

Report to the Joint Legislative Education Oversight Committee

Fourth Annual Evaluation of the High Priority Schools Initiative: 2005-2006

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High Priority Schools Initiative, North Carolina Department of Public Instruction METIS ASSOCIATES' FINAL EVALUATION REPORT

EXECUTIVE SUMMARY

INTRODUCTION

In 2001, the North Carolina General Assembly passed legislation that appropriated supplementary funds for the state's lowest performing elementary schools. Based on criteria that took into account the percent of students who qualified for free or reduced-price lunches and who performed at or above grade level during the 1999-2000 school year, 36 North Carolina elementary schools were identified as high priority (HP) schools.

The legislation specified that HP funds be used to:

- Reduce class size in kindergarten to grade 3 so that there is a 15:1 studentteacher ratio (component 1) by reallocating teaching assistant allotments to additional teacher positions;
- 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).

In 2005-06, Year 5 of the HP Schools Initiative, 24 schools failed to achieve the required high growth for two of the last three years and became ineligible for continued HP funding. Three schools were allowed to opt out of the HP Initiative after demonstrating high growth for three consecutive years. Nine HP schools remained in the Initiative during the 2005-2006 year.

Metis Associates was selected by DPI in 2002 to conduct an evaluation of the impact of the HP components on improving student achievement. This paper summarizes the results of the fourth annual evaluation of the HP Initiative, which aimed to document student achievement outcomes at the remaining nine HP schools.

ADDITIONAL BACKGROUND INFORMATION

At the start of the evaluation, the Metis team worked with Dr. Kenneth Gattis at DPI to establish a set of guiding evaluation questions, which focused on the following major areas: changes in the implementation of the four HP components, changes in average class size, and student achievement outcomes.

During the first year of the evaluation, Metis worked with DPI to select a set of nine similarly situated comparison schools. Beginning in the second year of the evaluation, Metis expanded the initial comparison school design (which was used solely in the quantitative

component of the evaluation) to include all of the school-based qualitative data collection, collecting parallel sets of data from both the HP and comparison schools.

Data to address the evaluation questions were derived from a review and analysis of student databases, interviews with HP school administrators, and interviews of comparison school principals.

SUMMARY OF KEY FINDINGS

Changes in Implementation

Over the years, the HP Schools Initiative has been successful in reducing class size in grades K-3 at the target elementary schools. Average class size remained below the state prescribed policy that called for a ratio of 15 students for each teacher at the HP schools for each year of the Initiative. Moreover, the HP schools established average class sizes in grades K-3 that were significantly lower than those at nine comparison schools at the same grade levels. This was true for each year of HP implementation.

At the same time, teacher assistants appear to be playing a shifting role in K-3 classrooms (as reported by both the HP and comparison schools), assisting in providing individualized instruction, small group instruction, and other one-on-one instructional opportunities to students, as well as supporting easier classroom management.

Consistent with findings from previous evaluations, the HP schools did not generally hire a parent coordinator/liaison but added parental involvement to the responsibilities of the staff person that was hired with the HP allocation for added instructional support.

During 2005-2006, the HP schools consistently implemented the five additional days of teacher professional development. Regarding the content of the extended teacher contract PD, the HP schools focused mainly on reading/literacy instruction, writing instruction, and mathematics content.

As originally intended by the North Carolina legislation, HP schools generally implemented the ESY component by adding five instructional days to the end of the regular school year calendar. However, there is still concern about the overall effectiveness of this component because of the perceived lack of productivity on the extra days, which is mostly due to the ESY being implemented at the end rather than the beginning of the school year.

Student Achievement Outcomes

When implemented fully, HP Initiative may have longer-term effects

While no significant implementation effects were observed in grade 3, students from schools with higher levels of implementation over the course of the five years of the Initiative displayed significantly greater math and reading gains from spring 2005 to spring 2006 than schools with low implementation levels. While at first blush this may appear to suggest that more stringent implementation leads to increased performance, the HP Initiative is not implemented in grades 4 and 5. The differences observed in those grades may therefore

suggest that there are long term effects of the Initiative on students within HP schools. This theory is supported by administrator comments regarding former HP students currently in grades 4 and 5. Importantly, there is a growing body of research that supports the lasting benefits of small class size. For example, a follow-up to the STAR study (a 1980's K-3 small class size initiative in Tennessee) revealed that in fourth grade, students from smaller classes outperformed students from larger classes in all subjects and were better behaved.

• HP Initiative may continue to have particular advantages for Hispanic students

As in the 2004-2005 evaluation, HP Hispanic students outperformed HP African American students and all comparison school NCLB subgroups, including white/other, in math. While the same was not observed for reading, these results may be mediated by the larger percentage of limited English proficient students in the remaining nine HP schools. Once again, this finding mirrors what's been cited in the literature on reduced class size. Recent research has shown that reducing class size in the early grades is an educational reform that has shown to narrow the achievement gap between ethnic and racial groups.

CONCLUSION

Taken together, these findings suggest that there may have been some improvement at the HP schools attributable to appropriate implementation of the four HP components over time. It seems plausible that the components do not immediately affect participants but rather provide the foundation for future performance improvements. Particularly of note are the continued performance improvements seen among HP Hispanic students.

Should DPI decide to continue the HP Initiative or implement other reduced class size initiatives, we suggest that the set of recommendations offered at the conclusion of the 2004-2005 annual report be reviewed and carefully considered.

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

Fourth Annual Evaluation of the High Priority Schools Initiative: 2005-2006

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• Copies of interview protocols (Appendix 1)

High Priority Schools Initiative, North Carolina Department of Public Instruction METIS ASSOCIATES' FINAL EVALUATION REPORT

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

1. Introduction

History of the High Priority (HP) Schools Initiative

Aiming to provide the state's highest priority elementary schools with immediate assistance, the North Carolina General Assembly passed legislation in 2001 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 the North Carolina Department of Public Instruction (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 Years 3 and 4, no waivers were granted, and all 36 schools were to be fully implementing all four of the components that comprise the HP Schools Initiative.

In order to remain eligible for the additional resources provided by the HP funding, schools were required to meet expected growth for each year and 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. High growth denoted a school that achieved at least ten percent above its expected growth goal. Based on these criteria, 24 schools of the 36 schools were no longer eligible in FY 05-06, Year 5 of the HP Project.

In addition to the schools that were no longer eligible in Year 5, three eligible schools took advantage of a special legislative provision that allowed schools to remove themselves from the project if they demonstrated high growth for at least three consecutive years.

