of the three years of the Initiative.

Estimates of within-school participation in professional development were obtained from several items on the Administrator and Teacher Surveys. Encouragingly, over 87% of the responding teachers had participated or had plans to participate in the teacher contract extension training that was held during the 2003-2004 school year.

When the principals were asked who was involved in planning the topics for the five-day contract extension professional development sessions, they most often cited:

- The School Leadership/Improvement Team (22 principals)
- o All classroom teachers (20 principals)
- o HP school principals (19 principals)
- Staff from the district (12 principals)

Survey findings revealed that among both the teachers and the principals, however, the most frequently mentioned topic area was literacy instruction (51.9% of teachers, 78.6% of principals). Other content areas and training topics that were mentioned by at least one third of the respondents from both groups were:

- Mathematics instruction
- Lessons that incorporate the NC Standard Course of Study
- o Classroom management strategies (e.g., discipline and diversity)
- Small group instruction
- o Cooperative learning
- o Technology as a learning tool

Additional data on professional development at the HP schools in 2003-2004 were derived from a review of program documentation of school-based professional development, as provided by 33 of the 36 HP schools. These data indicate that professional development took place throughout the year, with 18 schools (55%) reporting summer professional development (July and August), 14 schools (42%) reporting end-of-year training (June), and 11 schools (33%) reporting that the five days of professional development occurred during the regular school year. The contract extension professional development was provided to teachers of grades K-5 in 24 of the 33 reporting schools (73%), while training was targeted to teachers of grades K-3 in six schools (18%) and teachers of grades 4-5 in three schools (9%).

Consistent with the survey findings noted above, the document review revealed school-based professional development on a wide array of topics during 2003-2004.

Table 5.1.3 – Content of School-Based Professional Development, 2003-2004

TOPIC AREA

LITERACY INSTRUCTION (21 SCHOOLS, 64%)

- Literacy activities/centers/circles (8 schools)
- General instructional strategies (7 schools)
- Reading First grant training (6 schools)
- Guided Reading (4 schools)
- Accelerated Reader (3 schools)
- Five Components of Reading (3 schools)
- Reading Theatres, including Storysacks (3 schools)
- Reading Workshops (3 schools)
- End of Grade (EOG) Test Strategies (2 schools)
- Multiple Intelligences related to Literacy (2 schools)
- Reading Recovery (2 schools)
- Research-based Strategies/Best Practices (2 schools)
- Balanced Literacy (1 school)
- Comprehensive Literacy Program (1 school)
- Modern Red Schoolhouse Curriculum and Assessment (1 school)
- Open Court Literacy Program (1 school)
- Reading Roots (1 school)
- Reading Wings (1 school)
- Write from the Beginning (1 school)

MATH INSTRUCTION (17 SCHOOLS, 52%)

- Transitional Math NC Standard Course of Study (NCSCOS) (4 schools)
- Effective math strategies (3 schools)
- General training (3 schools)
- Instructional strategies (3 schools)
- Promoting importance of math in the world around us (PIMS) (3 schools)
- Calculators/manipulatives (2 schools)
- Geometry (2 schools)
- Accelerated math (1 school)
- Comprehensively Applied Manipulative Mathematics Program (CAMMP) (1 school)
- Everyday Math (1 school)
- Primary Math Wings (1 school)
- Problem-Solving (1 school)
- Activities Integrating Math and Science (AIMS) (1 school)

TOPIC AREA

SCHOOL REFORM MODELS (7 SCHOOLS, 21%)

- Success for All (2 schools)
- Title I (3 schools)
- Comer (1 school)
- Modern Red Schoolhouse (1 school)
- Effective Schools (1 school)
- Adaptive Schools (1 school)

SOCIAL STUDIES INSTRUCTION (4 SCHOOLS, 12%)

- Nystrom Maps (2 schools)
- Using newspapers for social studies instruction (2 schools)
- General social studies workshops (2 schools)
- Rewriting pacing guide based on NCSCOS (1 school)

SCIENCE INSTRUCTION (7 SCHOOLS, 21%)

- Science Kit training (3 schools)
- Food Chemistry (3 schools)
- Life Cycles (3 schools)
- Notebook 101 (3 schools)
- Integrated curriculum, including Activities Integrating Math and Science (AIMS) (2 schools)

SPECIFIC TEACHING STRATEGIES

- Technology as a learning tool (6 schools, 18%)
- Small group instruction (3 schools, 9%)
- Differentiated instruction (2 schools, 6%)
- Best practices (2 schools, 6%)
- Individualized instruction (1 school, 3%)
- Remediation (1 school, 3%)

OTHER AREAS

- Disaggregating and using data (13 schools, 39%)
- Team Building (12 schools, 36%)
- School Improvement (11 schools, 33%)
- Classroom Management techniques (10 schools, 30%)

Consistent with findings from the teacher and principal surveys, evidence of training that focused on literacy instruction, mathematics instruction, and classroom management techniques was frequently found in program documentation materials. Other professional development topics not reported in the teacher and principal surveys but often reported through program documentation were disaggregating and using test data, team building, and general school improvement.

Interestingly, a greater proportion of administrators believed teachers were offered follow-up to any of the five-day professional development activities than did the teachers themselves (84.2% vs. 69.2%, respectively). According to the HP teachers who responded to the survey, the type of follow-up activity that was offered most often was a workshop or teacher seminar that built on what was learned at the initial professional development activities (67.0%). Discussions held during regular teacher meetings and meetings with other teachers to reflect on the professional development experience were also mentioned by more than half of the HP teachers (64.5% and 56.7%, respectively).

Within school districts where there is more than one HP school, approximately two thirds of the principals noted that curriculum of the contract extension professional development varied by

school, while another 20% reported that it was the same, indicating that the content was mandated by the district.

Extended School Year for Students

- In Year 1, only seven (one waiver and six non-waiver) of the 36 HP schools (19.4%) implemented an extended school year program for students.
- In Year 2, this number increased to 26 of the HP schools (72.2%) having extended the school year. Among the ten schools that did not extend the school year for students in Year 2, six of these same schools also did not implement this component in Year 1.
- By Year 3, 32 of the 36 HP schools (88.9%) had planned and implemented the extended school year component. It should be noted that all four of the remaining schools did not extend the school year for students in all three years of the Initiative.

According to data from the Administrator Survey, 15 of the HP schools extended the school year by five consecutive extra days (15 schools or 53.6%). Other combinations of strategies used by the HP schools to accomplish this requirement included:

- Holding school during teacher workdays (6 schools or 21.4%)
- o Offering a five-day summer program (6 schools or 21.4%)
- Holding school for students during school holidays, breaks, or inter-sessions (6 schools or 21.4%);
- Starting school five days earlier (5 schools or 17.9%)
- Holding school on Saturdays (4 schools or 14.3%)
- Offering after school programs (3 schools or 10.7%)

Most respondents (both teachers and principals), regardless of how they were implementing the extended school year component, described the content as an extension of the regular school year instruction (65.5% of principals; 53.6% of teachers), primarily enrichment activities that are not part of the regular school day curriculum (31.3% of teachers; 51.7% of principals), or as remediation (38.0% of teachers; 55.2% of principals). Principals and teachers offered the following specific examples of activities implemented as part of the extended school year program at their school:

- Academic games/fairs (45.0% of principals);
- o Core subject area activities (e.g., math, literacy, science) (35.0% of principals; 31.1% of teachers);
- Specialty subject activities (e.g., art, technology) (25.0% of principals; 7.4% of teachers);
- o EOG objectives/test preparation (25.0% of principals; 3.3% of teachers);
- Remediation/tutoring activities (21.9% of teachers);
- Team building activities (10.0% of principals);
- Regular school day instructional activities (10.0% of principals; 14.2% of teachers); and
- o Small group instructional activities (4.4% of teachers).

Added Instructional Support Position

- In Year 1, eight (or 22.2%) of the 36 HP schools reported receiving an additional instructional support position through HP funds. Among the eight schools, none had received a waiver.
- By Year 2, this number had increased dramatically to 29 (or 80.6%) of the 36 HP schools.
- Increasing once again, by Year 3, a total of 32 (or 88.9%) of the 36 HP schools reported they had received the added instructional support position as part of the HP Schools Initiative. Of the two that did not, one HP school reported that they did not receive the allocation in any of the three years of implementation.

As shown in the following summary table, as of the 2003-2004 school year, the majority of the HP schools are systematically implementing each of the four components of the Initiative. The remainder of the findings section will focus on the extent to which the expectation that the combination of these tools would dramatically improve student achievement has been realized.

Table 5.1.4 – Summary of HP Initiative Implementation, 2001 – 2004

	2001-2002 (Year 1) 2002-2003 (Year 2)		2002-2003 (Year 2)		2003-200	4 (Year 3)
	Yes	No	Yes	No	Yes	No
Reduced class size in grades K-3	50.0%	50.0%	97.2%	2.8%	100.0%	
Extended contracts for professional development	52.8%	47.2%	80.6%	19.4%	94.4%	5.6%
Extended school year for students	19.4%	80.6%	72.2%	27.8%	88.9%	11.1%
Added instructional support position	22.2%	77.8%	80.6%	19.4%	88.9%	11.1%

How effective is the implementation of the class size reduction component in the HP schools?

In order to examine what effects the reduced class size component might be having on teaching and learning practices within the HP classrooms, a comparative analysis was conducted of selected items from the HP Teacher Survey and Comparison School Teacher Survey. It was our expectation that since the HP classes, on average, had fewer students than did the comparison school classes because of the reduced class size component of the HP Initiative, we would observe trends in classroom practices among the HP teachers that would be consistent with having smaller class size (e.g., increased use of small group instruction, greater time on task fewer, discipline problems, more individualized instruction, more time to involve parents) and that were notably different from that of their comparison school peers. These survey results are presented in the following tables.

Table 5.1.5 — How often do the following occur in your classroom? Percent of Teachers (Grades K-3) Who Indicated "Frequently"

	N	HP Teachers	N	CS Teachers	Percentage Point Difference
 Timely completion of daily lessons or assignments 	492	82.9%	89	94.4%	-11.5
 Competition among students for teacher's attention 	495	33.9%	88	38.6%	-4.7
Behavioral or discipline problems	491	30.1%	86	27.9%	+2.2
Students disrupting the work of other students	492	24.0%	88	23.9%	+0.1
Students being "off-task" for more than 5 minutes	493	14.6%	87	12.6%	+1.7

Table 5.1.6 – To what extent are the following statements true for you? Percent of Teachers (Grades K-3) Who Indicated "To a Great Extent"

		N	HP Teachers	N	CS Teachers	Percentage Point Difference
•	I am aware of what each student in my class knows and can do.	498	94.0%	86	95.3%	-1.3
•	I provide feedback on students' writing assignments within 1 day.	489	62.6%	89	65.2%	-2.6
•	I have enough time to provide individualized attention to students.	495	31.1%	88	23.9%	+7.2
•	I am able to plan instructional activities where students are placed in small groups.	493	63.3%	88	52.3%	+11.0
•	I am able to meet the instructional needs of all students.	496	47.8%	89	49.4%	-1.6
•	I have enough time to initiate the right amount of parent contact/communication.	494	27.7%	89	28.1%	-0.4
•	I am able to respond to parent requests/questions within 1 day.	494	73.1%	89	70.8%	+2.3
•	There is sufficient time for me to explore curriculum topics fully.	494	24.7%	88	20.5%	+4.2

Notable differences (i.e., greater than a seven percentage point difference) that can be seen in Tables 5.1.5 and 5.1.6 includes:

- Teachers at the comparison schools were much more likely to report that their students frequently finish their daily lessons and assignments on time than were the HP teachers (94.4% vs. 82.9%, respectively).
- In contrast, greater proportions of teachers at the HP schools reported that they frequently provide individualized attention to their students and plan small group instructional activities than did the teachers at the comparison schools. This finding is consistent with the survey finding that showed small group instruction as one of the major content areas emphasized as part of the contract extension professional development.

Table 5.1.7 – How often do you use the following strategies or student activities when teaching math and reading to your students?

	N	HP Teachers	N.	CS Teachers	Percentage Point Difference
Math:				- Cucifors	Tome Directice
Using a calculator	484	16.1%	88	21.6%	-5.5
 Using measuring instruments 	483	31.9%	88	27.3%	+4.6
 Playing with math-related games 	485	64.1%	87	59.8%	+4.3
 Using math in the context of other subjects 	484	52.5%	84	51.2%	+1.3
 Doing math worksheets 	480	40.2%	87	34.5%	+5.7
 Using patterns to discover math relationships 	484	65.5%	85	57.6%	+7.9
 Practicing computational skills 	484	63.8%	86	51.2%	+12.6
 Working with manipulative aids 	481	88.8%	87	83.9%	+4.9
Reading: Having guided discussions about reading	488	89.3%	88	88.6%	+0.7
 Having students read aloud to a partner 	488	70.5%	89	56.2%	+14.3
 Working on phonics 	489	76.9%	88	77.3%	-0.4
 Writing narratives or descriptive material using invented spelling 	488	69.1%	89	61.8%	+7.3
 Discussing new or difficult vocabulary 	489	82.2%	89	79.8%	+2.4
Working in a reading book	484	61.4%	87	56.3%	+5.1
 Listening to the teacher read stories 	483	87.0%	88	90.9%	-3.9

Table 5.1.7 shows a few noteworthy findings (i.e., differences greater than seven percentage points). These include:

- Within math, the HP teachers were more likely to report using patterns with their students to discover relationships, as well as activities for practicing students' computational skills, than were the comparison school teachers.
- Within reading, greater percentages of the HP teachers appeared to be having their students read aloud to a partner and writing narratives or other descriptive materials using invented spelling.

Classroom Teacher Log – Pilot Administration

As noted earlier, Metis conducted a pilot administration of a newly developed Classroom Teacher Log with teachers at two comparison schools and two HP schools. Among the 227 Teacher Logs that were completed by K-3 teachers, interestingly, the average number of students in the classes was somewhat lower for the HP schools when compared to the comparison schools (14.7 vs. 17.3, respectively). This trend was also true for grades 4 and 5, where the average class size was 21.5 for the two participating HP schools compared to 22.6 for the two participating comparison schools. Other data obtained from the Class Survey section of the Logs included:

- There was a stark contrast in the percentage of general education students taught by the participating K-3 teachers at the HP schools compared to the comparison schools (69.7% vs. 91.1%, respectively). The participating teachers at the HP schools reported that, across classes, there was an average of 31.9% ELL students in their classes compared to 19.5% ELL students across classes at the comparison schools. On average, teachers at both the participating HP and comparison schools reported teaching approximately 9% special needs students in their classes.
- o Across the participating K-3 teachers, more than 78% had a teaching assistant assigned to their class. This proportion was greater, however, among the comparison school teachers when compared to the HP teachers (82.6% vs. 75.7%, respectively). Not surprisingly, teachers in grades 4 and 5 were much less likely to have a teaching assistant assigned to their class (15.0%).

This next section discusses key findings from the Daily Log Report section of the Teacher Logs.

For grades K-3, the average length (in minutes) for lesson or instructional block reported by the comparison school teachers was almost twice as long as for the HP teachers (78.1 minutes vs. 43.19 minutes, respectively). The opposite was true in grades 4 and 5, where the average instructional block reported was 59.5 minutes among the HP teachers and 46.6 minutes for the comparison teachers. The table which follows shows the percent of this time that was spent on administrative matters (e.g., school bulletins, attendance, PA announcements) and student discipline, as reported by participating teachers.

Table 5.1.8 – Percent of Instructional Time Spent on Administration and Student Discipline

	Discip	PRINCE			
	Grade	es K-3	Grades 4-5		
	HP Schools (N=141)	Comparison (N=86)	HP Schools N=67)	Comparison (N=31)	
 Average Percent of Total Time Spent on Administration 	0.9%	3.2%	1.1%	1.1%	
 Average Percent of Total Time Spent of Discipline 	5.8%	5.7%	2.0%	2.0%	
Average Length	43.2 minutes	78.1 minutes	59.5 minutes	59.5 minutes	

Interestingly, the HP and comparison school teachers in grades K-3 both reported spending approximately six percent of their lesson time on student discipline.

Among all of the teachers who completed a log, across grades and type of school, the various content topics covered were listed as:

- Reading independently or in pairs (N = 52; 13.9%)
- Reading comprehension (N = 48; 12.9%)
- Writing skills (N = 50; 13.4%)
- Oral skills/speech (N = 15; 4.0%)
- Phonics (N = 75; 20.1%)
- Vocabulary (N = 51; 13.7%)
- o Poetry (N = 24; 6.4%)
- Thinking critically about a text (N = 48; 12.9%)
- Teacher reading to the class (N = 25; 6.7%)
- \circ Guided reading (N = 31; 8.3%)
- Grammar (N = 20; 5.4%)
- o Spelling (N = 32; 8.6%)
- Literacy First (N = 7; 1.9%)
- EOG/test preparation (N = 59; 15.8%)
- Arts (music, plays, art) (N = 11; 2.9%)
- Computer/technology enhanced learning (N = 24; 6.4%)
- Other (N = 27; 7.2%)

When asked to indicate the purpose of the lesson, the data in Table 5.1.9 show this varied depending on the grade levels being taught and the type of school (e.g., HP or comparison). For example, it can be seen that participating K-3 comparison school teachers were much more likely to have been reviewing a previously introduced topic, further developing a topic, and/or assessing students' understanding of a topic, than were the HP school teachers in the same grades.

Table 5.1.9 - Purpose of Lesson

	Grade	es K-3	Grades 4-5		
	HP Schools (N=136)	Comparison (N=84)	HP Schools (N=63)	Comparison (N=30)	
 Introduce a new topic 	25.0%	25.0%	17.5%	6.7%	
 Review a previously introduced topic 	39.7%	60.7%	54.0%	80.0%	
 Further develop a topic 	41.2%	60.7%	60.3%	33.3%	
 Conclude, synthesize, or complete a unit 	2.9%	7.1%	15.9%	0.0%	
 Assess students' understanding of a topic 	19.1%	39.3%	20.6%	50.0%	

In grades K-3, more than 72% of the logs completed by the comparison school teachers indicated that the level of student engagement in the lesson was high, which was substantially greater than the logs for the HP school teachers (approximately 51%). This is a 21.6 percentage point difference. In grades 4 and 5, a more similar percentage of comparison and HP teachers reported a high level of student engagement (76.7% and 80.9%, respectively).

When looking at grades K-3, in addition to whole group presentation or discussion, which was used by the majority of teachers from both groups of schools, the comparison school teachers appeared to be using a more varied set of student group practices than were the HP school teachers. For example, a much greater percentage of logs from the comparison K-3 teachers noted practices such as:

- o Independent work (75.3% vs. 30.7%, respectively);
- o Small group (heterogeneously grouped) (44.7% vs. 18.7%, respectively); and
- o Learning centers (45.9% vs. 10.7%, respectively).