A total of nine HP schools, representing 6 districts, remained in the Initiative during the 2005-2006 year: Aulander Elementary (Bertie County), Clara J. Peck Elementary (Guilford), East Elementary (Union), James C. Braswell (Nash-Rocky Mount), O.R. Pope Elementary (Nash-Rocky Mount), Shamrock Gardens (Charlotte-Mecklenburg), Thomasboro Elementary (Charlotte-Mecklenburg County), W. G. Pearson (Durham), and Walter Bickett Elementary (Union).

Evaluation Background

In December 2002, Metis Associates, Inc., an independent research organization, was initially 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 2003 report, called "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 and third years of the evaluation, the 2003-2004 school year (Year 3 of implementation) and the 2004-2005 school year (Year 4 of implementation), respectively, Metis continued to examine issues related to the implementation of the four legislatively prescribed components at the HP schools. These evaluations also aimed to document the impact of the HP components and resource utilization on student achievement and other outcomes.

In November 2006, DPI asked Metis to conduct a fourth annual evaluation of the HP Schools Initiative, which focused mainly on assessing the student achievement outcomes for the nine HP schools that remained in the Initiative during the 2005-2006 school year (Year 5 of implementation).

2. EVALUATION DESIGN

The Metis evaluation team worked collaboratively with Dr. Kenneth Gattis, Senior Research and Evaluation Coordinator, to determine the needs of the evaluation, including the types of quantitative analyses best suited to the data available. Additionally, the Metis team engaged Dr. Gattis in discussions about refining interview protocols.

Comparison Group Design

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 because they were alternative schools. The selected set of comparison of schools and their districts are listed in Table 1.

Table 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 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 six years: 2000-2001 (baseline), 2001-2002 (Year 1), 2002-2003 (Year 2), 2003-2004 (Year 3), 2004-2005 (Year 4), and 2005-2006 (Year 5).

Table 2.1 – Key Characteristics of HP and Comparison Schools (CS), Grades 3-5 Combined Baseline, Year 1, and Year 2 (2000-2001 through 2002-2003)

Demographics	2000-	2000-2001		2001-2002		2002-2003	
Demographics	HP (N=36)	CS (N=9)	HP (N=36)	CS (N=9)	HP (N=36)	CS (N=9)	
Number of Students	6,647	2,012	6,566	1,796	6,193	1,746	
% African-American	83.9	78.6	82.1	80.3	80.9	75.5	
% Hispanic	6.7	4.8	8.8	4.5	10.1	6.5	

Demographics	2000-2001		2001-2002		2002-2003	
Domographics	HP (N=36)	CS (N=9)	HP (N=36)	CS (N=9)	HP (N=36)	CS (N=9)
% White, Asian & American Indian	9.3	16.6	9.1	15.2	9.0	18.0
% Limited English Proficient	3.7	2.4	4.1	2.2	5.1	4.1
% Eligible for Free Lunch	86.2	79.9	87.0	81.1	83.2	73.8
% Special Education	16.1	16.3	15.8	18.4	16.7	17.8

Table 2.2 – Key Characteristics of HP and Comparison Schools (CS), Grades 3-5 Combined Year 3, Year 4, and Year 5 (2003-2004 through 2005-2006)

Demographics	2003-	2004	2004-2005		2005-2006	
Domograpinos	HP (N=36)	CS (N=9)	HP (N=36)	CS (N=9)	HP (N=9)	CS (N=9)
Number of Students	5,855	1,587	5,556	1,475	1,546	1,440
% African-American	76.5	73.9	75.0	72.9	64.7	73.0
% Hispanic	12.8	6.8	14.7	8.1	26.0	9.4
% White, Asian & American Indian	10.7	19.3	10.3	19.1	9.2	17.6
% Limited English Proficient	6.9	4.7	8.8	5.8	14.6	7.0
% Eligible for Free Lunch	82.9	75.5	85.5	71.5	87.5	80.5
% Special Education	16.1	17.8	16.7	18.8	13.1	13.3

The data in Tables 2.1 and 2.2 show that:

- The total enrollment at both the HP and the comparison schools has declined steadily from 2000-2001 to 2004-2005. This downward trend in student enrollment continued for the comparison schools, from a total enrollment of 1475 in 2004-2005 to 1440 in 2005-2006.
- The percentage of African-American students in both sets of schools has also declined each year since 2000-2001. For HP schools, there were 83.9% African-American students in 2000-2001, compared to 64.7% in 2005-2006—a substantial 19.2 percentage point difference. Similarly, for the comparison schools, there were 78.6% African-American students in 2000-2001, which decreased to 73.0% in 2005-2006, representing a 5.6 percentage point decline.
- This shift in student demographics is also evident when looking at the Hispanic population. For example, increasing steadily over time, there were 6.7% Hispanic students in the HP schools in 2000-2001 and almost 15.0% in 2004-2005, a proportion which is more than twice the baseline year. Moreover, in 2005-2006, the percentage of Hispanic students increased to 26.0% among the nine HP schools. A similar trend, though not as dramatic, can also be seen in the comparison schools, where the percent of Hispanic students increased from 4.8% in 2000-2001 to 9.4% in 2005-2006.
- Similarly, the proportion of limited English proficient students at the HP and comparison schools has also increased over time—from 3.7% in 2000-2001 to 14.6% in 2005-2006 for the HP schools (a 10.9 percentage point gain) and from

2.4% in 2000-2001 to 5.8% to 7.0% in 2005-2006 for the comparison schools (a 4.6 percentage point gain).

In summary, with respect to racial/ethnic background and English proficiency, there are marked differences in the student composition of the remaining nine HP schools and the original 36 HP schools. Specifically, the nine 2005-2006 HP schools served a greater proportion of students who were Hispanic and limited English proficient than did the 36 HP schools combined in past years. In general, the comparison schools continue to most closely reflect the HP schools in the proportion of special education students. At baseline and during each subsequent year, the HP schools enrolled a larger percentage of low-income students than did the comparison schools.

Research Questions and Methods

As mentioned earlier, the fourth year of the evaluation began in November 2006 when Metis convened a planning meeting with Dr. Gattis to review the findings of the previous three years in order to identify the set of research questions for the 2005-2006 school year and to decide on the appropriate set of data collection methods given the smaller pool of HP schools and the condensed timeline for data collection.

The final set of evaluation questions that were generated for the fourth annual 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 teacher contract for professional development, extended school year for students, added instructional support position) at the remaining HP schools?

Question 2 – What changes in average class sizes are evident at the HP schools within target grade levels?

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

The evaluation team used the following methods to collect data relevant to the research questions during the fourth annual evaluation study:

Collection and Analysis of Student Data — As in past years, Metis obtained various testing and student information files from DPI. Electronic database files that were constructed during the first three years of the evaluation were updated to contain test results and other student outcome data for all HP schools as well as for the comparison schools for six academic years: 2000-2001 (baseline), 2001-2002 (Year 1), 2002-2003 (Year 2), 2003-2004 (Year 3), 2004-2005 (Year 4), and 2005-2006 (Year 5).

Interviews with HP School Administrators — Metis staff successfully conducted interviews with principals or other school administrators from eight of the nine HP schools, utilizing a structured interview protocol. The interview protocol was designed to obtain detailed information about the implementation of the four HP components, as well as principals'

perceptions of the impacts of the Initiative on students, teachers and the school as a whole. Interviews were approximately 30 minutes in length.

Interviews with Comparison School Principals — 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. Interviews were approximately 20 to 30 minutes in length.

3. FINDINGS

This section presents findings for each of the specified three major evaluation areas. Where noteworthy, differences are drawn between outcomes or findings for the HP and comparison schools.

Question 1 — Changes in Implementation

Presented below is information on the implementation of the four components of the Initiative and how that has evolved across the HP schools for all five years. It is important to remember that while waivers for the reduced class size component were available to schools during Years 1 and 2 of the Initiative, by Year 3 all 36 schools were required to implement all four of the HP components. Also, in Year 5 only nine HP schools remained in the Initiative, with just eight participating in the qualitative data collection of the evaluation.

Reduced Class Size

- In Year 1,¹ 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.
- In Year 3, all 36 HP schools were implementing the reduced class size component in grades K-3.
- During Year 4, 34 of the 36 HP schools reduced class size in grades K-3.
- In Year 5, six of the eight HP schools reported having received additional K-3 teachers under the HP Initiative; the other two schools indicated that their K-3 teacher allotments had not changed.

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.

Administrators at the HP schools were asked if their school was able to retain its teaching assistant positions in grades kindergarten through 3 during the 2005-2006 year, despite the state's re-allocation of those positions to teacher positions to support reduced class size. Generally, schools retained some of their teaching assistants but only for grades K-2. In most cases, these were full time, itinerant positions that were shared among teachers or across grade levels. Across all schools, grade 3 teachers were much less likely to have any support from a teaching assistant.

When administrators were asked how the role of the teaching assistant had changed, if at all, in classrooms where the class size was reduced, they generally described teaching assistants at the HP schools as instructional assistants who work directly with children. "As a result of being a HP school, we've pretty much eliminated clerical duties of teaching assistants." One principal further noted that the teaching assistants attended staff development along with teachers so that they were equipped to implement different instructional approaches in the classroom. Yet another respondent commented that teaching assistants were "trained to work specifically with kids who were struggling."

From the perspective of most of the HP administrators, the added value from having teaching assistants in a reduced class size setting is the provision of additional instructional support (5 schools). Other administrators mentioned that the added value of the assistants was to facilitate greater individual instruction for students, further reduce the student-teacher ratio, and improve test scores.

Extended Teacher Contracts for Professional Development

- In Year 1 (2001-2002), 19 (52.8%) 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.
- By the end of Year 2 (2002-2003), this number increased to 30 (83.3%), with all but six of the 36 HP schools 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.
- In 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 one HP school
 did not implement this component in any of the three years of the Initiative.
- By Year 4, 35 of the 36 HP schools (97.2%) had implemented the extended teacher contracts for professional development. It should be noted, however, that the only school that did not extend teacher contracts for professional development had indeed implemented this component in past years, including Years 1 through 3.
- All eight of the HP schools (100%) implemented the five-day teacher contract extension for professional development during the 2005-2006 year (Year 5).

As shown below, the content areas most often covered during the five-day PD days during Year 5 were writing and reading/literacy instruction, followed by mathematics instruction.

Table 3 – HP School Administrator Interviews
Five-Day Teacher Contract Extension PD, 2005-2006

onter	nt Areas Covered	Frequency
0	Writing	6 schools
0	Reading/literacy (e.g., Reading First professional development activities)	6 schools
0	Mathematics (e.g., Math Trailblazers)	4 schools
0	Project-based instruction	2 schools
0	Discipline strategies for exceptional strategies	1 school
0	Multimedia technology-supported instruction (e.g., Quality Teacher and Learning workshop)	1 school
0	Science (e.g., science-across-the curriculum strategies)	1 school
0	Individualized instruction	1 school
0	Diversity	1 school
0	Differentiated instruction	1 school
0	Multiple intelligences	1 school
0	English as a second language instruction	1 school

Extended School Year (ESY) 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 (ESY) program for students.
- In Year 2, this number increased to 26 of the HP schools (72.2%) having extended the school year. Among the 10 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.
- In 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.
- By Year 4, 34 of the 36 HP schools (94.4%) had implemented the ESY component for students. Note that of the two remaining schools that did not extend the school year for students, one did not implement this component for the first time in the four years of the Initiative. The remaining other school did not implement the ESY component in any of the four years of HP implementation.
- During Year 5, all eight HP schools (100%) implemented the ESY component.

According to data from the administrator interviews, six of the eight HP schools (75.0%) extended the school year by five consecutive extra days in 2005-2006. Other combinations of strategies used by the HP schools to accomplish this requirement in Year 5 included

offering a five day summer program (1 school) and conducting an intersession program as part of the year-round school schedule (1 school).

In addition, in some cases, respondents provided information on the content and nature of activities conducted during the ESY component for students. For example, one school noted that ESY teachers rotated subject area instruction for students across the five days, offering a Reading Day where students worked on reading-based projects, a Math Day where students were engaged in games, as well as a Writing Day. Another school reported that their ESY component provided enrichment instruction that focused on reading, writing, and math, with students grouped and taught according to their rising grade level, and incorporated project- and theme-based instruction (e.g., the Olympics) as well as field trips.

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.
- 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.
- In Year 4, 27 (or 75.0%) of the 36 HP schools reported they had received the added instructional support position. Of the nine schools that did not receive the additional position, four schools reported that they had not received the allotment in Years 1 and 4 and two schools reported that they had not received the added position in Years 1, 3, and 4. Another two schools reported that Year 4 was the only year they had not received the added position, and one HP school reported that they did not receive the allocation in any of the four years of implementation.
- In Year 5, five of the eight HP schools reported having had an instructional support position allocated to their school

While the initial intent of the HP legislation was to focus on increasing parental involvement through the added instructional support position, this aspect of the Initiative continued not to be fully realized at the school level. According to the HP school administrators, the various types of positions that were allotted to the HP schools included a school social worker, curriculum specialist, resource teacher, and literacy specialist or facilitator.