In grades 4 and 5, the data show that, again in addition to whole group instruction, which was being used by the majority of both groups of teachers, the HP teachers were more likely to use practices such as independent work (65.7% vs. 35.5%, respectively) and small, homogeneously grouped (31.3% vs. 6.5%, respectively) than their comparison school peers.

In fact, among the K-3 teachers, more than 64% of the logs from the comparison schools indicate that the student grouping changed during the lesson, compared to only 31.4% of the logs from the HP schools. Similarly, for grades 4-5, 43.3% of the comparison school teachers indicated the same, vs. 22.7% of the HP teachers. These findings, however, may be directly related to the fact that the comparison schools have implemented longer instructional blocks than have the HP schools, allowing more time for varied instructional activities.

Finally, the Teacher Logs also asked teachers to indicate the different types of activities they used with students during the lesson or instructional block. As seen in Table 5.1.10, there are marked differences in the variation of student activities being implemented by the participating comparison school and HP teachers within both grades K-3 and grades 4 and 5.

Table 5.1.10 - Student Activities Used During the Lesson Frequency of Responses (Multiple Response Item)

		Grade	s K-3	!	Grade	es 4-5	
		HP (N=139)	CS (N=85)	Difference	HP (N=66)	CS (N=27)	Difference
•	Listened to teacher read trade books or other stories	26.6%	69.4%	-42.8	15.2%	22.2%	-13.0
•	Worked on language arts reading worksheets	20.1%	37.6%	-17.5	30.3%	18.5%	+11.8
•	Worked in learning centers	12.9%	45.9%	-33.0	6.1%	0.0%	+6.1
•	Discussed new or difficult vocabulary	43.2%	67.1%	-23.9	53.0%	59.3%	-6.3
•	Worked on a textbook or reading book	32.4%	50.6%	-18.2	27.3%	22.2%	+5.1
0	Worked on computer	24.5%	62.4%	-37.4	31.8%	3.7%	+34.1
•	Played instructional activities/games	18.0%	42.4%	-24.4	7.6%	3.7%	+3.9
•	Individual/one-on-one tutoring provided by a parent or student volunteer	6.5%	16.5%	-10.0	0.0%	7.4%	-7.4
•	Completed library work	1.4%	1.2%	-0.2	4.5%	3.7%	+0.8
•	Wrote narratives or descriptive material using invented spelling	20.9%	41.2%	-20.3	13.6%	0.0%	+13.6
•	Used language arts or reading in the context of another subject	10.1%	30.6%	-20.5	51.5%	51.9%	-0.4
•	Led guided discussions about reading	17.3%	50.6%	-33.3	1.5%	0.0%	+1.5
•	Worked on phonics	39.6%	77.6%	-38.0	4.5%	0.0%	+4.5
0	Worked with flash cards	21.6%	16.5%	5.1	39.4%	40.7%	-1.3
•	Students read aloud to other students	27.3%	57.6%	-30.3	45.5%	48.1%	-2.6

		Grade	s K-3		Grade		
		HP (N=139)	CS (N=85)	Difference	HP (N=66)	CS (N=27)	Difference
•	Worked on a teacher-led activity	34.5%	58.8%	-24.3	92.5%	90.3%	+2.2
•	Individual/one-on-one tutoring provided by a teaching assistant	7.9%	17.6%	-9.7	7.54%	9.7%	-2.2

In grades K-3, with one exception (using flash cards), comparison school teachers reported greater use of all student activities than did the HP school teachers. Some examples of fairly sizeable differences can be seen with respect to:

- Listening to the teacher read trade books or other stories (69.4% vs. 26.6%, respectively; 42.8 percentage point difference);
- Working on phonics (77.6% vs. 39.6%, respectively; 38.0 percentage point difference);
- Working on a computer (62.4% vs. 24.5%, respectively; 37.9 percentage point difference);
- Working in learning centers (45.9% vs. 12.9%, respectively; 33.0 percentage point difference);
- Students reading aloud to other students (57.6% vs. 27.3%, respectively; 30.3 percentage point difference); and
- Working on teacher-led activities (58.8% vs. 34.5%, respectively; 24.3 percentage point difference).

In grades 4 and 5, the great majority of both the HP and comparison school teachers most frequently reported working on a teacher-led activity (92.5% and 90.3%, respectively), followed by using language arts and reading in the context of another subject area (51.5% and 51.9%, respectively). Among the other activities, the results were generally mixed.

In summary, regarding changes in teaching strategies, the comparative survey data suggest that K-3 teachers at the HP schools were more likely to report having enough time to provide individualized attention to students and were somewhat more likely to plan small group instructional activities than were the comparison school teachers.

Finally, because the teacher log administration was a pilot that involved only two of the 36 HP schools with larger numbers of English language learner students, the results should be interpreted with caution. Moreover, findings from the pilot may be directly attributable to the wide disparity in the average length of lesson time reported by the comparison vs. the HP teachers, particularly with respect to the sizeable differences found in types of student group practices and other student activities used at both groups of schools. The average instructional time reported by the comparison school teachers was almost twice as long as time reported by the HP teachers.

How did the HP schools use the one additional instructional support position provided by the legislation?

District-level informants described the process for determining the type of instructional staff position to be allocated to the schools through HP funds. Among the 12 Director of Instruction (DOI) respondents who were able to address this issue, they described the process as being based on the needs of the students and staff and followed state guidelines. In addition, of the seven respondents with more than one HP school in their district, four indicated that the same position was allocated for each HP school in their district, while another three DOIs reported that the type of position varied among the HP schools in their district.

More than half of the principals (18 or 57.1%) noted that they did not receive any guidance or assistance in selecting what type of staff position they hired with the HP allotment. Another seven principals or 23.8% said the district offered them such suggestions, and six principals or 19.9% indicated they received guidance from both the district and DPI.

Thirty-one of the 33 HP school principals reported that HP funds were used to hire an added instructional support staff person at their school during the 2003-2004 school year. While the initial intent of the HP legislation was to focus on increasing parental involvement through the added instructional support position, this aspect was not actually stated in the legislation; therefore, not surprisingly, it was also not realized at the school level. According to the principals, the various types of positions that were allotted to the HP schools included:

- o Curriculum specialist (10 schools or 33.3%)
- Literacy specialist (4 schools or 14.3%)
- o Additional K-3 classroom teacher (3 schools or 9.5%)
- o Guidance counselor (3 schools or 9.5%)
- Staff developer (3 schools or 9.5%)
- o Parent liaison or parent coordinator (1 school or 4.8%)

When asked to describe the main responsibilities of this staff member, the HP principals most often noted it was to provide instructional planning and support (15 or 71.4%). This was followed by:

- Providing curriculum support (N=11; 52.4%)
- Conducting professional development (N=9; 42.9%)
- o Initiating parent contact (N=5; 23.8%) and
- Overseeing or assisting with testing (N=2; 9.5%).

 To what extent has parent involvement increased at the HP schools? What types of strategies are being used to engage and involve parents at the HP schools?

While only one of the 36 HP schools used the HP allotment to hire a parent coordinator, more than half of the principals (52.4%) indicated that the hiring of the added instructional support person had indeed improved parent involvement in their school. Importantly, there were a number of principals who noted that the added instructional support person, while not a parent coordinator, had responsibilities for engaging parents in the school activities. For example, one principal commented, "They've had some positive impact. The instructional support person's role has included designing parent nights, as well as events during the school day, to celebrate and to share evidence of student progress. She has helped to organize PTA meetings and parent-teacher conferences."

Similarly, 15 of the HP principals (57.7%) reported that parent involvement in their schools had increased since the HP Schools Initiative began in 2000-2001. From their perspective, the most effective types of strategies used to involve and engage parents in the school since the start the HP Schools Initiative have been:

- o Planning/holding parent conferences (8 schools; 53.3%)
- Conducting family-school activities (7 schools; 46.7%)
- Holding special programs for students (5 schools; 33.3%)
- Ongoing home-school communication strategies (e.g., home visits, telephone calls, newsletters) (4 schools; 26.7%)
- o Offering food and prizes during school events (3 schools; 20.0%)
- Offering parent education classes (3 schools; 20.0%)

When teachers were asked if they had observed an increase in parental involvement in the classroom because of the reduced class size HP Schools Initiative, approximately 35% of those who were surveyed indicated that there had been a modest change in parent involvement. Another 52.1% believed that the HP Schools Initiative had resulted in no change in parental involvement in the classroom, with the remainder (13%) indicating a decrease in parent involvement.

In order to determine what differences in parental involvement were evident in the HP schools when contrasted with the comparison schools, a parallel set of items was included on both the HP and CS Teacher Surveys. These data are presented in the following two tables.

Table 5.1.11 - During this school year, in what ways have you contacted or communicated with parents?

Percent of Teachers (Grades K-3) Who Indicated "Frequently"

	N	HP Teachers	N	CS Teachers	Percentage Point Difference
 Sent home or mailed written letters or notes 	490	73.7%	89	69.7%	+4.0
 Sent home or mailed classroom newsletters 	482	53.1%	86	37.2%	+15.9
 Made home visits 	479	3.3%	87	1.1%	+2.2
Made phone calls	492	57.3%	90	62.2%	-4.9
 Completed weekly behavior reports 	490	64.1%	83	59.0%	+5.1
Sent email messages	471	1.7%	81	1.2%	+0.5

Table 5.1.12 – Why have you contacted parents thus far this year?

Percent of Teachers (Grades K-3) Who Checked Each Response

(Multiple Response Item)

	HP Teachers N=497	CS Teachers N=90	Percentage Point Difference
 A child has been attentive and well behaved during class time 	80.5%	83.3%	-2.8
To invite/notify parents about classroom activities	82.5%	82.2%	+0.3
 A child has been disruptive during class time 	97.2%	95.6%	+1.6
To ask parents for classroom supplies (donations)	55.5%	72.2%	-16.7
 To invite parents to attend class trips 	54.3%	64.4%	-10.1
• A child has shown improvement in their academic skills	83.7%	84.4%	-0.7
A child has submitted exemplary work	52.1%	50.0%	+2.1
 A child has difficulty working with students in small groups 	57.1%	50.0%	+7.1
 A child has been inattentive and missing class work or homework assignments 	89.3%	81.1%	+8.2
 A child has a serious problem at home that is affecting their schoolwork and/or social skills 	37.6%	44.4%	-6.8
A child in my class has a learning disability	52.7%	48.9%	+3.8

Notable findings (i.e., greater than a seven percentage point difference) that are evident in Tables 5.1.11 and 5.1.12 include:

- In terms of the ways in which teachers maintain home-school communication, a greater percentage of teachers at the HP schools reported that they frequently send home or mail classroom newsletters than did the comparison school teachers (53.1% vs. 37.2%, respectively).
- When asked about the reasons for contacting parents, the data show that comparison school teachers are much more likely to be asking parents for classroom supplies and inviting them to attend class trips. In contrast, a somewhat greater percentage of HP teachers reported that they have contacted parents because their child has shown difficulty in working in small group settings than did the comparison school teachers (57.1% vs. 50.0%, respectively). This finding is probably related to the fact that the HP school teachers appear to use small group instruction more frequently than the comparison schools teachers (as reported earlier in Table 5.1.5).

Finally, it should be noted that teachers at both the HP and comparison schools remain less than satisfied with the level of parental involvement. Surveys of both groups included a question that asked teachers to rate their overall satisfaction with the level of parental involvement at their schools. Given a scale of 1 to 5, with 1 representing "not at all satisfied," 3 representing "somewhat satisfied," and 5 representing "very satisfied," both groups yielded very close mean ratings: 2.48 for the comparison school teachers and 2.43 for the HP teachers.

At the district level, the Directors of Instruction were asked whether, since the start of the HP Initiative, they had perceived an increase in parental involvement in the HP schools in their district. Of the 16 interview respondents, eight believed that parent involvement had increased

since the start of the HP Initiative, while three indicated that the level of parent involvement had not increased in the HP schools. (Four of the DOIs stated that they were not familiar enough with the schools to answer this question.) The eight respondents who believed this to be true talked about different types of impacts, including an increase in parent involvement activities offered at the HP schools (n=4), an improvement in parent outreach efforts (n=4), increased tailoring of activities for each grade level (n=1), and the implementation of student-led conferences (n=1).

The DOIs were also asked to indicate whether the additional instructional support position has had a neutral, positive, or negative impact on parent involvement. Of the ten DOIs able to respond to this question, all reported that the additional instructional support position had a positive impact, noting increased parent activities and programs, additional staff development, and coordinated resources to support parent involvement activities.

To what extent have the HP schools/districts been able to retain their teaching assistant positions through other funds?

The Administrator Survey asked principals to indicate for each of three schools years, 2001-2002 (Year 1), 2002-2003 (Year 2), and 2003-2004 (Year 3), if their school was able to retain its teaching assistant positions in grades kindergarten through 3, despite the state's reallocation of those positions to teacher positions. As shown in the following table, principals from 26 of the HP schools provided this information, as well as the combinations of funding sources used to pay the salaries of these retained teaching assistants.

Table 5.1.13 – Status of the Teaching Assistant (TA) Positions within the HP Schools

	Number of HP Schools That:			Funding Sources, by Number of Schools:				
	Retained A//TAs	Retained Some TAs	Retained No TAs	Federal	State	Local	Other	
Year 1 (N=26)	12	12	2	13	2	13	3	
Year 2 (N=26)	11	14	1	16	2	9	4	
Year 3 (N=26)	11	13	2	18	2	8	3	

In terms of funding, over time the HP schools were more likely to use federal funding to pay for the teaching assistant positions and were less likely to continue using local funding.

During interviews conducted with the DFOs and the DOIs, they were also asked to specify the funding source the district used to retain the teaching assistant positions. Respondents named the following, which were used alone or in combination: local funds, federal funds (including Title I and School Improvement funds), and state funds (including Remediation and Low Wealth funds). According to these respondents, retaining the teaching assistant positions sometimes meant that other resources were no longer available. Examples of resource cutbacks reported by respondents included instructional supplies, materials, and equipment; additional teacher positions; and instructional support positions.

The principals were also asked to report what resources were no longer being paid for or were reduced because the funds were used to pay for the teaching assistants. While the information was obtained from only 13 principals, it was learned that what was most often lost in this shifting of resources was funding for other staff positions (e.g., teaching assistants from other grade levels, teacher positions, specialty teachers). This was mentioned by six principals (46.2%). An additional four principals noted that new funding was used to pay for the reinstated teaching assistant positions.

What functions do teaching assistants serve in these schools?

As described earlier, a Teaching Assistant Survey was administered to teaching assistants at both the HP and the comparison schools. The narrative that follows presents a summary of the roles and responsibilities of these staff from their own perspectives. Where applicable, we also present differences that were evident between the teaching assistants at both sets of schools.

Type of Assistance – Academic

Across all of the teaching assistants, they reported most frequently carrying out the following types of academic assistance: tutoring or assisting children with learning materials (76.3%), listening to students reading in small groups (68.5%), checking and correcting students' work while it is in progress (67.8%), and demonstrating different instructional activities (63.7%). When looking at their academic-related responsibilities by respondent group (as shown in Table 5.1.14), we can see that:

- Teaching assistants within the HP schools were more likely to be tutoring or helping children with classroom material, assisting students with disabilities, and assisting children who are English language learners, than were the assistants at the comparison schools. Each of these represented at least a 10 percentage point difference.
- In contrast, proportionately greater numbers of teaching assistants at the comparison schools were frequently grading tests and assignments than were the assistants at the HP schools (50.5% vs. 39.9%, respectively). This was a 10.6 percentage point difference.

Table 5.1.14 – Teaching Assistant Survey, Academic Assistance
Percent of Assistants Who Checked "Frequently"

	HP As	sistants	CS As	ssistants	Percentage
"	N	Percent	N	Percent	Point Difference
 Tutor/assist children in learning class material using the teacher's lesson plans 	283	79.9%	97	66.0%	+13.9
Serve as a substitute teacher	284	28.2%	91	23.1%	+5.1
 Grade tests and assignments as instructed by the teacher 	278	39.9%	93	50.5%	-10.6
Observe and record student performance	282	43.6%	95	47.4%	-3.8
 Demonstrate various instructional activities 	282	64.9%	95	60.0%	+4.9
Listen to students reading in small groups	279	69.2%	93	66.7%	+2.5
Help students find information for reports	272	36.0%	93	30.1%	+5.9
Check and correct students' work while in progress	279	68.5%	97	66.0%	+2.5
Check homework assignments	279	50.9%	96	58.3%	-7.4
Assist students with disabilities	275	40.4%	92	30.4%	+10.0
Assist English language learners	258	41.5%	86	26.7%	+14.8

Type of Assistance – Administrative

Regarding administrative responsibilities, teaching assistants from both groups of schools reported that they frequently help prepare materials for instruction (68.8%), hand out materials for lessons (72.3%), and supervise students when they are outside the classroom (such as in the cafeteria or on the playground) (85.8%). When looking at differences between the groups, we can see that:

 A much greater percentage of the teaching assistants from the comparison schools reported that they frequently maintain students' health records and attendance records as part of their administrative responsibilities. For example, over 54% of the comparison school assistants maintain student attendance records, compared to only 34.8% of the assistants at the HP schools.

Type of Assistance - Classroom Management

The majority of all of the responding teaching assistants described their classroom management responsibilities as frequently including providing praise and general support for the students (93.6%), helping to keep students on task (92.3%), encouraging the students' self-esteem (93.7%), teaching the students citizenship, social skills, and respect for others (88.0%), and settling minor disputes or conflicts between the students (76.1%). With respect to teaching assistant classroom management duties, there were no notable differences between the HP and comparison schools.

Teaching Assistant Abilities

The last set of items on the Teaching Assistant Survey asked respondents to rate their skill level in a variety of teaching strategies/areas. The areas in which the most teaching assistants believed they were highly skilled included:

- Having a good understanding of what is expected behavior for children (for example, the basic the characteristics of ages and stages) (83.0%);
- o Having a working knowledge of the core subject matter for the grades in which they teach (71.5%); and
- o Having a repertoire of successful methods for dealing with children (71.0%).

Finally, a slightly greater percentage of teaching assistants from the comparison schools noted that they were highly skilled in knowing how to use good methods of recognition, reward and punishment (84.4%), when compared to the HP schools' teaching assistants (75.7%), an 8.7 percentage point difference.

Value Added by the Teaching Assistants

The principal surveys also included some information regarding the roles of the teaching assistants. From the perspective of the HP school principals, the value added from having teaching assistants in a reduced class size setting is the provision of instructional assistance (62.5%) and the assistance with individualized instruction (54.2%). Interestingly, the principals were much less likely to mention providing administrative assistance (20.8%) and helping with classroom management (20.8%) as a value added by the presence of the teaching assistants.