When asked to describe the main responsibilities of these individuals, it was clear that many had direct responsibilities for engaging parents in school activities. The different roles and tasks that were mentioned include:

- Participating/facilitating parent literacy programming and other parent workshops and academies (4 schools)
- Coordinating parent involvement/parent resource centers (3 schools)
- Conducting classroom demonstrations (3 schools)
- Assisting teachers with planning and instruction (3 schools)
- Providing/assisting with small group instruction (2 schools)
- Mentoring new teachers (2 schools)
- Participating in the school's Parent-Teacher Association (1 school)
- Working with struggling students (1 school)

While most schools did not use the added instructional support position allotment to hire a parent involvement coordinator, five of the eight HP school respondents believed that the parent-related responsibilities of the instructional support staff person together with the other components of HP did indeed have a positive impact on the level of parental involvement. For example,

- "I think there's a direct correlation between the work of the school social worker and parent involvement improvement, as well as a direct correlation with parents being more involved in what children are doing in the classrooms."
- "Ten additional instructional days has helped parents realize that extra effort is being made to help their child be better learners."
- "Being a high priority school... we had to do something to really get [parents] involved."
- "Because of the reduced class size... teachers communicated with parents more."
- "Adding that position so that we have one person readily available to our parents has helped a lot.... Because of the reduced class size our teachers can kind of stay more in contact with our parents and vice-versa; they can stay in contact with their children's teachers. And also, with the extended schedule, we have that extra time with the kids and their parents and that builds stability. [The HP Initiative] has done a lot of wonderful things."
- "[Teachers] can provide more parental involvement by calling parents and have the parents come out and schedule conferences when there are such a small number of students in their class."

Overall Implementation

When asked to comment on what changes occurred in the K-3 classrooms over the five years of HP implementation, HP school administrators noted the following:

 Improved test scores/academic performance or school achieved AYP or ABC growth composites (7 respondents)

- Reduced numbers of discipline referrals/improved student behavior and motivation to learn (7 respondents)
- Greater individualized instruction for students (5 respondents)
- Improved teacher knowledge and skill/professional growth (6 respondents)
- Greater use of teaching strategies such as differentiated instruction (3 respondents), cooperative learning/small group instruction (2 respondents), and hands-on instruction (1 respondent)

During the interviews, HP school administrators were asked to think about the performance of former HP students who were now in grades 4 and 5 in comparison to grade 4 and 5 children who were new to the school and had not received HP intervention and what changes they've noticed in HP students over time. Indeed, HP school administrators described a number of differences that they believed were attributable to the HP Initiative. These included improved relationships between HP-served students and teachers, a greater knowledge base in reading among former HP students, and improved student behavior among these students.

Reflecting on the past school year of HP implementation, school administrators mentioned a number of different challenges that remained a problem as they continued to implement reduced class size and the other HP components in their schools. These were:

- Difficulties in implementing the extended school year (ESY) component at the end of the school year – lack of student focus, poor student attendance, teacher frustration, and lack of productivity (3 schools)
- Dissatisfaction with the effectiveness of the ESY component, particularly because it is implemented at the end of the school year after testing has occurred (4 schools)
- Difficulties associated with effectively serving special student populations, including students from very low-income families, transient students, exceptional students, and students with limited English proficiency (4 schools)
- Lack of teaching assistant positions for K-3 classes (2 schools)
- Not enough parental support/involvement (2 schools)
- Poor student behavior (2 schools)

When asked about sustaining any or all of the HP components once state support is no longer available, the HP administrators reported the following:

 Incorporating the content covered during the five-day extension PD into the school's overall plan for staff development (2 schools)

- Securing district commitment and support for maintaining small classes in grades K-3 (3 schools) and to support the extra days for teacher PD (1 school)
- Using Title 1 funds to support the added instructional support position (1 school) and to maintain the ESY component (1 school)
- Securing or using existing grant money (2 schools)

Administrators from both the HP and CS schools offered a number of recommendations for improving the Initiative should it continue. These included:

- Allowing schools greater flexibility with implementation of the components, especially the ESY component (4 HP schools)
- Improving communication between DPI and the HP schools regarding implementation requirements (2 HP schools)
- Ensuring HP schools receive the position allotments from the district finance department (1 HP school)
- Maintaining smaller class sizes along with reinstating the teaching assistant positions (2 HP schools; 1 CS school)
- Increasing funding for HP schools (1 HP school)
- Expanding the Initiative to additional schools (1 CS school)
- Implementing additional efforts to engage and involve parents (1 CS school)
- Assessing teacher needs within the HP schools (1 CS school)

Question 2 - Changes in Average Class Size

The following set of line graphs (Figures 1 through 7) show the average class size of the HP and comparison schools by grade level and how these have changed over time (from baseline to the end of Year 5 of implementation).

These series of figures show a number of interesting findings regarding average class size, including:

• At baseline (2000-2001), the average class size for the HP schools was already somewhat lower than for the comparison schools at each grade level (with differences ranging from .53 for grade K to 2.67 for grade 2). With the implementation of the Initiative, however, the HP schools were able to reduce class size at a greater rate than the comparison schools, so that by the end of Year 4 these differences ranged from 2.58 fewer students in grade K to 3.71 fewer students in grade 3. While downward trends continued for both HP and comparison schools in year 5 (2005-2006) for grades K

through 3, large increases in class size were observed in grade 4 for both HP and comparison schools and in grade 5 for HP schools. As a result of this spike, HP school wide average class sizes for 2005-2006 increased for the first time since the inception of the Initiative.

• In addition, when looking at grades K through 3 at the HP schools, average class size declined steadily each year from baseline to 2003-2004. This trend was stemmed from 2003-2004 to 2004-2005, where there was a small gain in average class size for the first time since the Initiative began in 2001-2002. This increase ranged from .08 in grade K to nearly one student (0.99) in grade 3. By 2005-2006, the previous year's increases were negated by a continued downward trend. Of interest to note is the major difference in slopes from 2001-2002 to 2002-2003 and 2002-2003 to 2005-2006, suggesting that the schools have 'leveled off' once average class size drops below 15 students.

Figure 1: Average Class Size for Baseline and Each Year of HP Implementation All Grades

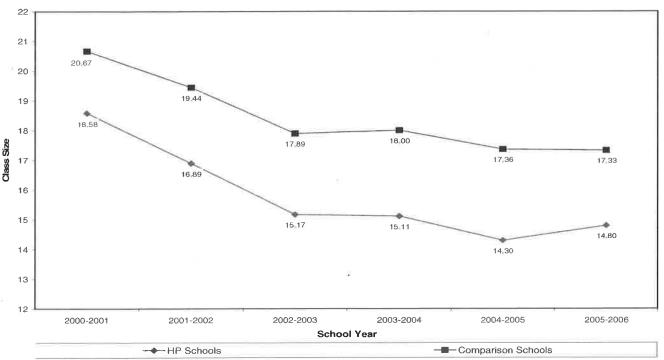


Figure 2: Average Class Size for Baseline and Each Year of HP Implementation Grade K

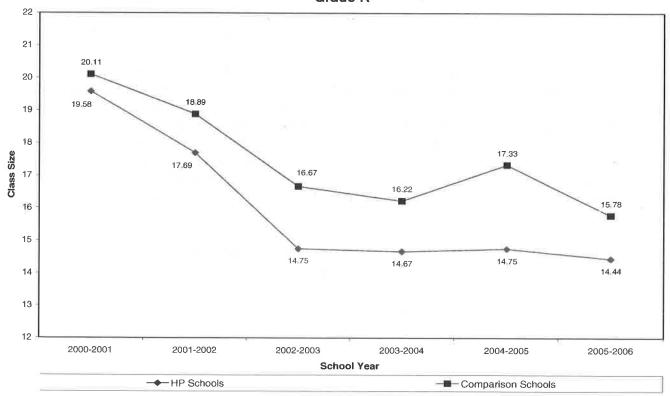


Figure 3: Average Class Size for Baseline and Each Year of HP Implementation Grade 1

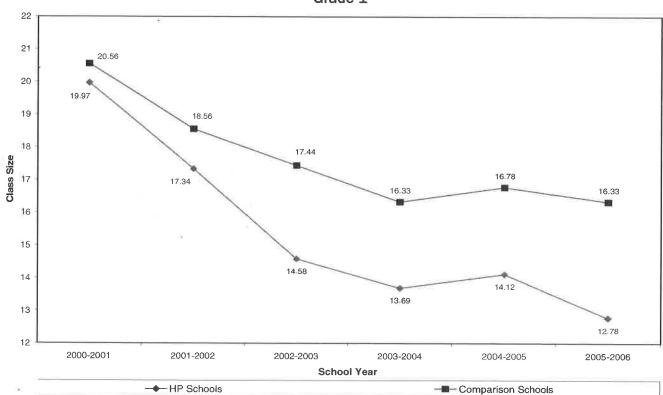


Figure 4: Average Class Size for Baseline and Each Year of HP Implementation Grade 2

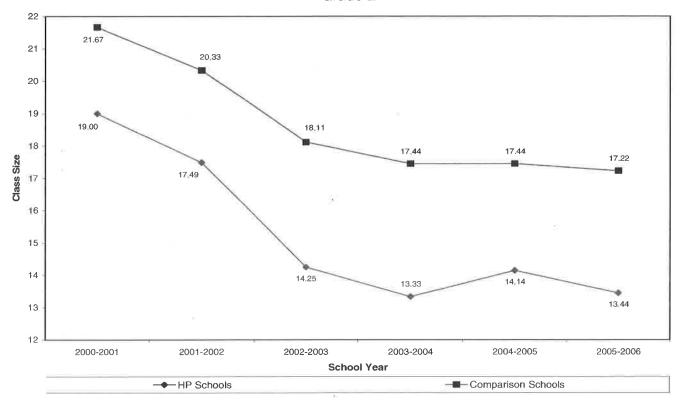


Figure 5: Average Class Size for Baseline and Each Year of HP Implementation Grade 3

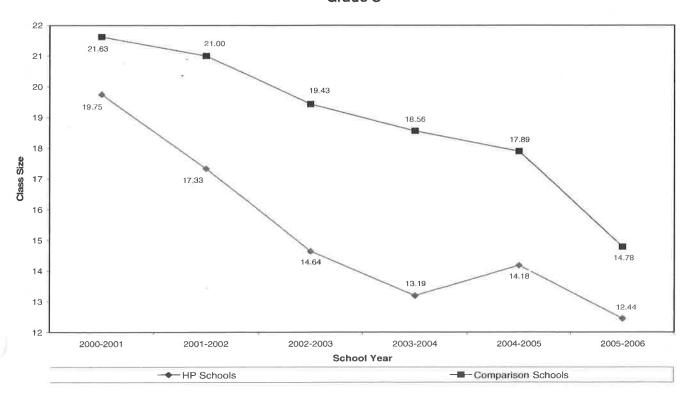


Figure 6: Average Class Size for Baseline and Each Year of HP Implementation Grade 4

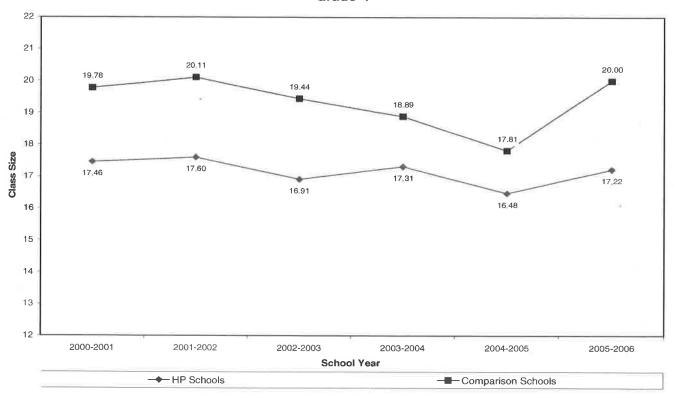
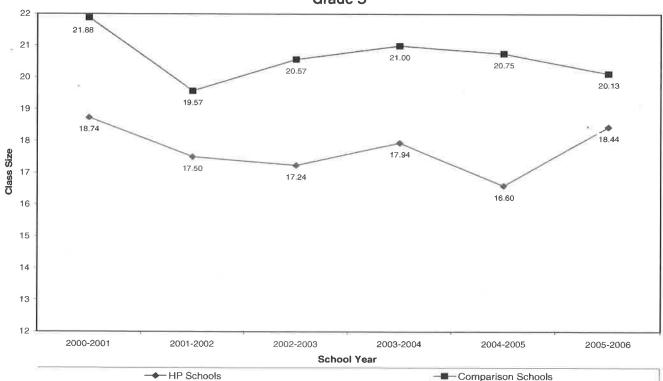


Figure 7: Average Class Size for Baseline and Each Year of HP Implementation Grade 5



In order to determine what significant 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 for grades K-3 for each year of the HP Schools Initiative. Figure 8 shows the average class size of the HP and comparison schools for grades K – 3 combined and how these have changed over time (from baseline to the end of Year 5 of implementation). Independent t-test analyses presented in Table 4 show the total number of schools for which there were 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.