Teachers at the HP schools gave similar responses to this question. According to the teachers at the HP schools, the primary value added by the teaching assistants is their ability to carry out the following key functions:

- Helping to provide individualized instruction to students (N = 360; 49.4%);
- Assisting with or facilitating small group instruction (N = 192; 26.3%);
- Providing general support and relief to the teacher (N = 129; 17.7%);
- Conducting other general instructional responsibilities (N = 151; 20.7%);

- Monitoring student behavior/classroom management (N = 102; 14.0%);
- \circ Performing administrative duties and tasks (e.g., making copies, grading, preparing materials, providing bathroom/recess supervision) (N = 30; 4.1%); and
- \circ Assisting the teacher in providing differentiated instruction and working with special needs students (N = 29; 4.0%).

The following series of tables (Tables 5.1.15 through 5.1.17) present selected results from the HP Teacher Survey that partition teacher's responses by whether or not their school retained its teaching assistant positions in 2003-2004. This analysis was done for teachers in grades K-3 since those were the affected grade levels.

Table 5.1.15 – How often do the following occur in your classroom?

Percent of K-3 HP Teachers Who Indicated "Frequently,"

By School Teaching Assistant Status

	School Retained All TAs		School Retained Some of No TAs	
	N.	Percent	N	Percent
 Timely completion of daily lessons or assignments 	157	82.2%	239	82.4%
 Competition among students for teacher's attention 	159	38.4%	239	31.8%
Behavioral or discipline problems	157	31.2%	239	33.1%
 Students disrupting the work of other students 	156	24.4%	240	26.3%
 Students being "off-task" for more than 5 minutes 	157	17.2%	240	12.9%

Interestingly, there were only small differences in the proportions of teachers within both groups (e.g., schools that preserved all of their teaching assistants and schools that kept some or no teaching assistants) who reported these problems frequently occur in their classroom.

Table 5.1.16 – To what extent are the following statements true for you?

Percent of K-3 HP Teachers Who Indicated "To a Great Extent,"

By Teaching Assistant Status

		School Retained All TAs			ained <i>Some or</i> o TAs
_		N	Percent	N	Percent
•	I am aware of what each student in my class knows and can do.	161	94.4%	240	92.9%
•	I provide feedback on students' writing assignments within 1 day.	155	59.4%	239	60.3%
•	I have enough time to provide individualized attention to students.	158	31.6%	283	28.3%
•	I am able to plan instructional activities where students are placed in small groups.	158	74.7%	239	52.3%
•	I am able to meet the instructional needs of all students.	159	49.1%	240	45.0%
•	I have enough time to initiate the right amount of parent contact/communication.	157	29.3%	240	25.4%
•	I am able to respond to parent requests/questions within 1 day.	158	72.8%	239	70.3%
•	There is sufficient time for me to explore curriculum topics fully.	157	25.5%	240	22.1%

Similarly, the data in the above table show that, the retention of the teaching assistants appears to positively impact teachers' ability to plan and carry out small group instructional activities. For this survey item, almost 75% of the teachers at schools that kept all of the teaching assistants reported "to a great extent," compared to 52.3% of teachers where some or no assistants were retained.

Table 5.1.17 – How often do you use the following strategies or student activities when teaching math and reading to your students?

Percent of K-3 HP Teachers Who Indicated "Frequently,"

By School Teaching Assistant Status

		Retained /TAs	School Retained So	
	N	Percent	N	Percent
Math:		~ 520		
Using a calculator	154	16.2%	235	14.5%
Using measuring instruments	154	30.5%	234	29.9%
Playing with math-related games	155	68.5%	236	64.0%
Using math in the context of other subjects	154	51.9%	235	52.3%
Doing math worksheets	152	33.6%	234	43.6%
Using patterns to discover math relationships	153	66.0%	236	63.6%
Practicing computational skills	155	63.9%	235	63.8%
Working with manipulative aids	153	88.2%	234	87.6%
Reading:	156	90.70/	227	99 69/
Having guided discussions about reading	156	89.7%	237	88.6%
Having students read aloud to a partner	155	67.1%	238	72.7%
Working on phonics	156	80.8%	238	73.5%
 Writing narratives or descriptive material using invented spelling 	155	65.2%	238	68.5%
Discussing new or difficult vocabulary	157	83.4%	237	78.9%
Working in a reading book	154	63.0%	237	60.3%
Listening to the teacher read stories	154	89.0%	235	87.8%

The data in the preceding table show, with a few exceptions, the presence or absence of the teaching assistants appears to have a limited effect on teaching reading and mathematics. In math, teachers at the HP schools where there are some or no teaching assistants were more likely to use math worksheets with their students, than were teachers with teaching assistants. In reading, a greater proportion of teachers in schools that retained all teaching assistant positions reported frequently working on phonics with their students, compared to teachers at those schools that preserved some or none of the assistants (80.8% vs. 73.5%, respectively).

As shown in the following table, additional survey data showed that principals and teachers alike had mixed feelings regarding whether or not the benefits of class size reduction outweighed the loss of the assistants. For both groups, however, only a minority believed that the benefits of reduced class size outweighed the loss of teaching assistant positions.

Table 5.1.18 – Benefits Outweighed the Loss of Teaching Assistant (TA) Positions, Extent of Agreement

Administrator and Teacher Surveys

	Survey Response	HP Principals (N=22)	HP Teachers (N=910)
•	Yes	36.4%	17.1%
•	No	45.5%	50.5%
•	Don't know/not sure	18.2%	32.3%

Notably, the data in Table 5.1.19 show that a greater percentage of teachers at the schools with only some or without any teaching assistants agreed that the benefits of the reduced class size was more important than or offset the loss of these positions, than did the teachers at schools where all of the teaching assistant positions were retained (19.7% vs. 12.8%, respectively).

Table 5.1.19 – Benefits Outweighed the Loss of TA Positions
Percent of K-3 HP Teachers, By School Teaching Assistant Status

		Survey Response	School Retained	School Retained Some or
_	•	Yes	A//TAs (N=156) 12.8%	No TAs (N=229)
	•	No	59.0%	57.6%
		Don't know/not sure	28.2%	22.7%

When asked whether the benefits of class size reduction outweighed the loss of teaching assistant allocations, district-level stakeholders also conveyed mixed sentiments. The DOI respondents, for example, noted that while teachers prefer smaller class sizes, HP schools face challenges finding highly qualified teachers to provide effective instruction and supervision, even with fewer students in the class. Other comments provided by the DOIs on this question included:

- "There is more direct time for the classroom teacher to work with students, but I go back to thinking that a class that has highly a qualified teacher with a paraprofessional has more instructional time for the student than an HP school."
- "Because of the nature of the needs of children in poverty, I believe that the more adults you have in the room to meet those needs, the teacher is more able to deliver instruction. The teaching assistant typically serves as an instructional assistant so that if the children are having difficulty with the direct instruction from the teacher, the TA can provide immediate assistance.... Through small group work, the TA also reinforces work that teacher has presented through direct instruction."

• What is the nature of the support being provided by both state- and districtlevel staff to the HP schools to help shore up implementation of the Initiative?

District Support

With regard to the district's role in communicating expectations about the HP Initiative to each of its HP schools, DOIs reported that it involved regular communication between district staff and the HP schools (n=7), meetings with principals and school staff (n=6), and school visits conducted by district staff, including the superintendent and departmental directors (n=4). In addition, 15 of 16 DOIs indicated that meetings between district staff and principals took place throughout the year to ensure that principals understood the availability of HP funding. District staff participating in the meetings with principals included curriculum and instructional staff (including DOIs) (n=8), the District Finance Officer (n=6), superintendents/assistant superintendents (n=4), and human resources/personnel directors (n=3).

Professional development was a key method of support provided to the HP schools by district-level staff. All 16 of the DFOs interviewed indicated that their districts had a budget or set of funds specifically earmarked for professional development. When asked to describe the extent to which their districts used their professional development funds to support or enhance the legislatively prescribed professional development required of the HP schools, respondents noted the following:

- To allocate extra professional development funding to support the implementation of reduced class size or the extended school year programming for the 2003-2004 school year (n=7);
- To support the cost of professional development supplies, materials, workshops, and substitute teachers in HP schools (n=6); and
- To allot an amount of professional development funds from the district to the HP schools for their use (n=4), depending on their needs.

Similarly, 13 of 16 DOIs also reported that the district provided assistance to the HP schools to support the implementation of the five professional development days. The following list summarizes the type of assistance districts provided to the HP schools, from the perspective of the DOIs:

- Additional monies available through a grant or other funding source (e.g., Comprehensive School Reform, Remediation, Title I, Equity Plus, local funds) (n=7);
- District staff developers (n=7);
- o Consultants/staff developers other than district staff (including the State Assistance Team) (n=6);
- Supplies and materials (n=4);
- o Planning time (n=1); and
- o Additional school staff (n=1).

The DOIs varied in their responses when asked to indicate the extent to which they themselves or the district had provided input into the content of the contract extension professional development. Of the 16 DOIs interviewed, six respondents reported that district staff provided

the professional development training to the HP schools, five respondents noted that the district provided the HP schools with student assessment data and needs assessment data required to determine the content of professional development, four respondents indicated that the district provided information and materials for the professional development training, and four respondents reported that their district assisted with planning the content of the five-day teacher contract extension professional development.

These findings were echoed in data obtained from the Administrator Survey, where principals were asked to indicate the various types of assistance (if any) the district has provided to help plan or implement the teacher contract extension professional development. The most frequently mentioned type of assistance was providing district-level staff developers to help carry out the training. This was reported by 19, or more than two thirds, of the HP principals, followed by providing supplies and materials (39.3%) and offering assistance to finding outside experts to deliver the training (32.1%).

Overall, principals believed they were well supported by their district in implementing the HP Schools Initiative. For example, over 81% of the principals characterized their district's support as either good (56.3%) or excellent (25.0%).

DPI Support/Communication

Another aspect of implementation about which the DOIs were asked to report was the quality of communication between stakeholders regarding the HP Initiative. Encouragingly, 11 of the 16 DOIs interviewed reported that the level and/or quality of communication between DPI and the district had improved since the previous year. Respondents attributed the improved communication to the meetings at the state office in Raleigh regarding the HP Initiative (n=8), increased communication from DPI in the form of letters, memos, and emails (n=6), and the fact that the HP schools in their district received professional development training from DPI staff (n=4). Some examples of the DOI comments included:

- "We've had several meetings this year with DPI, the HP principals, and central office representatives.... These meetings have helped open the lines of communication.... As time goes on and we learn what is needed at each of the schools, I'm sure communication will improve."
- "We've had memos that have given us specific definitions of the HP initiatives, and when there have been questions, we've been able to get answers. We had to call this year a couple of times to get clarifications, and I got answers by email. So the communication is a lot better, and we understand what HP is a lot better this year."

Of the those DOIs who believed that communication between DPI and the district had not improved, respondents reported that it remained difficult to get responses to requests for information (n=2) and that communication to district employees regarding the HP Initiative was insufficient (n=2). For example, one DOI noted, "I would say it's the same. ...I have not felt that I was in the loop, and it's been difficult to get information from my point of view."

Similarly, all but one of the 16 DFOs indicated that the level and/or quality of communication between DPI and the District had improved at least somewhat. From their perspective, some examples of how this was realized include a direct contact at DPI to call for information about the HP Initiative (n=3), receiving information from DPI on a regular basis (n=3), and being

more aware of the state's expectations for the HP components (n=3). However, among five respondents, it was noted that there is still confusion around the expectations for the implementation of the HP components and the limitations of the HP funding. Two respondents were not satisfied that the communication was limited to memos and meetings explaining how schools can access the HP funds.

When asked about the types of support or technical assistance they had received from DPI, 14 principals from the HP schools offered the following examples:

- Information meetings at DPI (N=10; 71.4%);
- o Professional development opportunities (e.g., State Assistance Teams, DPI) (N=6; 42.9%);
- o Written memos/correspondence (N=4; 28.6%); and
- o Contact person at DPI (N=1; 7.1%).

Despite these efforts, slightly less than half of the responding principals described the overall support provided by the state as good (34.5%) or excellent (13.8%).

Thinking about the past three years of implementation, the HP principals were asked what challenges continued to be a problem for at their schools, noting the following in relation to district and state-level support.

Table 5.1.16 – Administrator Survey
Ongoing Challenges/Problems at the HP Schools

	Ongoing Challenges/Problems	N	No, not a problem	Yes, a small problem	Yes, a significant problem
•	Inadequate information regarding funding available to HP schools	31	51.6%	35.5%	12.9%
•	Late notification of HP funding	32	56.3%	28.1%	15.6%
•	Lack of commitment from district-level administrators	32	93.8%	3.1%	3.1%
•	Lack of technical assistance/support from DPI regarding implementation of the HP components	32	71.9%	25.0%	3.1%
•	Poor communication between DPI and the schools on the requirements and expectations of the HP components	31	51.6%	41.9%	6.5%

Finally, it is important to note that all 16 DOIs and 12 of the 16 DFOs reported that schools were more aware of the requirements of the HP Initiative this year, compared to last year. Respondents attributed this increased awareness to:

- Improved communication from DPI to the district and/or to the HP schools (n=12);
- The fact that it was the second or third year of HP implementation for some schools (n=11);
- Schools being more involved in the planning process for the HP Initiative (n=8);
- Meetings that were held by DPI staff at the state office (n=6);
- o Consistent administrators remaining the same in the HP schools (n=3);
- .o improved communication from the district to the HP schools (n=5); and
- o The presence of a State Assistance Team in the HP school (n=1).

 To what extent are districts and the HP schools still encountering resource, facility, and other constraints to implementing reduced class size?

District-level Stakeholders

Nine of the 16 DOIs reported that the HP schools in their district were implementing all four of the HP components this year, though they did continue to face some barriers to implementation, including teacher retention (n=2), scheduling difficulties associated with the five extra days of professional development and student instruction (n=2), conflicts with other grants/initiative guidelines (e.g., Reading First, Equity Plus; n=2), loss of teaching assistant positions (n=2), turnover in school administrators (n=2), transportation (n=1), poor instructional leadership (n=1), and low teacher morale (n=1).

The DFOs were asked the extent to which they believe that sufficient resources are provided by the state to the HP schools to help them meet their educational needs. The majority of respondents (n=10) suggested that additional resources were needed to adequately support the HP Schools Initiative. Specifically, seven respondents noted that additional monies were needed to fund secondary activities associated with the Initiative (e.g., professional development supplies and materials, transportation costs on extended school year days, purchasing additional classroom space), six respondents suggested that funds were needed to restore the teaching assistant positions previously eliminated through the Initiative, and four respondents noted that funds were needed for the hiring of additional classroom teachers. For example, two of the DFOs commented:

- "The funding is sufficient for the position allocations and salaries related to the HP initiatives. However, the HP budget code does not allow us to bill the transportation costs for the extra school days so we need to pull from our transportation budget to support that cost, which is already tight."
- "No [it is not sufficient.]. We are a small, rural county. There was no extra money available for additional mobile units that we had to purchase, which pulled funding from other schools that really needed it."

Overall, respondents provided additional funding estimates ranging from \$300 per child to \$75,000 per school, in order to fully implement the HP components in the schools in their districts.

During evaluation interviews, the DOIs were also asked the extent to which they believe that the HP schools were provided with sufficient resources (either funding or technical assistance regarding implementation) by the state to assist these schools in implementing these four components for this school year. Thirteen of the DOIs reported that additional resources were needed to adequately support the HP Schools Initiative. Specifically, respondents noted the need for earlier notification regarding the implementation and funding for the HP components (n=5) and the need for additional monies to support the instructional support position (n=3), teaching assistant positions (n=2), and professional development component (n=1).

Of the 16 DOIs interviewed, nine also reported that their HP schools encountered unexpected costs associated with the implementation of the HP Initiative during the 2003-2004 school year. These included costs associated with the following:

The retention of teaching assistant positions (n=6);

- Secondary costs associated with the extended teacher contracts for professional development and the extended school year (e.g. non-instructional staff, cafeteria, custodial services, transportation) (n=5);
- Additional teaching positions and support staff (n=2);
- The setting up of appropriate classroom space (n=1); and
- The additional instructional support position (n=1).

When asked to specify how the schools and/or district were able to absorb these unexpected costs, DOIs noted the use of local funding and donations (n=7), federal funding (e.g., Title I, II, and VII monies; n=4), and state funding (e.g., staff development and accountability monies; n=1).

The DOIs were also asked to reflect on the schools' ability to meet staffing needs. Of the eight respondents indicating that their district had to hire new teachers, all noted that their district had some level of difficulty finding qualified, licensed teachers to staff the additional classes in grades K-3. Three respondents noted that the district had to recruit teachers from other states or countries, two respondents reported a lack of licensed staff, one other respondent indicated teacher turnover during the middle of the year, and another respondent noted difficulties with recruiting staff for HP schools. For example, one of the DOI respondents noted:

"Our whole school system struggles to find qualified teachers... [Because of our geographical location within the State] we do not have a large pool to draw from. Across the system, we have fewer candidates for teaching positions than we do vacancies. High Priority schools are relatively unappealing to new teachers. It is more challenging, they are not guaranteed ABC's money, and there are extra days; we've just had a hard time recruiting teachers."

Of the eight DOIs reporting new teacher hires in their district during the 2003-2004 school year, they all noted that while the hired teachers were licensed, most had less than three years of prior teaching experience.

School-Level Stakeholders

Reflecting on the past three years of HP implementation, principals mentioned a number of different challenges that continue to be a problem (small and significant combined) as they implement reduced class size in their schools. These are:

- Lack of the teaching assistant positions in the K-3 classrooms (23 or 76.6%);
- Not enough support from parents (22 or 73.4%);
- Lack of available state-certified teachers in grades K-3 (22 or 68.8%);
- o Retaining experienced teachers in the HP schools because of the 10 additional required workdays (19 or 61.3%);
- o Insufficient funding from the state (15 or 53.6%);
- Insufficient space in the school to reduce class size (13 or 42.0%);
- Insufficient money to set up additional classrooms, purchase portable units, or remodel existing space (12 or 37.5%);
- o Insufficient district funding to supplement the HP allocations (10 or 33.3%); and
- o Insufficient instructional materials and resources for teachers (9 or 28.1%).

When asked what changes could be made to improve the overall design or implementation of the different HP components, principals at the HP schools offered a number of different suggestions, including:

- Provide more adequate and timely resources (DPI contacts, staff, money) to improve HP implementation (N=10; 37.0%);
- Reinstate the teaching assistant positions (N=9; 33.3%);
- Address issues that have emerged related to the required extra days for teachers (N=5; 18.5%);
- Update/change the list of HP schools over time (N=4; 14.8%); and
- o Continue or expand the HP components (N=3; 11.1%).