Figure 8: Average Class Size for Baseline and Each Year of HP Implementation Grades K – 3 Combined

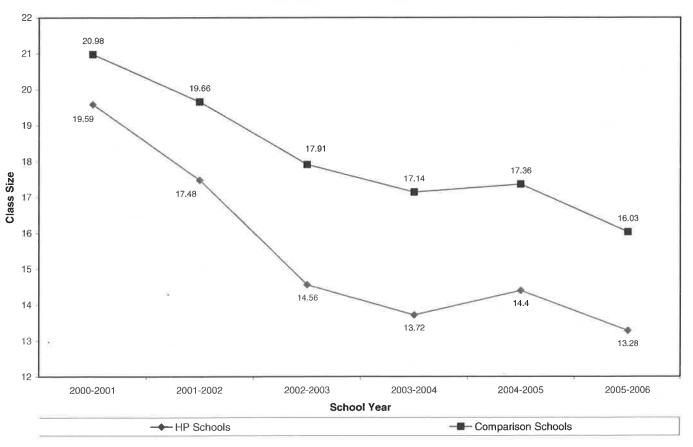


Table 4 – Independent T-Test Analysis
Average Class Size for Grades K-3 Combined, by Year of Implementation

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
2004-2005 (Year 4)				
HP Schools	36	14.40	-6.17*	0.00
Comparison Schools	9	17.36		
2005-2006 (Year 5)				
HP Schools 9		13.28	-3.61*	0.00
Comparison Schools	9	16.03		

The data in Figure 8 and Table 4 show that:

- At baseline (the year prior to the start of the HP Initiative), there was no statistical difference in the average class size for grades K-3 for the HP and comparison schools.
- For each subsequent year, however, the HP schools, on average, had significantly fewer students per class than did the comparison schools. For example, in Year 5, the average class size in grades K-3 for the HP schools was 13.28, compared to 16.03 for the comparison schools, a difference that proved to be statistically significant at the .05 level of probability.

Question 3 - Student Achievement Outcomes

To investigate the degree to which academic gains were achieved by students at the HP schools a series of analyses were conducted using the 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. 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 presented in this section of the report, Achievement Levels and scale scores. 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. 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 IV 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.

Scale scores provide a standard range of values by which test administrators can measure achievement in reading and mathematics according to state standards (norms). These scores adjust for differences in difficulty level from year to year as a result of changes in examination questions. Because each grade level demands more of a student than the previous grade level, growth can be determined by looking at the differences in scale scores from year to year.

It is important to note that the mathematics tests administered in 2005-2006 required a new developmental scale and new academic achievement levels be established for mathematics. Although this implies that comparisons should not be made from prior years to 2005-2006, those made within this report are relative measures. Specifically, mathematics gains are calculated and used only to compare the HP to comparison students to measure relative growth (i.e., differences between HP and comparison students), not absolute growth.

Of further note is that gain comparisons for 3rd grade mathematics could not be conducted as 3rd grade pretests were not administered in the fall of 2005.

To what extent do HP schools achieve their stated growth targets in ABC performance levels and/or make adequate yearly progress in spring 2006? What differences (if any) exist between 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 from baseline (spring 2001) to Year 5 (spring 2006) (Table 5) and that were determined to have made adequate yearly progress (AYP) from Year 2 (2002-2003) to Year 5 (2005-2006) (Table 6).

Table 5 – ABCs Growth Targets

Number and Percent of HP and Comparison Schools Achieving

Expected Growth Targets. By Year

	Spring	Spring	Spring	Spring	Spring	Spring
	2001	2002	2003	2004	2005	2006
	(Baseline)	(Year 1)	(Year 2)	(Year 3)	(Year 4)	(Year 5)
HP Schools (N=35, baseline, Years 1 & 2; N=36, Years 3 & 4; N=9, Year 5)	14 40.0%	22 62.9%	35 100.0%	25 69.4%	20 55.6%	4 44.4%
CS Schools (N=9, All Years)	0	2	8	9	6	4
	0.0%	22.2%	88.9%	100.0%	66.7%	44.4%

The results shown in Table 5 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 versus 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, from the end of Year 2 (spring 2003) to the end of Year 5 (spring 2006), the percent of HP and comparison schools that achieved expected growth had declined to 44.4% for both sets of schools.

Table 6 – Adequate Yearly Progress (AYP)

Number and Percent of HP and Comparison Schools Meeting AYP,

2002-2003 to 2005-2006

	Spring 2003	Spring 2004	Spring 2005	Spring 2006
	(Year 2)	(Year 3)	(Year 4)	(Year 5)
HP Schools (N=35, Year 2) (N=36, Years 3 & 4) (N=9, Year 5)	21 60.0%	29 80.6%	13 36.1%	4 44.4%
Comparison Schools	3	7	4	2
(N=9, All Years)	33.3%	77.8%	44.4%	22.2%

In Table 6 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.

- By spring 2005, however, both groups showed a decline in the number and percent of schools meeting AYP–from 80.6% to 36.1% for the HP schools and from 77.8% to 44.4% for the comparison schools.
- In spring 2006, the comparison schools continued to show a decline in percent of schools meeting AYP (from 44.4% to 22.2%; a 20 percentage point decrease), while HP schools showed a slight gain (from 36.1% to 44.4%, an 8.3 percentage point increase).

To what extent has implementation of HP Initiatives influenced progress on state assessments in reading and math?

As shown in the following two tables, an analysis of variance (ANOVA) was conducted on reading and math gains from fall/spring 2005 to spring 2006 by grade and for all grades combined. The purpose of these analyses was to determine whether 'intensity' of HP implementation over time (e.g., reducing class size, implementing extended school year, etc.) had an effect on outcomes for HP school students in reading and math. In order to create three levels of HP implementation (high, medium, and low), composite scores were created for HP schools as follows:

- Presence of Instructional Support Position, 2002-2006 (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, 2002-2006 (defined as no=0 and yes=1)
- Teacher Contract Extension Professional Development Implementation, 2002-2006 (defined as no=0 and yes=1)
- Extended School Year Implementation, 2002-2006 (defined as 0=no, 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)

The composite scores were then summed over the course of the five years of the Initiative and divided into three categories, which yielded high, medium, and low levels of implementation. Note that that these analyses were conducted for eight of the nine schools as 2005-2006 implementation data were not available for one of the schools.

Table 7 – HP Implementation from 2001-2002 through 2005-2006 Cross Sectional ANOVA Analysis Fall/Spring 2005 to Spring 2006 EOG Reading Gains, By Grade

Group (I)	Group Mean Scaled Score Gain	Omnibus F- Value	Group (J)	Mean Difference (I-J)	Post Hoc Significance
Grade 3		1.903			
		(p < 0.150)			
Low (N=106)	7.491				
Medium (N=233)	8.974				
High (N=120)	8.350				
Grade 4		8.178 (p=0.000)			
Low (N=89)	3.787	## E	Medium	0.763	0.968
			High	-9.975*	0.012
Medium (N=209)	3.024		High	-10.737*	0.001
Hìgh (N=113)	13.761				
Grade 5		5.786 (p=0.003)			
Low (N=103)	4.835		Medium	0.654	0.966
			High	-7.323*	0.039
Medium (N=227)	4.181		High	-7.977*	0.005
High (N=114)	12.158		rtina *H.		
All Grades Combined	h.	12.884 (p=0.000)			
Low (N=298)	5.466		Medium	-0.022	1.000
			High	-5.897*	0.000
Medium (N=669)	5.488		High	-5.874*	0.000
High (N=347)	11.363				

Table 8 – HP Implementation from 2001-2002 through 2005-2006 Fall/Spring 2005 to Spring 2006 EOG Mathematics Gains, By Grade*

Group (I)	Group Mean Scale Score Gain	Omnibus F- Value	Group (J)	Mean Difference (I-J)	Post Hoc Significance
Grade 4		6.397			
		(p=0.002)			
Low (N=91)	92.571		Medium	-2.081	0.784
			High	-10.648*	0.007
Medium (N=216)	94.653		High	-8.567*	0.009
High (N=114)	103.219				
Grade 5		7.442			
		(p=0.001)			
Low (N=107)	93.710		Medium	-0.972	0.923
			High	-9.281*	0.004
Medium (N=233)	94.682		High	-8.309*	0.002
High (N=114)	102.991				
All Grades Combined		13.745			
		(000.000)			
Low (N=198)	93.187		Medium	-1.481	0.738
			High	-9.918*	0.000
Medium (N=449)	94.668		High	-8.437*	0.000
High (N=228)	103.105				

^{*} Grade 3 mathematics pretest was not administered in fall 2005

Notable findings from the preceding two tables include:

- The mean difference in reading gains from 2005 to 2006 between implementation intensity was significant, with schools that implemented on a high level over the five year period showing significantly greater gains than those who implemented on a low or medium level for grades 4 and 5 and for both grades combined.
- Like the reading results, the mean difference in mathematics gains from 2005 to 2006 between implementation intensity was significant for grades 4 and 5, with schools that implemented on a high level over the five year period showing significantly greater gains than those who implemented on a low or medium level. As noted earlier, grade 3 gains could not be computed as the pretest was not administered in fall 2005.

Do students at the HP schools show greater academic growth in reading and math when compared to their peers at the comparison schools?

As shown in the following two tables, independent t-test analyses were conducted on reading and math gains from fall/spring 2005 to spring 2006 by grade and for all grades combined. The purpose of these analyses was to determine whether HP students showed greater academic growth than comparison school students. The tables show the total number of students with matched scores, mean scale score gain, 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 9 – Independent T-Test Analysis
Fall/Spring 2005 to Spring 2006 EOG Reading Gains, by Grade

Grade	N	N Mean Scale Score Gain		Significance	
All Grades					
HP Schools	1373	6.99			
Comparison Schools	1357	6.18	1.56	0.12	
Grade 3					
HP Schools	476	8.65			
Comparison Schools	477	8.66	-0.03	0.98	
Grade 4					
HP Schools	437	5.93			
Comparison Schools	521	4.46	1.29	0.20	
Grade 5					
HP Schools	460	6.29			
Comparison Schools	359	5.38	0.80	0.42	

Table 10 – Independent T-Test Analysis
Fall/Spring 2005 to Spring 2006 EOG Mathematics Gains, by Grade*

Grade	N	Mean Scale Score Gain	T-Value	Significance	
All Grades					
HP Schools	923	96.30			
Comparison Schools	881	94.67	2.17*	0.03	
Grade 4					
HP Schools	450	96.30			
Comparison Schools	522	94.74	1.38	0.17	
Grade 5					
HP Schools	473	96.29			
Comparison Schools	359	94.57	1.54	0.12	

^{*} Grade 3 mathematics pretest was not administered in fall 2005

Tables 9 and 10 illustrate that:

- The difference in reading gain scores between HP and comparison schools was neither statistically significant for the individual grades nor for all grades combined.
- The difference in math gain scores between HP and comparison schools was significant, suggesting that HP students overall made greater gains than comparison students in math from spring 2005 to spring 2006. However, the difference in gain scores for grades 4 and 5 was not statistically significant.

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 the EOG reading and mathematics tests. Within each figure, the data are presented for the following school years: spring 2002 (Year 1), spring 2003 (Year 2), spring 2004 (Year 3), spring 2005 (Year 4), and spring 2006 (Year 5).

Level 1 Level 2 Level 3 Level 4 Level 4 Level 5 Level 4 Level 7 Level 8 Level 9 Level £.12 22.6 21.3 22.6 52.8 52.8 50.8 8.03 2006 0. FS 21.0 21.1 1.12 6.4 4.9 5.4 4.2 7.02 20.0 20.7 20.0 8.84 48.8 52.3 52.3 2005 23.2 23.2 21.7 7.12 2.7 6.0 7.2 0.9 8.02 20.8 20.8 8.02 51.2 51.2 5.13 5.13 2004 22.0 22.0 22.0 22.0 1.8 6.1 6.1 1.9 9'91 17.6 16.6 **9.7** r 1'8t 51.4 48.1 4.13 24.9 24.4 24.9 24.4 4.0 F 10.4 6.7 7.9 13.5 13.5 12.6 12.6 45.2 45.2 45.1 L'St 2002 8,62 32.5 29.8 32.5 **9'LL** 11.5 6.6 6.9 ■ CS H 10 20 0 20 40 30 9 Percent of Students