Question 2 - What impact does resource utilization have on student achievement and other outcomes at the HP schools? What changes in resource utilization have occurred at the HP schools in Year 3?

• To what extent has DPI improved the tracking of allocations and expenditures in the HP Schools Initiative? How have the financial systems been improved over the life of the HP Schools Initiative?

Allocation Patterns

Funding for the HP Initiatives is allocated to the districts; the districts then allocate the funds to the schools. Thus, DPI only handles district allocations, not individual school allocations.

State HP Classroom Teaching Positions

In FY 2003-2004, 16 districts received HP allocations ranging from \$68,447 in Edgecombe County to \$993,195 in Forsyth County. The 16 districts were allocated \$5.74 million in HP funds, which bought 126.5 teaching positions in the 36 HP schools; the average allocation was eight HP classroom teaching positions. This was a reduction of seven total HP positions and \$231,857 from the year before, a loss of almost 4%. Eleven of the 16 districts had a net loss of at least one position (see Table 5.2.2), primarily due to declining enrollment, as shown in Table 5.2.1

Table 5.2.1 – Average Daily Membership Means for HP School Districts, By Year

District	Number of HP Schools	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004
Anson	1	588.00	565.00	554.00	544.00	475.00
Bertie	2	327.00	316.50	306.00	305.50	305.50
Cumberland	3	286.67	252.67	260.67	232.33	218.00
Durham	4	370.50	347.75	352.00	322.75	277.75
Edgecombe	1	163.00	154.00	174.00	159.00	176.00
Forsyth	6	428.83	406.83	386.50	359.83	347.83
Gaston	2	462.50	417.00	398.00	347.00	337.00
Guilford	3	532.33	493.33	457.00	406.67	383.00
Hertford	1	594.00	580.00	581.00	547.00	496.00
Mecklenburg	3	467.67	451.67	451.67	433.00	408.00
Nash-Rocky Mount	2	299.50	272.00	283.50	276.00	239.00
Northampton	1	403.00	370.00	333.00	339.00	302.00
Robeson	1	130.00	142.00	149.00	147.00	160.00
Union	2	663.50	663.50	658.00	650.50	664.50
Vance	3	277.33	285.67	298.00	279.33	258.00
Wayne	1	750.00	725.00	612.00	558.00	450.00
Overa	ll Mean	421.49	402.68	390.90	369.18	343.60

In order to determine how this enrollment decline is affecting the number of teaching positions in the HP schools, the DFOs who were interviewed were asked their perspective on this issue. Nine of the 16 DFOs reported that the HP schools had experienced declining enrollment during the 2003-2004 school year. Within these nine districts, most reported that the HP schools in

their district received fewer teaching positions, ranging from one to three fewer teachers per school, because of the declining enrollment.

State HP Teaching Assistants Positions

State funds continued to be withdrawn for teaching assistants. In FY 2003-2004, the funds withheld were \$7,483,683, which was \$104,679 (1.4%) more than the year before. Thirteen of the 16 districts received a larger reduction than the year before (see Table 5.1.17).

State HP Instructional Support Positions

As expected, the number of instructional support positions remained fairly constant. Thirty-six positions were allocated in FY 2003-2004 as compared to 35 positions the previous year. The total dollar amount was \$1,846,834, which was \$81,043 (4.6%) more than the previous year (also shown in the following table).

Table 5.2.2 - State HP Initiative Total Allocations

HP Allocations	FY01-02	FY02-03	Difference FY02-03	FY03-04	Difference FY03-04	Three Year Difference
Classroom Teaching	86.5	133.5	47	126.5	7	40
Positions			54.3%		-5.2%	46.2%
Classroom Teaching	\$3,955,912	\$5,971,847	\$2,015,935	\$5,739,990	\$(231,857)	\$1,784,078
Funding	- F	0.00	51.0%		-3.9%	45.1%
Teaching Assistants	\$(4,048,036)	\$(7,379,004)	\$(3,330,968)	\$(7,483,683)	\$(104,679)	\$(3,435,647)
Funding			82.3%		1.4%	84.9%
Instructional Support	35	35	0	36	1	1
Positions			0.0%		2.9%	2.9%
Instructional Support	\$1,759,707	\$1,765,791	\$6,084	\$1,846,834	\$81,043	\$87,127
Funding			0.3%		4.6%	5.0%

Expenditure Patterns

DPI tracks expenditures by school; however, expenditures for specific programs, including the HP Initiative, are not tracked. Hence this analysis is of overall school spending patterns, not spending related to the HP Initiative itself.

Total Expenditures²

In the 36 schools, total expenditures for FY 2002-2003 equaled \$120,075,908, representing an increase of 4.2% over the previous year, FY 2001-2002. State funds for FY 2002-2003 equaled \$74,874,387, a 3% increase over the previous year. Federal dollars increased more than 17%, from \$14.8 million to \$17.4 million. Most of the HP schools spent more in federal funds over the three-year period; however, 11 HP schools spent less in federal funds. Local funds

² Expenditures are not yet available for FY 2003-2004.

increased less than 1%, from \$27.6 million to \$27.8 million, and 19 schools received less in FY 2002-2003 than in FY 2000-2001 (see table below).

Table 5.2.3 – HP Initiatives School Expenditures

Expenditures	FY00-01	FY01-02	Difference FY02-01	FY02-03	Difference FY03-02	Difference FY03-01
State Expenditures	\$72,314,249	\$72,696,688	\$382,439 0.5%	\$74,874,387	2,177,699 3.0%	\$2,560,138 3.5%
Federal Expenditures	\$12,117,671	\$14,808,536	\$2,690,865 22.2%	\$17,382,835	\$2,574,298 17.4%	\$5,265,163 43.5%
Local Expenditures	\$27,601,706	\$27,727,652	\$125,646 0.46%	\$27,818,687	\$91,053 0.33%	\$216,981 0.8%
Total Expenditures	\$112,003,626	\$115,232,876	\$2,820,093 2.58%	\$120,075,908	\$4,843,033 4.2%	\$8,042,283 7.2%

Expenditures: Teachers

The number of teaching positions increased in the HP schools from 867 positions to 899 (3.7% increase) in the last year (FY 2001-2002 to FY 2002-2003). This increase was provided by the state, which added over 63 instructional teaching positions, from 697.4 to 760.5 (a 9% increase). Both federal and local positions decreased. Positions funded by federal dollars decreased from 55.3 to 49.3, and positions funded by local dollars decreased from 114.3 to 89.4, which is a 21.8% decline. As shown in the following table, over a two-year period, the total number of teaching positions increased by 10.2%.

Table 5.2.4 — Teaching Positions

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Source	FY00-01	FY01-02	Difference FY02-01	FY02-03	Difference FY03-02	Difference FY03-01				
State	694.8	697.4	2.6	760.5	63.1	65.7				
			0.4%		9.0%	9.5%				
Federal	38.2	55.3	17.1	49.3	-6.0	11.1				
			44.8%		-10.9%	29.1%				
Local	83.4	114.3	31.0	89.4	-24.9	6.0				
			37.1%		-21.8%	7.2%				
Total	816.3	867.0	50.7	899.2	32.2	82.9				
			6.2%		3.7%	10.2%				

Expenditures: Teaching Assistants

In the first year of the HP Initiative, DPI established a policy of reducing teaching assistant positions while increasing instructional teaching positions. The school districts responded by funding additional teaching assistant positions through local funds. In the second year of the Initiative, this pattern continued, with the local school districts using federal funds to finance additional teaching assistant positions. As a result, after one year, the schools lost only 43.7 teaching assistant positions or 7.9%; after the second year, the schools lost 91.7 or 18.1%, for a total of 135.5 eliminated positions over a two-year period (loss of 24.6%) while the state reduced its allocation by more than 50%. These data are presented in the following table.

Table 5.2.5 - Teaching Assistant Positions

Source	FY00-01	FY01-02	Difference FY02-01	FY02-03	Difference FY03-02	Difference FY03-01
State	421.4	378.2	-43.1 -10.2%	196.7	-181.5 -48.0%	-224.6 -53.3%
Federal	82.7	74.2	-8.55 -10.3	167.7	93.5 93.5%	85.0
Local	46.1	54.1	8.0 17.2%	50.4	-3.7 -6.9%	103.0% 4.3 9.0%
Total	550.2	506.5	-43.7 -7.9%	414.7	-91.7 -18.1%	-135.5 -24.6%

Expenditures: Staff Development

Each level of government has increased its allocations for staff development in the HP schools. As shown in the following table, in the first year, the total increase was 33.4%, with the largest increase coming from the federal government. In the second year, the total increase was 60.5%, with the largest increase again being federal funds.

Table 5.2.6 - Staff Development Expenditures

Expenditures	FY00-01	FY01-02	Difference FY02-01	FY02-03	Difference FY03-02
State Expenditures	140,691	122,850	-17,842 -12.7%	\$153,987	31,137 25.3%
Federal Expenditures	309,202	520,657	211,454 68.4%	878,108	357,452 68.7%
Local Expenditures	147,414	153,147	5,733 3.9%	246,229	93,082 60.8%
Total Expenditures	\$597,307	\$796,653	\$199,346 33.4%	\$1,278,324	\$481,671 60.5%

Expenditures: Extended Contract Days

As illustrated in the table below, on the first year of the Initiative, only 14 schools implemented extended contract days. By the second year, 22 schools had implemented extended contract days, for a total of over \$1 million.

Table 5.2.7 – Extended Contract Days Expenditures

		THE TOTAL PROPERTY.	MICHICO.
Expenditures	FY01-02	FY02-03	Difference
State Expenditures	151,024	969,163	818,138
			541.7%
Local Expenditures	4,925	46,598	41,673
			846.1%
Total Expenditures	\$155,949	\$1,015,761	\$859,811
			551.3%

Comparison Schools

The comparison schools also suffered from declining enrollment, as witnessed by the reduction in state spending. As illustrated in the following table, fewer state and local dollars were spent over the three-year period than in the HP schools. Federal dollars increased similarly to the HP schools.

Table 5.2.8 – Comparison School Expenditures

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Expenditures	FY20- 01	FY01- 02	Difference FY02-01	FY02-03	Difference FY03-02	Difference FY03-01
State	\$19,292,644	\$ 18,081,954	\$(1,210,690) -6.3%	\$ 18,012,395	\$(69,559) -0.4%	\$(1,280,249) -6.6%
Federal	\$2,662,073	\$3,194,122	\$532,049	\$3,495,819	\$301,697	\$833,746
			20.0%		9.4%	31.3%
Local	\$6,920,118	\$6,732,492	\$(187,626) -2.7%	\$6,649,460	\$(83,032) -1.2%	\$ (270,658) -3.9%
Total	\$28,874,835	\$28,008,567	\$(866,268) -3.0%	\$28,157,674	\$149,107 0.5%	\$(717,161) -2.5%

As shown below, in the comparison schools, the actual positions of instructional teachers in the comparison schools decreased from 220.6 in FY2001 to 211.5 in FY2003.

Table 5.2.9 — Comparison School Positions

Positions	FY00-01	FY01-02	Difference FY02-01	FY02-03	Difference FY03-02	Difference FY03-01
State	186.1	175.7	-5.6%	178.6	1.6%	-4.1%
Federal	2.0	3.8	87.5%	5.0	33.3%	150.0%
Local	32.5	30.4	-6.6%	27.9	-8.0%	-14.1%
Total	220.6	209.8	-4.9%	211.5	0.8%	-4.1%

The contrast between the increase in expenditures in HP schools and the comparison schools is stark. It can be seen in the following table that the HP schools had increases in expenditures across the board from state, federal and local agencies, whereas the comparison schools had a decrease in expenditures from both the state and local districts, with increases coming only from the federal government.

Table 5.2.10 – Increase in HP School Expenditures Compared to the Comparison Schools

50100.5			
Expenditures	HP Schools FY2003-2001	Comparison Schools	
Local	0.8%	-3.9%	
State	3.5%	-6.6%	
Federal	43.5%	31.3%	
Total	7.2%	-2.5%	

• For each year of the Initiative, what process do the districts use to allocate HP funds to the schools?

Allocation of Federal and Local Funds to Schools

District Finance Officers were asked what changes had occurred, since last year, in the amount of federal funding above and beyond what would normally be allocated for increases in student enrollment. Across the 16 districts, nine respondents reported an increase in federal funding, two indicated that there had been a decrease, and five noted no change in federal funding since the previous year. Of the nine respondents indicating that their districts had seen an increase in federal funding, six specified that the funding sources were Title I (n=4), Title II (n=2) or Title VIB grants (n=1), and No Child Left Behind (NCLB) legislative funding (n=2).

Decreases in federal funding were attributed to the loss of Title I and Reading Excellence Act (REA) grants.

The DFOs also were asked whether since 2002-2003 their district had experienced any changes in local funding beyond what would normally be allocated for increases in student enrollment. Most reported that there had not been a change in local funding since last school year (n=10); while five respondents reported an increase in local funding, one respondent noted a decrease.

Allocation of State Funds to Schools

All 16 DFOs reported that the general process used to allocate state funds to the schools had not changed in their district from last year. Specifically, respondents noted that state funds are generally allocated to schools based on school enrollment or Average Daily Membership (ADM).

In addition, of the 16 DFOs who were interviewed, most (n=10) indicated that there had been no significant changes in state funding.

Allocation of HP Schools Initiative Funding

The DFO from each of the 16 districts reported that the HP schools in their counties were receiving the special HP funding allocations from the state for the teacher positions to reduce class sizes, an added instructional support position, and the extended teacher contract days for both professional development and the extended school year days.

When asked about the process used to allocate the positions and resources to the HP schools this year, the responses from the DFOs varied depending on the specific component. Their responses are summarized below.

- o In the area of <u>reduced class size</u>, eleven respondents indicated that teachers were added to HP school classrooms based on the combination of the predetermined threshold defined by the legislation of 1:15 in grades K-3 and/or ADM; two DFOs indicated that district staff made decisions on how to reduce class sizes in each of the HP schools based on specific knowledge about those schools; and one district indicated that decisions on how to allocate funds to reduce class size were made by school principals with input from school- and district-level personnel. Two respondents were unaware of the process used to reduce class sizes in their district.
- With respect to the <u>extension of teacher contracts for professional development</u>, seven respondents noted that allocation decisions were made solely by district personnel, and six indicated allocation decisions were made solely by the HP schools. One respondent also indicated that HP schools ran their expenses and booked them for coverage at the end of the year. Two respondents were unaware of the process used to extend teacher contracts for professional development in their district.
- o In the area of the <u>extended school year</u>, six respondents noted that allocation decisions were made solely by district personnel, four respondents indicated allocation decisions were made solely by the HP schools, and three respondents noted that such decisions were made collaboratively by district and school personnel. Three respondents were unaware of the process used to extend the school year in their district. In addition, one

respondent also indicated that HP schools simply ran their expenses and booked them for coverage at the end of the year.

o For the <u>hiring of the additional instructional support person</u> component, nine DFOs indicated that the district determined the position to be hired, while two indicated that the HP schools made decisions regarding the hiring of an additional staff position. Four respondents were unaware of the process used to hire the additional support person in the HP schools in their district, while one respondent indicated that their district did not receive an allotment for the additional instructional support position.

It should be noted, however, that 15 of the 16 DFOs indicated that the process used to allocate the HP resources to the schools this year was similar to the process used last year.

Other Relevant Funding Sources

DFOs were asked to indicate any funds aside from HP funds that were used to support class size reduction, related professional development, or the extended school year components of the HP Schools Initiative. Respondents specified several funds used for such purposes, as listed below:

- Title I funds (used for class size reduction, professional development, and the extended school year) (n=11);
- General local funds (used for professional development and the extended school year) (n=3);
- Comprehensive School Reform Demonstration Grant (used for professional development) (n=2);
- Equity Plus Funding (used for class size reduction, professional development, and the extended school year) (n=2);
- School Improvement Grant (used for professional development) (n=1);
- 21st Century Community Learning Centers Grant (used for extended school year) (n=1);
- Early Reading First Grant (used for professional development) (n=1);
- Federal Magnet Grant Assistance Program (used for extended school year program) (n=1); and
- Title II funds (used for class size reduction) (n=1).

It is important to note that nine of the 16 DFOs interviewed reported that their districts had engaged in class size reduction efforts in 2003-2004 above and beyond that which occurred as a result of the HP Initiative. These efforts varied widely in terms of their impetus (e.g., federal class size reduction program, state-mandated class size reductions), the numbers of schools affected (ranging from several elementary schools to all schools district-wide), the extent to which class sizes were reduced (minor reductions versus large reductions), and funding source (e.g., Equity Plus, local funds, state funds).

Question 3 – What student achievement outcomes occurred in the HP schools?

In order to examine the extent to which academic gains have been made by students at the HP schools, several analyses were conducted with results from the annual *End-of-Grade (EOG) Tests*. The EOGs are North Carolina-developed tests that measure student achievement of curricula objectives in reading comprehension and mathematics in grades 3 through 8. As described in a 1999 *Assessment Brief* published by DPI, the primary purposes of the EOG tests are to provide accurate assessment of:

- Individual student skills and knowledge as specified in North Carolina's Standard Course of Study
- Growth and performance of groups of students for the state's ABCs Accountability Program

DPI notes that the "value of the test lies primarily in the fact that the scores provide a common standard that is not influenced by local differences in achievement and expectations." As such, EOG test scores are used to measure gains (or losses) in student performance over time to determine the extent to which educational programs, such as the HP Schools Initiative, are working.

Two types of EOG scores were used in the analyses. Achievement Levels are pre-determined performance standards that allow comparisons of student and group performance to standards based on what is expected in each subject at each grade level. Determined by relating the judgments of thousands of North Carolina teachers, four achievement levels are reported for each subject area. The four levels are as follows:

- Level I Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.
- Level II Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.
- Level III Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.
- **Level TV** Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

The achievement levels are created using scale scores, with each grade having its own set of cut off scores and a corresponding range. In order to standardize the scale scores to obtain a true depiction of how well students performed compared to the state for any given year, the scale scores were converted to Z-scores using statewide parameters (mean and standard deviation) for each tested grade. Z-scores are standardized measures that explain how many standard deviations away from the mean a given score resides. Z-scores can be positive or negative, with a positive Z-score indicating that the value is above the mean and a negative Z-score indicating that the value is below the mean.

 To what extent did the HP schools achieve their stated growth targets in ABCs performance levels and make adequate yearly progress in spring 2004? What differences (if any) exist between the HP schools and the comparison schools on these indicators?

The tables that follow present the number of HP and comparison schools that achieved expected growth targets in spring 2001 (baseline), spring 2002 (Year 1), spring 2003 (Year 2), and spring 2004 (Year 3) (Table 5.3.1) and that were determined to have made adequately yearly progress (AYP) in spring 2004 (Year 3) (Table 5.3.2).

Table 5.3.1 – ABCs Growth Targets

Number and Percent of HP and Comparison Schools Achieving

Expected Growth Targets, By Year

	Spring 2001 (Baseline)	Spring 2002 (Year 1)	Spring 2003 (Year 2)	Spring 2004 (Year 3)
HP Schools (N=35, Baseline, Year 1 and Year 2) (N=36, Year 3)	14 40.0%	22 62.9%	35 100.0%	25 69.4%
Comparison Schools	0	2	8	9
(N=9, All Years)	0.0%	22.2%	88.9%	100.0%

Table 5.3.2 – Number and Percent of HP and Comparison Schools Meeting AYP, 2002-2003 and 2003-2004

	Spring 2003 (Year 2)	Spring 2004 (Year 3)
HP Schools (N=35, Year 2)	21	29
(N=36, Year 3)	60.0%	80.6%
Comparison Schools	3	7
(N=9, All Years)	33.3%	77.8%

The results shown in these tables are as follows:

- In the baseline year (spring 2001), proportionately greater numbers of HP schools achieved the expected growth target than the comparison schools: 14 or 40.0% of HP schools and none or 0% of the comparison schools.
- From baseline (spring 2001) to Year 1 (spring 2002), the number of HP and comparison schools achieving the expected growth target increased by approximately 22 percentage points for both groups. For example, 14 or 40.0% of the HP schools met the growth target in the baseline year, compared to 22 HP schools or 62.9% in Year 1.
- In Year 2 (spring 2003), all 35 (or 100%) of the HP schools achieved their expected growth targets. This represents a 37.1 percentage point increase from Year 1. The comparison schools also fared well in Year 2, with all but one or 88.9% achieving the growth target, a 66.7 percentage point increase.
- However, by the end of Year 3 (spring 2004), the number of HP schools that achieved expected growth had decreased by approximately 30 percentage points, while all of nine comparison schools achieved their expected growth targets.

- In Table 5.3.2 it can be seen that the number of HP schools meeting AYP increased dramatically from Year 2 to Year 3, from 60.0% to 80.6%, respectively.
- The data in table 5.3.2 further show that a slightly greater percentage of HP schools met their AYP targets in spring 2004 than did the comparison schools (approximately 81% vs. 78%, respectively).

In summary, findings from these cross-sectional analyses showed that, by the end of Year 3, the number of HP schools that were successful in realizing growth expectations (despite the dip that was evident in spring 2004), as derived from North Carolina's ABCs of Public Education school-based accountability program, increased by more than 29 percentage points from the baseline year. In addition to growth outcomes, when compared to the set of similarly situated comparison schools, a slightly greater proportion of HP schools attained adequate yearly progress at the end of Year 3.

• To what extent have the HP schools made gains on state assessments in reading and math, in comparison to gains for the set of comparison schools, since the implementation of the Initiative?

In order to examine the extent to which the HP schools have made progress on state assessments in reading and math and how well these gains compared to those of the comparison schools, Metis conducted a series of longitudinal analyses. In these types of analyses, the performance of student groups can be monitored over sequential test administrations based on mean pre-post score differences. Longitudinal analyses were conducted because they often provide the clearest picture of the relationship between instructional programs and student outcomes. Mean Z-score differences from two years of EOG test administrations (2002-2003 and 2003-2004) were subjected to statistical analysis.

When examining the results of the longitudinal EOG analyses, only differences in mean Z-scores that prove to be statistically significant should be considered as gains or declines. Smaller and/or non-significant differences between pretest and posttest scores are considered to reflect no change.³

The longitudinal analyses presented in the following tables show by grade level, the number of students with matched pre- and posttest scores (N), pre- and posttest means (in Z-scores), mean differences, and the significance level and associated t-value. The tables also show an asterisk (*) if the difference between pretest and posttest means resulted in a significant t-value at or below the .05 level of probability.

Table 5.3.3 – Spring 2003 – Spring 2004 Longitudinal Analyses EOG Reading and Mathematics, All HP Schools Combined

LOG Reading and Fladientales/ 7th III Sanson									
Grade	Matched N	Pre Mean Z- score	Post Mean Z- score	Mean Difference	Significance	t-Value			
Reading									
3	1,573	-0.54	-0.50	0.04	0.03	2.11*			
4	1,239	-0.52	-0.53	-0.01	0.46	-0.74			
5	1,119	-0.56	-0.56	-0.01	0.76	-0.30			
All Grades	4,011	-0.54	-0.53	0.01	0.38	0.88			
Math									
3	1,582	-0.56	-0.50	0.06	0.00	3.46*			
4	1,247	-0.52	-0.52	0.00	0.94	0.07			
5	1,206	-0.53	-0.50	0.03	0.07	1.84			
All Grades	4,035	-0.54	-0.50	0.03	0.00	3.33*			

The data in Table 5.3.3 show that at grade 3, HP students showed statistically significant improvements in both reading and mathematics from spring 2003 compared to spring 2004. It can also be seen that when the grades are combined, HP students across the tested grade levels made statistically significant gains in average math performance from spring 2003 to spring 2004.

Analysis of covariance (ANCOVA) is a type of longitudinal analysis that is used to assess the statistical significance of mean differences among groups with an adjustment made for initial

³ While any change in an *individual* student's score is meaningful, mean differences that are not statistically significant reflect data where the number of students is too small, the mean difference is too small, and/or variations in students' scores are too large to make reliable statements about the group.

differences on one or more variables (covariates). In order to conduct longitudinal (same student) analyses that test student mean Z-score differences on the EOG from spring 2003 to spring 2004 for HP schools vs. the comparison schools, a series of ANCOVA analyses were conducted.

The purpose of this type of analysis was to remove the effects of the covariates (e.g., reading level, parent education level, gender, and ethnic background) that could affect the relationship of the treatment variables (e.g., HP vs. comparison schools) to the outcome variables (e.g., mean Z-scores on the EOG). The covariates that were included in the different ANCOVA analyses are as follows:

- Spring 2001 Reading (defined as mean Z-score for the EOG reading test in spring 2001; used for grade 5 analysis only)
- Spring 2002 Reading (defined as mean Z-score for the EOG reading test in spring 2001; used for grade 4 analysis only)
- Parent Education Level (defined as 1=High School Diploma or Less and 2=Higher than High School Education; used in analyses for grades 3-5)
- Gender (defined as 1=Male and 2=Female; used in analyses for grades 3-5)
- Racial/Ethnic Background (defined as 1=Black, 2=Hispanic, and 3=Other [White, Asian, and American Indian])

It is important to note that longitudinal analyses are only conducted for students with valid test results for each of a cohort's test administrations. Therefore, for a student to be included in the longitudinal analyses, a spring 2003 and spring 2004 score is required. Since student mobility and other factors can negatively effect matching of student scores over three test administrations, the Ns in the following analyses are somewhat smaller than those in the cross-sectional analyses.

The results of the ANCOVA analyses for reading and math for grade 3 (Table 5.3.4), grade 4 (Table 5.3.5), and grade 5 (Table 5.3.6) are presented in the following tables.

Table 5.3.4 – Mixed-Model Analysis of Covariance Spring 2003 to 2004 EOG Reading, Grade 3

	Test Administration (Pre Mean Z-score)	on (Post Mean Z-score)	Effects	F Value	Sig.	
Reading			Mean Gain Reading	0.453	.501	
HP			HP Status by Reading Gain Covariates	14.028*	.000	
(N=1,571)	Spring 03 (-0.535)	Spring 04 (-0.497)	Gender	2.238	.135	
Comparison (N=487)	Spring 03 (-0.486)	Spring 04 (-0.588)	Ethnic Background Parent Education Level	0.003 0.038	.956 .845	
Math			Mean Gain Math	3.690	.055	
НР			HP Status by Math Gain Covariates	17.590*	.000	
(N=1,580)	Spring 03 (-0.556)	Spring 04 (-0.497)	Gender	1.015	.314	
Comparison			Ethnic Background	0.683	.409	
(N=488)	Spring 03 (-0.530)	Spring 04 (-0.610)	Parent Education Level	2.033	.154	

Table 5.3.5 — Mixed-Model Analysis of Covariance Spring 2003 to 2004 EOG Reading, Grade 4

Reading	Test Administration (Pre Mean Z-score)	on (Post Mean Z-score)	Effects	F Value	Sig.
HP (N=1,069)	Spring 03 (-0.496)	Spring 04 (-0.523)	Mean Gain Reading HP Status by Reading Gain	0.006 -9.577*	.936 .002
Comparison (N=403)	Spring 03 (-0.641)	Spring 04 (-0.541)	Covariates Gender Ethnic Background Parent Education Level Reading Z-score '02	2.518 0.188 4.161* 4.857*	.113 .665 .042 .028
Math HP (N=1,154)	Spring 03 (-0.496)	Spring 04 (-0.499)	Mean Gain Math HP Status by Math Gain	0.000 4.981*	.987 0.26
Comparison (N=477)	Spring 03 (-0.559)	Spring 04 (-0.491)	Covariates Gender Ethnic Background Parent Education Level Math Z-score '02	1.505 0.256 0.080 1.945	.220 .613 .777 .163

Table 5.3.6 – Mixed-Model Analysis of Covariance Spring 2003 to 2004 EOG Reading, Grade 5

	Эрп	ig 2003 to 2004	EOG Reading, Grade		
Reading	Test Administrati (Pre Mean Z-score)	on (Post Mean Z-score)	Effects	F Value	Sig.
HP (N=848)	Spring 03 (-0.505)	Spring 04 (-0.504)	Mean Gain Reading	0.188	.664
			HP Status by Reading Gain Covariates	0.210	.647
Comparison	0 / 00 / 0 (00)	G : 64 (0 F00)	Gender	2.143	.143
(N=211)	Spring 03 (-0.633)	Spring 04 (-0.589)	Ethnic Background	0.658	.417
()	(===)		Parent Education Level	1.548	.124
			Reading Z-score '02	0.580	.446
Math					
HP (N=852)	Spring 03 (-0.475)	Spring 04 (-0.448)	Mean Gain Math	3.536	.060
			HP Status by Math Gain Covariates	4.214*	.040
Comparison			Gender	3.767	.053
(N=211)	Spring 03 (-0.538)	Spring 04 (-0.562)	Ethnic Background	0.008	.930
(= = = /			Parent Education Level	0.432	.511
			Math Z-score '02	0.017	.896

A summary of findings from Tables 5.3.4 through 5.3.6 includes:

- For each of three grades, gains observed across the groups in average reading and math performance, from spring 2003 to spring 2004, were not different than the average gain statewide.
- However, for grade 3, membership in HP schools proved to have an effect on gains in both reading and math. In both subject areas, the HP students showed greater improvement in scores than the comparison students.
- o In grade 4, we see the opposite is true. The comparison school students showed improvements that were significantly better than the HP school students in both of these subject areas between spring 2003 and spring 2004.

o In grade 5, it can be seen that there was no difference between HP and comparison school students in reading. In mathematics, students at the HP schools achieved a mean gain in performance that was significantly greater than their peers in the comparison schools.

In summary, the results of these longitudinal analyses show that HP students in grade 3 made significant improvements in both reading and mathematics from Year 2 to Year 3 of the Initiative, as did grade 5 students in math only. Moreover, in Year spring 2004, students in the HP schools outperformed their peers in the comparison schools in reading and math at grade 3 and in math at grade 5. Comparison school students, however, outperformed the HP school students in grade 4 in both subjects. The positive results found in grade 3 may be attributable to the fact that HP students at this grade level have had three full years of class size reduction.

 To what extent do students at the HP schools show greater positive movement in performance levels in reading and math when compared to their peers at the comparison schools?

The figures that follow depict the percent of HP and comparison school students scoring within each achievement level on EOG reading and mathematics tests for three school years: spring 2002 (Year 1), spring 2003 (Year 2), and spring 2004 (Year 3).

Figure 5.3.1 – EOG Reading – Grades 3-5 Combined
Percent of Students Scoring at Each Performance Level, Over Years

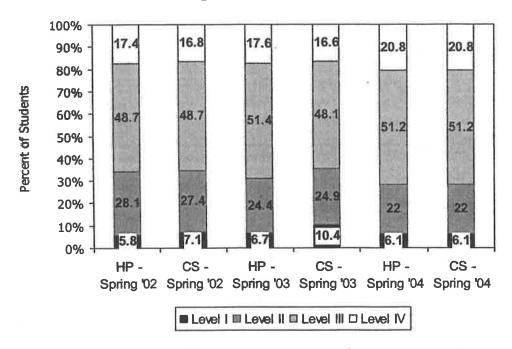
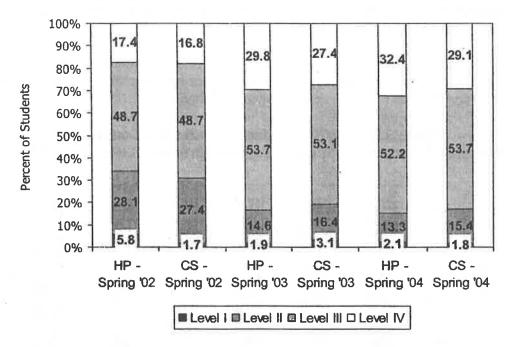


Figure 5.3.2 – EOG Mathematics – Grades 3-5 Combined Percent of Students Scoring at Each Performance Level, Over Years



The data in Figures 5.3.1 and 5.3.2 show that:

- o In Year 2 (spring 2003) the reading performance for students attending HP schools was approximately four percentage points greater than the performance at the comparison schools; 69.0% of HP students and 64.7% of comparison school students scored at or above Level III.
- From Year 2 to (spring 2003) to Year 3 (spring 2004), the percent of HP and comparison school students scoring at or above Level III in reading increased by precisely three percentage points for both groups. For example, 69.0% of HP students scored in Levels III and IV in spring 2003 compared to 72.0% in spring 2004. Similarly, 64.7% of comparison school students scored at Level III or higher in spring 2003 compared to 67.7% in spring 2004.
- In mathematics, in Year 2 (spring 2003) the mathematics performance for students attending HP schools was again slightly higher than the performance at the comparison schools; 83.5% of HP students and 80.5% of comparison school students scored at or above Level III.
- o From Year 2 (spring 2003) to Year 3 (spring 2004), at both groups of schools, there was a modest increase in the number and percent of students scoring at or above Level III in mathematics (1.1 percentage points for HP schools and 2.3 percentage points for the comparison schools).

In order to further determine progress in reading and mathematics for the students in the HP schools, performance level movement analyses were conducted using matched pretest (spring 2003) and posttest (spring 2004) EOG Reading and Math test data for both groups of students. These data are presented in Tables 5.3.7 and 5.3.8.

Table 5.3.7
Spring 2003—Spring 2004 Longitudinal EOG Reading Analysis
Performance Level Change, By School Status

		Matchad		Percent of Students						
Grade	School	Matched N	-3	-2	-1	No Change	+1	+2	+3	
3	HP	1,573	0%	0%	9%	47%	36%	7%	0%	
	CS	487	0%	1%	13%	51%	30%	5%	0%	
4	HP	1,262	0%	1%	20%	61%	17%	1%	0%	
	CS	509	0%	2%	16%	61%	20%	1%	0%	
5	HP	1,199	0%	0%	11%	61%	25%	3%	0%	
	CS	295	0%	0%	9%	63%	23%	4%	0%	
All	HP	4,011	0%	0%	13%	56%	27%	4%	0%	
Grades	CS	1,291	0%	1%	13%	58%	24%	3%	0%	

Table 5.3.8
Spring 2003—Spring 2004 Longitudinal EOG Math Analysis
Performance Level Change, By School Status

		Matched	Percent of Students						
Grade	School	N	-3	-2	-1	No Change	+1	+2	+3
3	HP	1,582	0%	0%	13%	63%	22%	1%	0%
	CS	488	0%	0%	16%	64%	19%	0%	0%
4	HP	1,247	0%	0%	6%	61%	32%	1%	0%
	CS	512	0%	0%	6%	56%	37%	1%	0%
5	HP	1,206	0%	0%	11%	70%	18%	0%	0%
	CS	295	0%	1%	16%	66%	16%	1%	0%
All	HP	4,035	0%	0%	11%	65%	24%	1%	0%
Grades	CS	1,295	0%	0%	12%	61%	25%	1%	0%

The performance level movement analyses for the EOG Math test (Table 5.3.8) show that, across grades, the majority of students (65% of HP and 61% of comparison) remained in the same performance level from pretest to posttest. When looking at the individual grades, it can be seen that the results are somewhat mixed. For example, in grade 3, a greater proportion of HP students moved up at least one performance level as compared to the comparison school students (23% vs. 19%, respectively). The opposite was true for grades 4 and 5, where the proportion of students moving up at least one performance level was greater for comparison than for HP students.

In summary, the analyses presented above show that in both reading and math, the HP students in grade 3 showed greater positive movement in performance levels in spring 2004, than did their peers at the comparison schools. In the remaining grades (4 and 5), there were similar performance level changes for both groups in reading; and the comparison students showed greater positive movement in math, than did the HP students..

• Taking into account relevant factors identified in the first annual evaluation, what effect (if any) is the implementation of the HP components having on individual student performance in reading and math over time? Is the HP Initiative more or less effective with different groups of students or in different types of schools?

Multiple regression analysis was used to address the evaluation questions about the different HP components and other factors or combination of factors (such as federal expenditures, intensity of HP implementation, retention of teaching assistant positions, etc.) that may be associated with achievement in the HP schools for particular groups of students (limited English proficient, students with special needs, different racial/ethnic backgrounds, etc.).

Multiple regression is a useful tool when there is an interest in accounting for the variation in an outcome (i.e., dependent variable) based on combinations of different factors and conditions (i.e., independent variables). Multiple regression analysis can establish that a set of independent variables explains a proportion of the variation in a dependent variable at a significant level (significance test of R²) and can establish the relative predictive importance of the individual independent variables (comparing beta weights).

With students' reading Z-scores on the spring 2004 EOG serving as the dependent variable, the different factors of the HP schools (independent variables) that were included in this regression analysis are as follows:

- Reading Pretest Scores (2001, 2002, and/or 2003 mean Z-scores on the EOG, where applicable)
- Student Demographics:
 - Racial/Ethnic Background (defined as 1=Black, 2=Hispanic, and 3=Other [White, Asian, and American Indian])
 - Gender (defined as 1=Male and 2=Female)
 - LEP Status (defined as 1=LEP and 2=Non-LEP)
 - Low-Income (defined as 1=Eligible and 0=Not Eligible for free or reduced lunch)
 - Title I Eligibility (defined as 1=Eligible and 0=Not Eligible)
 - Special Education Status (defined as 1=Special Education and 0=General Education)
 - Gifted (defined as 1=Gifted and 0=Not Gifted)
- Finance-Related Variables:
 - Average Per Pupil Costs, 2002-2003 (defined as the sum of all 2003 expenditures [state, local, and federal] divided by 2003 average daily membership [ADM])
 - 2003 State Program Report Codes (PRC), including 001 classroom teachers, 027 teacher assistants, 028 staff development, 061 instructional/classroom supplies, and 093 HP schools
 - 2003 Total Federal Expenditures
- Teaching Assistant Status, 2003-2004 (defined as 1=retained none of the TA positions; 2=retained some of the TA positions; and 3=retained all of the positions)

- o Presence of State Technical Assistance Teams, 2002-2004 (defined as 0=no years of assistance; 1=1 year of assistance; 2=2 years of assistance; and 3=3 years of assistance)
- Presence of Instructional Support Position (ISP), 2002-2004 (defined as 0=no added instructional support position; 0.25=added instructional support position was not directly related to improving parent involvement; 0.75=added instructional support position was another staff position with direct parental involvement responsibilities; and 1=added instructional support position was a parent coordinator)
- Successful Implementation of Reduced Class Size (RCS), 2002-2004 (defined as no=0 and yes=1)
- Teacher Contract Extension (TCE) Professional Development Implementation, 2002-2004 (defined as no=0 and yes=1)
- Extended School Year (ESY) Implementation, 2002-2004 (defined as no=0, 0.25=after school program model, 0.50=five extra days implemented during teacher workdays, holidays, Saturdays or other school breaks, and 1=five consecutive days held at the beginning or end of the school year)

Initial stepwise multiple regression analyses were run for grades 3 through 5. In the table below, we summarize the resulting amount of variation that is explained by the independent variables (i.e., the R-squared value) and we present the set of variables that appear to contribute significantly and substantially to that variation. The table also includes the resulting regression equation that may be used to predict reading scores. (Complete output from this analysis is included in the Appendix to this report.)

Table 5.3.9 — Results of Stepwise Multiple Regression Analysis
Spring 2004 EOG Reading and Math, by Grade Level

Grade Level	Independent Variables	Multiple R Squared	Regression Equation
Reading			
Grade 3	 Reading Z-score 03 Special education status, 03-04 Presence of ISP, 02-04 		Reading '04 Z-score (predicted) = .540 reading
	 Implementation of RCS, 02-04 State funds, instructional/classroom supplies, FY 03 Gender, 03-04 	.5279	03 Z-score + .532 spec ed status + .634 ISP857 RCS010 state funds (instructiona supplies) + .306 AIG status + .259 ELL status + .077 gender — constant
Grade 4	 Reading Z-score 03 State funds, HP schools, FY 03 AIG Status, 03-04 Presence of ISP, 02-04 Implementation of ESY, 02-04 Special education status, 	.5851	Reading '04 Z-score (predicted) = .688 reading '3 Z-score002 state funds (HP) + .351 AIG status + .399 ISP 02-04 +.199 ESY + .233 spec ed status - constant
Grade 5	03-04 Reading Z-score 03 AIG status, 03-04		
	 State funds, staff development, FY 03 Special education status, 03-04 	.6235	Reading '04 Z-score (predicted) = .696 reading '03 Z-score + .471 AIG status + .004 state funds (HP) + .065 state funds (staff development) + .295 spec ed status + .017
	 State funds, classroom/instructional supplies, FY 03 Presence of ISP, 02-04 		state funds (instructional supplies) + .457 ISP – constant
All Grades	 Reading Z-score 03 Special education status, 03-04 		Deather 1047
	 AIG status, 03-04 State funds, staff development, FY 03 Presence of ISP, 02-04 	.5553	Reading '04 Z-score (predicted) = .621 reading '03 Z-score + .393 special ed status + .424 AIG status009 state funds (staff development) + .467 ISP648 RCS +
	 Implementation of RCS, 02-04 ELL status, 03-04 		.167 ELL status + constant
Math			
Grade 3	 Math Z-score '03 Special education status, 03-04 		Math/04 7-ccore (avadisted) = 647 11 (22
	 AIG status, 03-04 Implementation of ESY, 02-04 Presence of ISP, 02-04 Implementation of RCS, 02-04 	.5812	Math'04 Z-score (predicted) = .647 math '03 Z-score + .518 spec ed status + .615 AIG status + .202 ESY + .480 ISP407 RCS - constant
Grade 4	 Math Z-score '03 AIG status, 03-04 Implementation of RCS, 02-04 	,.6646	Math '04 Z-score (predicted) = .739 math '03 Z-score + .369 AIG status - 2.091 RCS + 1.511 ISP + constant

Grade Level	Independent Variables	Multiple R Squared	Regression Equation
	 Presence of ISP, 02-04 		
Grade 5	 Math Z-score '03 State funds, staff development, FY 03 AIG status, 03-04 Special education status, 03-04 Implementation of ESY, 02-04 Presence of ISP, 02-04 	.6748	Math '04 Z-score (predicted) = .717 math '03 Z-score + .008 state funds (staff development) + .067 AIG status + .141 spec ed status152 ESY174 ISP - constant
All Grades	 Math Z-score '03 AIG status, 03-04 Special education status, 03-0 Implementation of RCS, 02-04 Presence of ISP, 02-04 	.6163	Math '04 Z-score (predicted) = .688 math '03 Z-score + .372 AIG status + .300 spec ed status - 1.020 RCS + .788 ISP + .009 constant

Given the data in Table 5.3.9, it is apparent that the resulting regression equations are somewhat different for different grade levels and subject areas. In summary, these data show that:

- As might be expected, the strongest predictors of achievement (reading or math) are pretest (2003) scores.
- Among the student demographic characteristics included in the model, special
 education status, academic-intellectually gifted (AIG) status, and ELL status were
 most likely to predict higher achievement in reading for all grades combined. Across
 grades, special education status and academic-intellectually gifted status were also
 the demographic characteristics most likely to predict higher achievement in
 mathematics.
- Among the student demographic characteristics included in the model, special education status, academic-intellectually gifted status, and ELL status were most likely to predict higher achievement in reading for all grades combined. Across grades, special education status and academic-intellectually gifted status were also the demographic characteristics most likely to predict higher achievement in mathematics.
- When looking at the programmatic indicators, higher reading and math achievement across all grades was associated with a greater presence of the added instructional support position (ISP), but with less implementation of the reduced class size component.
- In addition, for all grades, state funding for staff development was the only financial-related variable that was associated with higher reading achievement, though this was a negative relationship. None of the financial-related variables included in the model proved to predict math achievement for all of the grades combined.

 How does average class size at the HP schools compare to that of the comparison schools? What changes in class size (if any) have occurred in the comparison schools over time?

In order to determine what differences in class size (if any) exist between the HP schools and the comparison schools, comparative analyses of each group's average class size were conducted by grade level groups (K-3 and 4-5) for each year of the HP Schools Initiative. Independent t-test analyses presented in Table 5.3.10 and 5.3.11 show the total number of schools for which there was average class size data for each school year, the means, the significance level and associated t-value. The table also shows an asterisk (*) if the difference between means resulted in a significant t-value at or below the .05 level of probability.

Table 5.3.10 – Independent T-Test Analysis Average Class Size for Grades K-3. by Year

School Year	Number of Schools	Average Class Size	T-Value	Significance
2000-2001 (Baseline)				
HP Schools	36	19.59		
Comparison Schools	9	20.98	-1.44	0.16
2001-2002 (Year 1)				
HP Schools	36	17.48		
Comparison Schools	9	19.66	-2.58*	0.01
2002-2003 (Year 2)				
HP Schools	36	14.56		
Comparison Schools	9	17.91	-4.29*	0.00
2003-2004 (Year 3)				
HP Schools	36	13.72		
Comparison Schools	9	17.14	-5.66*	0.00

The data in Table 5.3.10 show that:

- The average class size for the HP schools has decreased steadily over time for grades K-3, from 19.59 in 2000-2001 (baseline) to 13.72 in 2003-2004, the most recent year of implementation. This was also true for the comparison schools, where average class size in grades K-3 declined from 20.98 in 2000-2001 to 17.14 in 2003-2004.
- o Interestingly, at baseline (the year prior to the start the HP Initiative), there was no statistical difference in the average class size for grades K-3 for the HP and comparison schools (approximately 20 students). For each subsequent year, however, the HP schools, on average, had fewer students per class than did the comparison schools. For example, in Year 3, the average class size in grades K-3 for the HP schools was 13.72, compared to 17.14 for the comparison schools, a difference that proved to be statistically significant at the .05 level of probability.

As shown below, these same analyses for grades 4 and 5 showed a different pattern. While the HP schools revealed average class sizes in each year that were lower than the comparison schools, none of these differences were found to be statistically significant.

Table 5.3.11 - Independent T-Test Analysis Average Class Size for Grades 4-5, by Year

School Year	Number of Schools	Average Class Size	T-Value	Significance
2000-2001 (Baseline)				
HP Schools	35	18.19		"
Comparison Schools	9	20.50	-1.78	0.08
2001-2002 (Year 1)				
HP Schools	35	17.57		
Comparison Schools	9	20.06	-1.96	0.06
2002-2003 (Year 2)				
HP Schools	35	17.21		
Comparison Schools	9	19.78	-1.82	0.08
2003-2004 (Year 3)				
HP Schools	35	17.59		
Comparison Schools	9	19.56	-1.43	0.16

What differences exist in achievement outcomes for different clusters of HP schools?

Presented in this section are the results of a series of analysis of variance (ANOVA) analyses of mean EOG Z-scores that were conducted for different groups of schools⁴. These include:

- \circ Group 1 HP schools that retained teaching assistant (TA) positions in 2003-2004 vs. those that could/did not
- o Group 2 HP waiver schools vs. non-waiver HP schools vs. comparison schools
- Group 3 HP and comparison schools that implemented an extended school year (ESY) component in 2003-2004 vs. those that did not

When examining the results of the EOG ANOVA analyses, only differences in mean Z-scores that prove to be statistically significant should be considered as gains or declines. Smaller and/or non-significant differences between the groups' scores are considered to reflect no change. The following tables show for grade 3 the number of schools included in the analysis, group means (in Z-scores), mean differences, and the significance level and associated F-value. The tables also show an asterisk (*) if the difference between the groups' means resulted in a significant F-value at or below the .05 level of probability.

Table 5.3.12

Group 1 (Teaching Assistant Status) – Cross Sectional ANOVA Analysis

Spring 2004 EOG Reading and Math, Grade 3

Group (I)	Group Mean Z- Score	Omnibus F- Value	Group (J)	Mean Difference (I-J)	Post Hoc Significance
Reading				militario (2 3)	Significance
Retained All (N=634)	-0.525	0.072	Retained Some Retained None	0.008	1.000
Retained Some (N=728)	-0.533		Retained None	0.032	1.000
Retained None (N=132)	-0.558				
Math					
Retained All (N=639)	-0.485	0.917	Retained Some Retained None	0.064 0.071	.0.599 1.000
Retained Some (N=733)	-0.548		Retained None	0.007	1.000
Retained None (N=133)	-0.555			——————————————————————————————————————	

The data in Table 5.3.12 show that, for grade 3, the small mean differences in reading in spring 2004 that exist among the HP schools that retained all, some, or none of their teaching assistant positions were not statistically significant. The same was true for mathematics. Therefore, these data suggest that the presence of the teaching assistants in the K-3 classrooms does not appear to have a significant effect on student achievement in reading or mathematics.

⁴ Note that these same analyses were also conducted controlling for students' prior achievement. Since the results were very similar, the more parsimonious set of analyses are presented in this section.

Table 5.3.13

Group 2 (Waiver Status) – Cross Sectional ANOVA Analysis
Spring 2004 EOG Reading, Grade 3

Group (I)	Group Mean Z- Score	Omnibus F- Value	Comparison Group (J)	Mean Difference (I-J)	Post Hoc Significance
Reading					
HP Waiver	-0.497	1.823	HP Non-Waiver	0.050	.714
(N=763)			Comparison	0.097	.177
HP Non-Waiver	-0.547		Comparison	0.046	.987
(N=1,144)					
Comparison	-0.593				
(N=545)					
Math					
HP Waiver	-0.464	5.625*	HP Non-Waiver	0.115*	.023
(N=763)			Comparison	0.161*	.006
HP Non-Waiver	-0.579		Comparison	0.045	1.00
(N=1,151)				<u>N</u>	
Comparison	-0.625		5.		
(N=546)					

According to the data in Table 5.3.13, in spring 2004 no significant differences were found in reading performance among grade 3 students at the three groups of schools: HP waiver, HP non-waiver, and comparison. However, grade 3 students at HP waiver schools significantly outperformed their peers at the comparison schools in math in spring 2004. While counterintuitive, this was also true for HP non-waiver schools. Average math performance for third graders at the HP waiver schools was significantly greater than it was for students at the HP non-waiver schools. The small mean difference between HP non-waiver and the comparison schools in math in spring 2004 was not statistically significant. It should be noted, however, that because waivers have not been granted to the HP schools for the past two school years, we suspect that the fact that the waiver schools outperformed the non-waiver schools is due to an anomaly in the data rather than to programmatic impact.

Table 5,3.14

Group 3 (Extended School Year Status) — Cross Sectional ANOVA Analysis

Spring 2004 EOG Reading, Grade 3

Group	Group Mean Z-Score	Effects	Significance	F-Value
HP Schools (N=1,921) Comparison (N=513)	-0.530 -0.544	HP Status	.803	0.062
No ESY in 03-04 (N=609) ESY in 03-04 (N=1,825)	-0.611 -0.463	ESY Status in 03- 04	.010	6.685*
HP Schools No ESY in 03-04 (N=227) ESY in 03-04 (N=1,694)	-0.525 -0.534	HP Status, by ESY	.006	7.503*
Comparison No ESY in 03-04 (N=382) ESY in 03-04 (N=131)	-0.697 -0.391	Status in 03-04	.000	7.303

The data in Table 5.3.14 suggest that the implementation of an extended school year component in 2003-2004 had a significant effect on grade 3 student achievement in reading in spring 2004, despite whether the students were in HP or comparison schools. For example, the mean Z-score in reading in spring 2004 for grade 3 students in schools where an extended school year was implemented was -.463, compared to -.611 for students in schools that did not

offer an extended school year program, a difference that proved to be statistically significant at the .05 level of probability. Moreover, these data also show that there is a significant interaction between HP status and the presence of an extended school year program. Given the negligible difference in scores among the HP schools that did and did not implement the ESY component, this interaction appears to be attributable to the schools within the comparison group that are implementing an ESY program.

What differences exist in the number and percent of children retained in grade at the HP schools vs. the set of nine comparison schools?

The following table shows the number and percent of students who were retained in grade at both the HP and comparison schools for two school years, 2002-2003 (Year 2) and 2003-2004 (Year 3).

Table 5.3.15 – Number and Percent of Students Retained in Grade,
By Grade Level and School Year

	Total N	HP Schools	Total N	Comparison Schools	Percentage- Point Difference
2002-2003 (Year 2)		i			
Grade 3	2,321	7.0%	681	5.4%	+1.6
Grade 4	1,380	3.3%	526	1.3%	+2.0
Grade 5	1,506	3.5%	306	2.3%	+1.2
Grades 3-5 Combined	5,207	5.0%	1,513	3.4%	+1.6*
2003-2004 (Year 3)	.,				
Grade 3	2,008	3.9%	562	3.7%	+0.2
Grade 4	1,341	1.2%	522	0.2%	+1.0*
Grade 5	1,277	0.8%	305	0.0%	+0.8
Grades 3-5 Combined	4,626	2.2%	1,389	1.6%	+0.6

The data in Table 5.3.15 show that the HP schools retained proportionally more students in Year 2 in each grade level than did the comparison schools (ranging from a 1.2 percentage point difference for grade 5 to a 2.0 percentage point difference in grade 4), though these differences were not significant. Taken together, the proportion of HP students who were retained in grades 3 through 5 combined was 5% in 2002-2003, whereas the proportion from the comparison schools was 3.5%. This difference was found to be statistically significant (p<.007).

However, with the exception of grade 4, these differences were diminished in Year 3. Although the proportion of HP school students who were retained in grades 3 through 5 combined remained slightly higher than the comparison school students, the difference was not statistically significant (p < .129).

Question 4 — What impact did each HP component have on promoting student achievement and other outcomes according to stakeholder perceptions?

In this section, we present information collected from key stakeholders at both the school and district levels about their views concerning the HP components. Data are presented for each stakeholder group, summarizing respondents' opinions regarding student academic achievement. In addition, other outcomes of the components, such as changes in teacher practices, classroom organization and management, and school climate are discussed.

Changes in Teaching and Learning Practices/Student Achievement

Both administrators and teachers at the HP schools were asked what changes they have observed with respect to teaching and learning because of the reduced class size component. As shown in the following table, the changes cited most often in both groups were:

- Increased use of small group instruction (68.2%-teachers; 84.6%-principals);
- Increased time spent on instruction (64.5%-teachers; 65.4%-principals);
- Greater incidence of individualized student instruction (56.9%-teachers; 65.4%-principals);
- Improved standardized test scores (55.4%-teachers; 53.8%-principals); and
- Increased use of data to inform instruction (59.5%-teachers; 57.7% principals).

Table 5.4.1 – Teacher and Administrator Surveys
Changes Attributed to the HP Initiative

	Practice	Tea	chers	Pri	ncipals
	Practice	N	Percent	N	Percent
0	Improved standardized test scores	554	91.5%	26	53.8%
0	Positive changes in level of student effort and initiative	626	86.4%	26	53.8%
0	Increased use of test results to inform instruction	587	90.6%	26	57.7%
0	Increased use of small group instruction	670	93.3%	26	84.6%
0	Increased use of project-based instruction	469	84.4%	26	15.4%
0	Increased time spent on instruction	650	90.9%	26	65.4%
0	Reduced time spent on classroom management	647	79.8%	26	42.3%
0	Fewer discipline-related problems	673	75.9%	26	53.8%
0	Greater incidence of individualized student instruction	629	95.4%	26	65.4%
0	Increased use of alternative assessment methods	582	82.3%	26	26.9%

Moreover, the great majority of the responding teachers provided examples of positive changes that have occurred at their school because of the implementation of the HP Schools Initiative. Their comments most frequently centered on positive effects of the reduced class size initiative, coupled with the increased numbers of classroom teachers (38.7%), followed by higher achievement or improved outcomes on statewide testing (22.0%) and greater incidence of individual and/or small group instructional practices (13.2%). Some examples of their comments are as follows:

"Small class size in an inner-city school like ours has made all the difference. Teachers have time to work with each child every day. These children are needy and need additional time each day with their teacher."

- "Smaller class size has allowed for smaller groups, less discipline problems, and more individualized attention,"
- "Student scores have increased and teachers are more focused and more knowledgeable about best practices and effective strategies."
- "Smaller class size has definitely improved the quality of instruction for our students. It
 has made it much easier for teachers to give students more individual attention and
 helps us get to know them better."
- "The students appear to be more organized and aware of routines/schedules and expectations. More individualized instruction is occurring and student performance has improved."
- "At our school the students attend regularly and they are more excited about school.
 There has been an increase of students bringing in homework and our test scores have
 improved greatly. We have also obtained more quality teachers."

Nature/Quality of the Contract Extension Professional Development

Several survey items asked about staffs' opinions of the five-day contract extension professional development. Specifically, teachers of grades K-3 and the principals were asked how well the training had prepared teachers to work more effectively as they implemented the reduced class size component. Interestingly, a much greater proportion of HP school principals than teachers believed that the professional development either "adequately or fully" prepared teachers to work more effectively with smaller classes (71.4% vs. 49.1%, respectively).

Another question asked both principals and teachers to rate how well the contract extension professional development addressed topic areas or skills specific to working with fewer students. Data from these items are presented below.

Table 5.4.2 – HP Teacher and Administrator Surveys Professional Development Topic/Content Areas Covered

			Teachers			Principals	s
Topic/Content Area		N	Not at All/ Partially	Adequately/ Fully	N	Not at All/ Partially	Adequately/ Fully
0	North Carolina's Standard Course of Study, including strategies for classroom practice	659	32.7%	67.3%	24	8.3%	91.7%
0	Strategies for working with diverse student populations (e.g., students with disabilities, English language learners)	649	47.0%	53.0%	24	66.7%	33.3%
0	Strategies for promoting active learning	656	31.0%	68.3%	26	26.9%	73.1%
0	Strategies for implementing small group instruction	644	33.4%	66.6%	NΑ	NA	NA
0	Specific needs of participating teachers	644	47.4%	52.6%	26	11.5%	88.5%
0	Specific needs of students in your school	647	38.5%	61.5%	26	19.2%	80.8%

			Teachers	3		Principals	5
Topic/Content Area		N	Not at All/ Partially	Adequately/ Fully	N	Not at All/ Partially	Adequately/ Fully
0	Strategies for implementing research-based or "best practice" instructional methods	653	36.6%	63.4%	28	14.3%	85.7%
0	The school's overall plan for improved student achievement	655	32.1%	67.9%	27	7.4%	92.6%

The data in Table 5.4.2 show that there is some disparity in opinions between the principals and the teachers as to how well the professional development covered the different content or topic areas. In almost every content area, greater percentages of principals believed the scope was at least adequately covered than did the teachers. For example, while more than two thirds of the teachers reported that the professional development adequately or fully addressed North Carolina's Standard Course of Study, almost 92% of the principals indicated the same. The opposite was true for strategies for working with diverse student populations. For this content area, almost 53% of the teachers believed it was adequately or fully covered, compared to just 33.3% of the principals.

In addition, the DOIs were asked their opinions of whether the HP Initiative has helped to improve the skills of classroom teachers. Generally, respondents indicated that the Initiative did have a positive impact on teacher skills and attributed this impact to the fact that teachers were exposed to more professional development opportunities, that the opportunities tended to be of higher quality and targeted at areas of identified need, and that teachers were offered more individualized, hands-on coaching. For example, several of the DOI respondents commented:

- o "I think the lower class size has helped them become more involved with individualized assessment, and really looking at individual needs, strengths, and weaknesses, and be able to organize and plan instruction based on those results."
- o "The small class size has helped a lot.... There is greater classroom learning because teachers are able to work closely with the students."
- o "In both of these schools, test scores have increased as a result of a higher focus on PD that the leaders at the schools have received and turn-keyed to the staff. Also, they are holding teachers and students more accountable."

Effectiveness of the Extended School Year Component

Principals and teachers at HP schools, however, appear to have mixed feelings about the extent to which the extended school year component has contributed to growth in student achievement at their school. Both groups were given a scale of 1 to 5, with 1 representing "not at all," 3 representing "somewhat," and 5 representing "to a great extent." Among the principals and teachers, approximately 40% provided a rating of 1 or 2, approximately one third indicated a rating of 3 or "somewhat," and about one quarter indicated a rating of 4 or 5.

In addition, when asked about constraints, challenges, or obstacles that were encountered when trying to implement any of the four components of the Initiative, teachers most often mentioned problems associated with the extended school year component (25.3%). Specifically, the issues cited by the teachers included general discontent among parents and students with the five extra days; low teacher morale/job satisfaction associated with working

the extra instructional days (e.g., losing teacher workdays, planning time, and summer vacation time); scheduling difficulties that were exacerbated in some cases by make-up days because of inclement weather; and poor student attendance during the additional five days.

Overall Effectiveness of the HP Schools Initiative

Finally, the last section of both the Teacher and Administrator Surveys asked respondents their opinions of the overall effectiveness of the HP Schools Initiative. Among the four components, a much greater number of principals and teachers attributed reduced class size to improved student achievement (90.9%-principals; 73.8%-teachers) than any other component of the Initiative. This was followed by the added instructional support position (51.5%-principals; 47%-teachers); extended teacher contracts for professional development (39.4%-principals; 23.3%-teachers); and extended school year for students (24.2%-principals; 22.3%-teachers).

From a district level perspective, when the DOIs were asked to reflect on the extent to which the HP Initiative had led to improved academic achievement or greater classroom learning at the HP Schools, all 13 who were interviewed commented on these issues, reporting that test scores and classroom learning had increased at the HP schools. Respondents believed that each of the Initiative's components – the extended school year, reduced class size, additional professional development, and additional instructional staff position – contributed to these improved outcomes. Other positive changes associated with the HP Initiative as reported by DOIs included:

- Other schools in the district following the lead of the HP schools (e.g., increasing professional development opportunities, attending more closely to student achievement data) (n=2);
- Increased teacher morale (n=2);
- o Increased awareness of schools' needs (n=1); and
- Improved use of existing resources (n=1).

Effects of the HP Initiative on District/School Level Policy

Of the 16 DOIs who were interviewed, seven reported that there were some notable effects that the implementation of the HP Initiative has had on policy, either at the district or school level. Specifically, they reported the following: changes in school calendars for the extra professional development days and student instruction (n=4); the provision of additional staff in HP schools (n=2); changes in testing schedules for the HP schools (n=1); larger class sizes in grades 4 and 5 (n=1); the distribution of resources equally among HP schools and Equity Plus schools (n=1); and the restructuring of professional development training to teachers in HP schools (n=1).

V. CONCLUDING REMARKS

As a consequence of the state of North Carolina's HP Schools Initiative, the average class size in grades K-3 has decreased dramatically across the 36 HP schools over the past three years. Moreover, because of the Initiative's contract extension professional development and the curriculum/training support provided by the added instructional support staff person, teachers at the HP schools are becoming increasingly knowledgeable about how to work more effectively with smaller classes and more steeped in effective practices in literacy and teaching reading. As discussed below, when we looked at teaching and learning practices within the target classrooms, marked changes were evident in classroom practices and the teacher skills and abilities and student outcomes that improved.

Classroom Changes

The research is clear that reducing the number of students in a class does not by design produce improved learning. Rather, to get the most out of a smaller class size setting, teachers may need to alter their teaching practices, moving from predominantly lecture-style approaches to providing more frequent feedback and interaction. Within the Initiative's target grade levels (K-3), the HP schools, on average, had significantly fewer students per class than did the comparison schools for all three years of implementation. Encouragingly, the evaluation revealed that K-3 teachers at the HP schools are taking advantage of smaller classes to tailor instruction and give students more individualized time and attention in their classes. For example, greater numbers of HP teachers reported that they have more time to provide individualized attention to their students as well as to plan instructional activities where students are working in small groups than did teachers in the comparison schools.

Improvements in Test Scores

While we believe that there is a need for continued longitudinal evaluation before definitive conclusions may be drawn, the quantitative analyses presented in this report provide some evidence that lower class size in particular may be having a positive influence on student achievement in grade 3. Some examples of such findings reported earlier include:

- o Longitudinal analyses showed that HP students in grade 3 made significant improvements in both reading and mathematics from Year 2 to Year 3 of the Initiative.
- o HP students in grade 3 showed greater positive movement in performance levels on the EOG reading from Year 2 to Year 3 than did grade 3 students at the comparison schools.
- o For grade 3, membership in the HP schools proved to have an effect on gains in both reading and math. In both subject areas, the HP students outperformed their peers in the comparison schools at the close of Year 3.
- o In Year 3, grade 3 students at the HP schools that received waivers during the first year of implementation showed significantly higher achievement in math than did their peers at the comparison schools.

The more positive results found in grade 3 may be attributable to the fact that the HP students at this grade level could have had three full years of class size reduction.

In addition, we compared cohorts (HP schools to comparison schools) to see whether patterns of achievement were related to patterns of exposure to the four components of the HP Schools Initiative. The most notable association was evident for the implementation of the added instructional support position and achievement effects during this period.

Implementation

The second annual evaluation found that the HP Schools Initiative has been essentially fully implemented in grades K-3 by 2003-2004. A related finding may be the fact that both district and school stakeholders perceived that the schools were more aware of the requirements of the HP Initiative during Year 3, compared to past years of implementation. However, the HP districts and schools continued to report a number of challenges and constraints to implementation.

- Recruiting, hiring, and retaining fully certified and experienced teachers were ongoing problems for many of the HP schools.
- Another ongoing issue reported among the HP districts and schools is related to facilities. Typically, there were not enough additional rooms and insufficient funds to modify existing facilities or purchase portable classrooms.
- Resource limitations also continue to be a concern for the HP districts and schools as they implement the four components of the HP Initiative. In some cases the reduced class size component (and the reallocation of the teaching assistant positions, in particular) has required that districts reallocate funds and space away from a variety of support and educational programs.
- Some confusion still remains among both district level staff and HP principals regarding funding availability to the HP schools.
- O While large numbers of teachers and principals remain dissatisfied with the reallocation of the teaching assistant positions, very few differences were found in the teaching strategies and classroom climate, as reported by teachers in schools where all of the teaching assistant positions were preserved compared to those in schools where only some or no assistants were in grades K-3 classrooms. In addition, no relationship could be inferred between achievement and the retention of the teaching assistant positions.
- Finally, across schools, HP teachers and principals both voiced the continued need for improved parental involvement and support in the education of their students.

VI. RECOMMENDATIONS

Emanating from the evaluation findings, Metis has a number of recommendations that apply collectively to all 36 schools involved in the HP Schools Initiative, rather than to any specific participating school or district. It is hoped that these recommendations will provide DPI with useful information to consider as they move forward with the continuance and improvement of the different components of the HP Schools Initiative.

 Offer guidance on best practices for implementing the four components of the HP Schools Initiative.

While we recognize that the state does not want to impose a rigid model for implementing the HP Initiative, it may be useful for the HP districts and schools to have some guidelines on how best to implement the four components of the Initiative, so that these tools might have the greatest potential for impact on student achievement. For example, the state might want to suggest that the staff development and the extra week of instruction for students occur at the beginning of each school year, so that new teachers could be trained and the instruction would have greater impact on achievement results. Specific topic areas for professional development might be another suggestion that would be beneficial to the Initiative and those responsible for carrying it out. Much of the research on class size reduction programs indicates that professional development that directly helps teachers take advantage of the greater opportunities smaller classes provide for individualization of learning and group activities would be worthwhile.

o Provide the HP districts and schools with more flexibility to design the extended school year component in a way that best meets local needs.

At the same time, we are suggesting that there is a need for DPI to offer the HP schools and districts greater flexibility in how they offer the extended time so that this component is more responsive to the needs of each school. For example, the state may want to consider allowing the five days of instruction to be used during the school year to provide after school programming. The evaluation revealed that, without such flexibility, there was general discontent among parents, students, and teachers, as well as reports of poor student attendance on those days. Each school needs to be permitted to develop an extended school year program and time frame to meet its own needs.

o Consider using a K-2 assessment to help measure the extent to which the reduced class size component is impacting academic growth for students in these grade levels

Currently, the only target grade of the reduced class size component that is being assessed in reading and mathematics achievement is grade 3, where pretest and posttest EOG testing in those subjects is implemented statewide. As such, the quantitative analyses conducted thus far as part of the HP evaluation have focused solely for grades 3, 4, and 5. While research shows that long-term benefits of reduced class size can still be seen after three or four years of smaller classes, we are suggesting that DPI consider possibly using a student achievement assessment in grades K-2 (e.g., ITBS, TPRI, etc.) in order to get a clearer picture of the initial or immediate benefits to students. While this may not be permissible under current state laws which prohibit standardized testing below grade 3 (G.S. 115C-174.11),it is possible that some of the HP districts may already be using a K-2 assessment (such as the formative K-2 assessments developed by NCDPI) that could provide useful evaluation data. We would recommend that DPI research the extent to which any of the HP districts and schools are currently using such an

assessment, including the viability of obtaining and using that data as part of the state evaluation. Another option would be to pilot the use of a K-2 assessment tool with a sample of HP and comparison schools during the next year of implementation.

Finally, we are suggesting a number of additional evaluation questions based on findings that have emerged over the past three years of implementation that DPI may want to consider for future evaluation efforts. We believe that there may be other extant data available that in combination with the rich longitudinal database that has already been created and new qualitative data collections (surveys of HP teachers, interviews with HP principals) could provide additional useful information regarding the overall effectiveness of the HP Initiative.

- How can the teaching assistants (in HP schools where these positions have been preserved) most effectively support teaching and learning in an environment of smaller classes?
- To what extent are the 10 extra days required of the HP teachers is negatively impacting school climate and teacher morale/job satisfaction, teacher absenteeism rates, teacher retention rates, and student discipline? This is being suggested because the qualitative evaluation findings from this evaluation are not consistent with the literature on reduced class size initiatives, which predicts that teachers are generally more satisfied because of reduced workload per class.
- To what extent has the general discontent among students and parents with the added instructional days and the negative stigma associated with HP status impacted student absenteeism, particularly on the extended school year days, and overall student mobility?
- What changes have occurred in teaching practices among HP teachers in grades K-3, and to what extent are teachers spending more time covering curriculum as a result of smaller class size?
- o What relationship exists between the content of the contract extension professional development in combination with other staff development resources at the HP schools and improved student achievement?
- What else can be learned from the multi-year evaluation database regarding the relationship between the reduced class size component and student achievement outcomes at the HP schools?

Appendix 1

.13/3

Second Annual Evaluation of the High-Priority Schools Initiative

School	Administrator Survey
***	Elementary

The Department of Public Instruction (DPI) has asked Metis Associates, an independent research and evaluation firm, to conduct a second annual evaluation of the High-Priority (HP) Schools Initiative in North Carolina. As you know, the State legislature prescribed four initiatives for the HP schools: reduced class size (K-3); extended teacher contracts for professional development, extended school year for students, and an added instructional support position. The purpose of the study is to assess the impact that these legislatively prescribed initiatives are having on student performance and other outcomes. This survey should be filled out by the principal or assistant principal who is most knowledgeable about the HP initiatives.

We appreciate your cooperation, and encourage you to answer the questions honestly and as completely as possible. Since only one Administrator Survey will be completed per school, strict anonymity cannot be guaranteed. However, responses to the items will be reported in the aggregate and never attributed to any one individual. Please return your completed survey to Metis Associates in the attached self-addressed, postage-paid UPS envelope. If you have any questions, please contact Celinda Casanova using Metis' toll-free phone number, 1-877-638-4568.

SECTION I - BACKGROUND 1. Your position: ☐ Principal ☐ Assistant Principal □ Other, specify: 2. Please indicate the number of years you have held the position you indicated in Q1 (include the current year as one year): Years 3. Your highest education achievement: □ Doctoral or advanced degree ☐ Master's degree ☐ Bachelor's (4-year) degree □ Other, specify: 4. For the past three school years, what additional school-wide initiatives have been implemented along with the HP Schools Initiative (e.g., reduced class size in grades K-3) to improve academic achievement at your school? (Check all that apply) □ Specific instructional approaches ☐ Reading First/Reading Excellence Act grant Other teacher development programs ☐ New curricula for particular subject areas Comprehensive school reform initiatives ☐ Specific strategies for increasing parent (e.g., Comer School Development) involvement ☐ 21st Century Community Learning Center grant ☐ School-based health/mental health services □ Scheduling changes □ Nothing except the HP Schools Initiative □ Other, specify: _____

SECTION II - CLASS SIZE REDUCTION

•	nal K-3 classroom teacher positions to reduce class size under se grades for the 2003-2004 school year?
	No ≡ SKIP TO SECTION III
	☐ Don't know/Not sure SKIP TO SECTION III
classroom space? (Check all to We divided classroom space to We divided classroom space to We used portable classrooms We used space not traditional gymnasium, storage areas, how we leased/rented space outsion We moved grade(s) into another Teachers used rolling carts for We used team teaching strates	by using dividers without dividers lly associated with classroom teaching (e.g., music room, allways, large group instruction rooms) ide of the school building her school building r instruction in specialty subjects (e.g., art, music)
	outs) Small group instruction Tutoring or remediation
changes have occurred in the kithat apply) None Increased standardized test solincreased use of project-based increased time spent on instruction increased time spent on classon increased use of small group increased use of small group increased use of small group increased parental involvement increased use of alternative solincreased use of alternative solincreased use of testing well increased use of testing results.	ed instruction uction froom management lems instruction alized student instruction ent in the classroom student assessment methods tudent effort and initiative (e.g., completing assignments, asking with other children)
	What strategies has your scheclassroom space? (Check all to classroom space? (Check all to we divided classroom space) We divided classroom space? We used portable classrooms We used space not traditional gymnasium, storage areas, howe leased/rented space outsing we moved grade(s) into another traditional gymnasium, storage areas, howe leased/rented space outsing we moved grade(s) into another traditional gymnasium, storage areas, howe leased/rented space outsing we moved grade(s) into another traditional grade leased of the parallel or block scheduling or other, specify: What types of scheduling or other implementation of reduced class of the parallel or block scheduling hired additional teachers/tead small group intervention (pulling of the parallel or block scheduling or other, specify: From what you've observed as changes have occurred in the kethat apply) None changes have occurred in the kethat apply) None changes described the spent on class changes have occurred in the kethat apply) Reduced time spent on class changes have of small group changes duse of small group changes duse of small group changes duse of small group changes in level of smore questions, working well

5.	 With the provision of additional teaching positions under the HP Schools Initiative, teach assistant positions were eliminated. Did your school retain its teaching assistant position grades K-3 in any of the following school years? (Check all that apply) 							
	9.00	Too it o in any c		ing solicor ;	 	ok un trat a		Not
			Yes	s, all	Yes,	some	None	applicable
	•	2001-2002:			1	□ Part time	I I	_ 🗆
	•	2002-2003:	☐ Full time	□ Part time	☐ Full time	☐ Part time		
		2003-2004:	☐ Full time	□ Part time	□ Full time	□ Part time		
	a.	were used to	pay for the	teaching as	sistant pos	itions in your	school.	of funding that
		□ Not appl	icable - we	did not retain	teaching as	sistant positio	ns in this scho	ol year.
		• 2002-2003	:					
		□ Not appl	licable – we	did not retain	teaching as	sistant positio	ns in this scho	ol year.
		• 2003-2004	:					
		□ Not appl	licable – we	did not retain	teaching as	sistant positio	ns in this scho	ol year.
6	\ \ \/\be	□ Supplies □ Equipme □ Professi □ Nothing □ Other, s	aff positions sent onal develop these were pecify:	, specify: oment e new funds				
0.		at are the main	responsibi		eaching as	sistants in gr	aues N-3?	
7.		our school lost to uced class size						associated with 3?
		Yes)		n't know		
8.		at do you believuced class size		lue added (i	f any) of the	presence of	the teaching	assistants in a

SECTION III - ADDITIONAL INSTRUCTIONAL SUPPORT POSITION

	M catictica are		التنتما مطامية	£			
						in your school?	
a.	If yes , in you increase pare	r opinioi nt involv	n, what have rement at yo	e been the our school si	most et	fective types o	f strategies used to ools Initiative?
	Yes		No		Don't kr	now	•
Sir scl	nce the HP Sch	ools Init	iative began	in 2000-200)1, has p	arent involveme	ent increased in you
	involvement in	hiring of the school hiring of	the additional ol. f the additiona			person has impro	
	Neutral - The	niring of t	he additional	instructional	support p	erson has not ha	ad any effect on
In ha	your opinion, w d on parental i	/hat effe nvolvem	ct (if any) ha ent in your s	s the hiring of the school?	of the ad	ditional instructi	onal support perso
					□ No		
	Yes, from the Yes, from DPI		nly			from both the Di	strict and DPI
Su	pport person?	(Check	only one re	sistance in sesponse)	selecting	the type of ad	ditional instruction
			4)				
			n n				
W	hat are the mai	n respor	nsibilities of t	he additiona	linstruct	ion support pers	on (checked above)
	Staff Develope Other, specify				Social \	Worker	
	Specialty Tead	cher (Art,	Phys Ed, Mu	e) \Box	-	/ Specialist ce Counselor	
W	hat type of inst K-3 Classroon Curriculum Sp	n Teache	r		Parent	Liaison or Parent	Check only one) Coordinator
	Yes	□ No	≡ SKIP TO S	SECTION IV		Don't know ≡ S	KIP TO SECTION IN

SECTION IV - EXTENSION OF TEACHER CONTRACTS FOR PROFESSIONAL DEVELOPMENT

1.	professional development during the 2003-20	nent th 004 so	e 5-day extension of teacher contracts for chool vear?
	☐ Yes ☐ No = <i>SKIP TO SE</i>		•
	□ Don't know/Not su	re ≡ S	KIP TO SECTION V
2.	Who was (or is) involved in determining the professional development sessions? (Check Staff from the District Target K-3 Classroom Teachers All Classroom Teachers Outside Experts or Consultants School Leadership/Improvement Team	k all th 2 2 2 2	at apply for the 2003-2004 school year) HP School Principal Staff from DPI
3.	Which of the following describe(s) the major contract extension professional development (Check <i>all</i> that apply to the 2003-2004 school	t that h	as been (or will be) offered at your school?
	□ Individualized instruction		Theme-based instruction
	□ Small group instruction		Learning centers
	□ Cooperative learning		Manipulatives
	□ Language learning approaches		Inquiry-based instruction
	□ Project-based instruction		Technology as a learning tool
	□ Literacy instruction		Science instruction
	□ Mathematics instruction		Increasing parental involvement
	 Lessons that incorporate the North Carolina Standard Course of Study 		Specific strategies for teaching students with disabilities
	 Specific strategies for teaching English language learners 		Classroom management strategies (e.g., discipline, diversity)
	 Specific school-reform models (e.g. Comer School Development Program) Other, specify: 		Don't know/Not sure
4.	In your opinion, to what extent has (or will professional development prepared teachers Not at all Partially	to wo	content of the 5-day contract extension rk more effectively with smaller classes? Adequately
5.	Is (or will) the curriculum for the 5-day contra same for all HP schools in the District or does	act ex s (or v	vill) it vary by school?
	The same for all		This is the only HP school in the District
	□ Varies by school□ Varies by other criteria		Don't know/Not sure
6.	What assistance has (or will) the District offer contract extension professional development	er your t sessi	ons? (Check <i>all</i> that apply)
	□ Additional funding		District-level staff developers
	Contracts with outside experts		Assistance with finding outside experts
	□ Physical space		Supplies and materials
	□ No District assistance has been offered		Other, specify:

7. To date, to what extent have the following extension professional development?	topics be	en cove	red during	the 5-day	/ contract
e *	Not at all	Partially Covered	Adequately Covered	Fully Covered	Not applicable
 North Carolina's Standard Course of Study, including strategies for classroom practice 					
 Strategies for working with students with disabilities and limited English proficiency 					
c. Strategies for promoting active learning					
d. Specific needs of the participating teachers					
e. Specific needs of the students in your school					
f. Strategies for implementing research-based or "best practice" instructional methods					
g. The school's school improvement plan					
 8. Were (or are) teachers offered opportunities follow-up to any of the 5-day contract extens No Yes 	s for traini sion profes	ng, activit ssional de	ies, or othe	er experie ?	nces as a
 a. If yes, the opportunities that (or professional development (PD) activities will) occured) 					
 A workshop or teacher seminar that 	at built on w	hat was le	amed in the	PD activity	y.
 Meetings with other teachers to rewhat was learned. 	flect on the	PD exper	ience and ho	ow to imple	ement
 Visits to classrooms of other teach understand how to implement what 					etter
 Coursework at a postsecondary in 	stitution the	at was rela	ted to the ini	tial PD act	civity.
 Someone coming into classrooms learned at the initial PD activity. 	to provide	demonstra	ation lessons	or model	what was
 An experienced teacher working we to assist to implementation of what 					mentor
 Discussions held during regular te level teachers. 	acher mee	tings of the	e entire staff	or certain	grade
 Dissemination of test scores to sh 	ape instruc	tion.			
□ No opportunities for follow-up have□ Other (specify):	•	•			
SECTION V EXTENDED SCHOOL YEAR INITIATIVE	VE FOR ST	UDENTS			
 1. Has (or will) your school implemented the e2003-2004 school year? □ Yes □ No = SKIP TO SECTION VI □ Don't know/Not sure = SKIP TO SECTION 		school ye	ar initiative	for stude	ents in the
 2. How has (or will) the school year been extended Holding school on Saturdays Holding school during teacher workdays Offering a 5-day summer program 	nded by five	e addition	al days? (C	Check <i>all</i> t	hat apply)

	 □ Starting school 5 days earlier □ Extending the school year by 5 extra day □ Holding school for students during school □ Providing an after school program □ Other, specify: 	ol holidays or breaks	×	
3.	What instructional activities have been initiative for students at this school? (Cook An extension of what is being taught dure Enrichment activities that are not part of Remediation Don't know/not sure Other, specify:	Check all that apply) ring the regular school d f the regular school day	lay curriculum	xtended school year
	In the space below, please provide of the extended school year initiative	ve for students.		
4.	Was there (or will there be) specially plowho are (or will be) implementing the end of the large in the larg	extended school year		ffered to the teachers
5.	In your opinion, to what extent is the attributing to growth in student achieve	•	e extended	school year initiative
	1 2 Not at all	3 Somewhat	4	5 To a great extent
_				To a great extent
SE	ECTION VI - EFFECTIVENESS OF IMPLEMEN	NTATION		
1.	Since the HP Schools Initiative began prescribed initiatives, what combination achievement at your school? (Check Reduced class sizes in grades K-3 Extended teacher contracts for profession Extended school year for students Added instructional support position	n of initiatives, if any, d all that apply)	-	•
	□ None of the above			

2.	Ho	w effective is the implementation of the HP Initiative		I Somewhat	in terms Very effective	Not
	a.	Reconfiguring/expanding existing physical space				
	b.	Reducing class size for particular groups of children				
	C.	Obtaining qualified teachers for newly created classes				
	d.	Improving teacher knowledge and skills in teaching methods appropriate for use with lower class size				
	e.	Improving teacher knowledge and skills in using appropriate assessment methods				
	f.	Improving teacher knowledge and skills in using classroom management methods				
	g.	Improving student achievement (grades K-3)				
	h.	Improving student achievement (all grade levels)			□ y.	
	i.	Improving student attendance				
	j.	Increasing parental involvement in the classroom				
J.	ass	appl	es? (Che Not	ck <i>all</i> that a	pply) State	Other local funds
	a.	Reducing class size in grades K-3				
	b.	Extending the school year for students				
	C.	Extending teacher contracts for professional development				
4.	cha	flecting on the past three years of HP implementated allenges, check yes if it continues to be a problem for your school.	ion, for e or your s	chool, or <i>no</i>	if it is no	longer or
					s, a small problem	significant problem
	a.	Inadequate information regarding funding available to H Schools	Р			
	b.	Late notification of HP funding				
	C.	Insufficient HP funding from the State				
	d.	Lack of commitment from District-level administrators				
	e.	Insufficient District funding to supplement State HP mor	nies			
	f.	Lack of available State certified teachers in grades K-3				
	g.	Lack of teacher assistant positions in the K-3 classroom	IS			
	h.	Insufficient space in the school to reduce class sizes				
	i.	Insufficient money to set up additional classrooms (puro portable units, remodel existing space)	hase			
	j.	Retaining experienced teachers because of the 10 addi workdays required at the HP schools	tional			
	k.	Poor working relationship between the school and outsi agency that provided the contract extension PD	de			
	l.	Insufficient instructional materials and resources for tea	chers			
	m.	Lack of technical assistance/support from DPI regarding implementation of the HP Initiatives	9			

Appendix 1

Ta.		No, not a problem	Yes, a small problem	Yes, a significant problem
	 Poor communication between DPI and the schools on the requirements and expectations of the HP Initiatives 			
	o. Not enough support from parents			
	p. Other:	Ц		
5.	What additional types of constraints (if any) has your school en the four HP Initiatives?	countered i	n implemen	ting any of
6.	What is your opinion of the support provided by the district to	your school	ol in implem	enting the
	HP Schools Initiative?			
	□ Poor □ Fair □ Good		Excellent	
7.	What support or technical assistance (if any) was provided by implementation of the HP Schools Initiative?	DPI to your	school to su	upport the
•				
Ö.	What is your opinion of the support provided by DPI to your Schools Initiative?	school in i	implementir	ig the HP
	□ Poor □ Fair □ Good		Excellent	
9.	What changes (positive or negative) have taken place a implementation of the HP Schools Initiative?	it your sch	nool becaus	se of the
10.	Finally, what changes can you suggest to improve the overall the different HP Initiatives?	design or i	mplementat	ion of
				1

Thank you for completing this survey.

Second Annual Evaluation of the High-Priority Schools Initiative

Teacher Survey	
 Elementary	

The Department of Public Instruction (DPI) has asked Metis Associates, an independent research and evaluation firm, to conduct a second annual evaluation of the High-Priority (HP) Schools Initiative in North Carolina. As you know, the State legislature prescribed four initiatives for the HP schools: reduced class size (K-3); extended teacher contracts for professional development, extended school year for students, and an added instructional support position. The purpose of the evaluation study is to assess the impact that these legislatively prescribed initiatives are having on student performance and other outcomes. Teachers at each of the 36 HP schools are being asked to complete this survey.

We appreciate your cooperation, and encourage you to answer the questions honestly and as completely as possible. Please know that the survey is anonymous, and that all of your answers will remain strictly confidential. Responses to the items will be reported in the aggregate and never attributed to any one individual. Please return your completed survey to Metis Associates in the attached envelope, and return the sealed envelope to the specially marked box located in your school's main office. If you have any questions, please contact Celinda Casanova using Metis' toll-free phone number, 1-877-638-4568.

SECTION I - BACKGROUND

1.	What is your position at the school?	
	□ Classroom Teacher - Grades K-3	Si.
	□ Classroom Teacher - Grades 4-6	
	□ Specialty Teacher (Art, Phys Ed, Music)	
	☐ Pre-kindergarten Teacher	
	☐ Resource Teacher (ESL, Special Ed)	
	□ Other, specify:	
4.	Please indicate the number of years of experience you've had teaching (inc year as one year): Years	luding the current
5.	What is your highest education achievement?	
	Doctoral or advanced degree	
	□ Master's degree	
	□ Bachelor's (4-year) degree	
	□ Associate's (2-year) degree	
	□ Other, specify:	
6.	. Are you fully licensed and/or certified for your current position?	
٠.	☐ Yes	
	□ No	

SECTION II - CLASS SIZE REDUCTION

1.	Over the past three school years, your school received HP funding to reduce class size in grades K-3. Has the number of students in <i>your class</i> decreased as a result of this Initiative?									
	• 2001-2002:		lo 🗆	Yes	□ N	ot applicabl	e – I was	not teac	hing in this	school
	2002-2003:		10 D	Yes	□ N	ot applicabl	e – I was	not teac	hing in this :	school
	• 2003-2004:	□ N	10 D	Yes	□ N	ot sure – th	is is my fi	rst year t	eaching in t	his school
2.	Have any chang reduction?			to your	· physi	cal classro	oom spa	ce to a	llow for cl	ass size
	□ No	□ Y	es es			er.				
	□ Positive -	<i>one</i> n The ch The ch	esponse) ange in cla nange in cla	ssroom s	pace his	physical c as not had as facilitat has made i	any effectived	t on inst ve instru	ruction. ction.	truction?
 3. What types of scheduling or other programmatic changes (if any) are being implementation of reduced class sizes? (Check all that apply) Parallel or block scheduling Hired additional teachers/teaching assistants Small group intervention (pull-outs) Grade level planning Used school-wide curriculum plan (e.g., SFA) None Other, specify: 					aching oup inst	ruction	nts			
4.	How often do the	e follo	wing occur	r in your	classro					
						Neve		•	Occasionally	-
	Timely completi		•	_						
	Competition am	-			attentic					
	 Behavioral or di 	scipline	e problems							
	 Students disrup 	ting the	e work of o	ther stude	ents					
	Students being	"off-tas	sk" for more	than 5 n	ninutes					
5.	To what extent a each)	are the	following	stateme	ents tru	e for you?	•	•		for
							•	lot Really	Somewhat	Extent
	 I am aware of 									
	I provide feedb	ack or	n students'	writing as	signme	ents within 1	day.			
	 I have enough 	time to	o provide in	dividualiz	ed atte	ntion to stud	dents.			
	 I am able to plan instructional activities where students are placed in small groups. 						olaced			
	I am able to m		instruction	al needs	of all st	udents.				
	I have enough contact/comm	time to	o initiate the							
	I am able to re			equests/n	uestion	s within 1 d	av.			
	There is sufficient	•	•		•		-	П	П	П

0.00	reading to your students? (Check only one resp	Never	Rareiv	Occasionally	Frequently
	Math:	Never	кагеју	Occasionally	Frequently
13	Using a calculator				
	 Using measuring instruments 			<u>-</u>	
	 Playing with math-related games 				
29	 Using math in the context of other subjects 		П		П
	Doing math worksheets	П		П	П
	Using patterns to discover math relationships	_ []	П	П	
	Practicing computational skills		П	П	
	Working with manipulative aids			n	
	Other (specify):				
	Reading:				
	 Having guided discussions about reading 				
	 Having students read aloud to a partner 				
	Working on phonics				*
	 Writing narratives or descriptive material using invented spelling 				
	 Discussing new or difficult vocabulary 				
	Working in a reading book				
	 Listening to the teacher read stories 				
	Other (specify):				
	During this school year, in what ways have you	contacted	or commi	unicated with	parents?
	(Check only one response for each)				
		Never	Rarely	Occasionally	Frequently
	 Sent home or mailed written letters or notes 				
	Sent home or mailed classroom newsletters				
	Made home visits				
	Made phone calls				
	 Completed weekly behavior reports 				
	Sent e-mail messages				
	Other (specify):				
	Why have you contacted parents thus far this year A child has been attentive and well behaved durin To invite/notify parents about classroom activities A child has been disruptive during class time To ask parents for classroom supplies (donations To invite parents to attend class trips A child has shown improvement in their academic A child has submitted exemplary work A child has difficulty working with students in sma A child has been inattentive and missing class work A child has a serious problem at home that is affer A child in my class has a learning disability Not applicable — I have not contacted parents for Other (specify):	g class time) skills Il groups ork or homeworting their so	/ork assigni choolwork a	ments ind/or social s	kills
9.	How satisfied are you with the level of parent invo	olvement in	•		
	1 2 3		4)

	From what you have observed <u>as a result of the reduced</u> changes have occurred in the K-3 classrooms with respet that apply)	d class size ect to teachi	HP Scho	ols Initiativ aming? (Ch	<u>e,</u> what neck <i>all</i>
		No change	Modest change	Substantial change	Don't know
	 Increased standardized test scores 				
	Increased use of project-based instruction				
	• Increased time spent on instruction				
	• Reduced time spent on classroom management				
	Fewer discipline-related problems				
	 Increased use of small group instruction 				
	Greater incidence of individualized student instruction				
	 Increased parental involvement in the classroom 				
	• Increased use of alternative student assessment methods				
	Positive changes in level of student effort and initiative				
	 Increased use of testing results to inform instruction 	3 🗆			
	• Other:				
	If your school lost teaching assistant positions, in your or reduced class size outweighed the loss of the teaching Yes Don't What do you believe is the value added (if any) of the preduced class size setting?	assistants t know	in grades	s K-3?	
	The HP Schools Initiative calls for schools to extend tead days of professional development. Did (or will) your extension professional development during the 2003-2 Yes No = SKIP TO SECTION IV Do not know of any contract extension professional development.	chers' contra school imp 004 school	acts to pro plement t year?	ovide five ac he 5-day c	contract
2.	Did (or will) you participate in the 5-day contract extenduring the 2003-2004 school year (including the summ ☐ Yes ☐ No≡ SKIP TO SECŢION IV ☐ Do not know of any contract extension professional deversion of the second in th	er months)	?		