Figure 9 – EOG Reading – Grades 3-5 Combined Percent of Students Scoring at Each Performance Level, Over Years

Level 1 Level 2 Level 3 Level 1 Level 1 Level 2 Level 3 Level 4 Level 1 Level 2 Level 4 Level 1 Level 2 Level 4 Level 4 Level 1 Level 4 Level 4 Level 5 Level 6 Level 7 Level 9 Level 6.6 5.5 6.4 **7.9** 38.2 38.2 40.7 7.04 L. F4 38.5 41.1 3.85 15.2 14.3 15.2 14.3 9.82 29.4 28.9 4.62 8.64 49.9 49.8 6.64 Percent of Students Scoring at Each Performance Level, Over Years 2005 18,3 18.0 18.3 0.81 2.5 3.0 3.0 2.7 1,62 32.4 29.1 32.4 7,53 52.2 53.7 2004 15.4 13.3 15.4 £.E1 8. F 1.8 2.1 1.2 4.72 29.8 27.4 8.62 1,53 53.7 53.1 7.53 ₽.81 14.6 16.4 14.6 1.9 7.5 1.9 3.1 8.9 F 17.4 16.8 **4.71 7.8**4 48.7 48.7 7.84 2002 4.72 27.4 28.1 r.8S 1.7 5.8 7.1 8.3 OHD SO 9 50 40 30 20 9 0 Percent of Students

Figure 10 – EOG Mathematics – Grades 3-5 Combined

The data in Figures 9 and 10 show that:

- At the end of Year 1 (spring 2002), the reading performance for students attending the HP schools was comparable to those at the comparison schools; 57.7% of HP students and 58.7% of comparison school students scored at or above Level III. By the end of Year 4 (spring 2005), a slightly greater percentage of HP students scored in Levels III and IV in reading than did comparison school students (72.3% vs. 69.5%, respectively). However, by the end of Year 5 (spring 2006), this difference was erased (HP: 73.4%, CS: 74.1%).
- In mathematics, at the end of Year 1 (spring 2002), approximately two thirds of both the HP and comparison school students scored at or above Level III on the EOG. From Year 1 (spring 2002) to Year 4 (spring 2005), there was a 13.2 percentage point increase in the number and percent of students scoring at or above Level III in mathematics for both groups of schools. In contrast, a sharp decline in the percent of students scoring at or above level 3 occurred in Year 5, probably due to the change in the examination. Despite this decline, a greater proportion of HP students (47.1%) score at level 3 or higher than comparison students (43.7%).

The longitudinal analyses presented in the following tables show–for all grades combined—the number of students with matched pre- and posttest scores (N) and the percent of these students that moved down or up in performance levels from fall or spring 2005 to spring 2006 on the EOG Reading and Mathematics.

Table 11 – Fall/Spring 2005 – Spring 2006 Longitudinal Performance Level Analyses EOG Reading, Grades 3-5 Combined

		Ů,					
Matched N	Down 3 Levels	Down 2 Levels	Down 1 Level	At Same Level	Up 1 Level	Up 2 Levels	Up 3 Levels
106	*	-	*	27%	45%	27%	:42
317	-	(=)	8%	40%	47%	5%	
677	255	2%	14%	67%	17%	**	-
265	-	2%	31%	67%	77.	773	H a ll
1,365	-	1%	15%	58%	23%	3%	-
hools							
111			=	19%	51%	28%	2%
340		(=)	10%	42%	45%	3%	
655	展	1%	13%	70%	16%	-	
251	8	1%	31%	68%		#1	
1,357	1775	1%	14%	58%	23%	3%	
	N 106 317 677 265 1,365 hools 111 340 655 251	N Levels 106 - 317 - 677 - 265 - 1,365 - hools 111 - 340 - 655 - 251 -	Matched N Down 3 Levels Down 2 Levels 106 - - 317 - - 677 - 2% 265 - 2% 1,365 - 1% hools - - 340 - - 655 - 1% 251 - 1%	Matched N Down 3 Levels Down 2 Levels Down 1 Level 106 - - - 317 - - 8% 677 - 2% 14% 265 - 2% 31% 1,365 - 1% 15% hools - - - 340 - - 10% 655 - 1% 13% 251 - 1% 31%	Matched N Down 3 Levels Down 2 Levels Down 1 Level At Same Level 106 - - - 27% 317 - - 8% 40% 677 - 2% 14% 67% 265 - 2% 31% 67% 1,365 - 1% 15% 58% hools 111 - - - 19% 340 - - 10% 42% 655 - 1% 13% 70% 251 - 1% 31% 68%	Matched N Down 3 Levels Down 2 Levels Down 1 Level At Same Level Up 1 Level 106 - - - 27% 45% 317 - - 8% 40% 47% 677 - 2% 14% 67% 17% 265 - 2% 31% 67% - 1,365 - 1% 15% 58% 23% hools 111 - - - 19% 51% 340 - - 10% 42% 45% 655 - 1% 13% 70% 16% 251 - 1% 31% 68% -	Matched N Down 3 Levels Down 2 Levels Down 1 Level At Same Level Up 1 Level Up 2 Levels 106 - - - 27% 45% 27% 317 - - 8% 40% 47% 5% 677 - 2% 14% 67% 17% - 265 - 2% 31% 67% - - - 1,365 - 1% 15% 58% 23% 3% hools - - - 19% 51% 28% 340 - - - 10% 42% 45% 3% 655 - 1% 13% 70% 16% - 251 - 1% 31% 68% - - -

Table 12 – Fall/Spring 2005 – Spring 2006 Longitudinal Performance Level Analyses EOG Mathematics, Grades 4-5 Combined*

School Type, by Level	Matched N	Down 3 Levels	Down 2 Levels	Down 1 Level	At Same Level	Up 1 Level	Up 2 Levels	Up 3 Levels
HP Schools								
Level I	10	<u>></u>	(-)	-	60%	40%	*	·
Level II	142	S=	3=3	47%	48%	5%	-	· · ·
Level III	475	g -	11%	51%	37%	1%	- 	-
Level IV	289	1%	14%	64%	21%	===		
Across Levels	916	-	10%	54%	34%	2%	577-	-
Comparison Sc	hools		7					
Level I	9	8.7	9=9	=	78%	22%	_ =	=
Level II	182	Œ	(=)	37%	56%	7%	-	-
Level III	485	Œ	10%	52%	38%	##	#	*
Level IV	205	-	13%	65%	22%		=	
Across Levels	881	Œ	9%	51%	38%	2%	-	**

^{*} Grade 3 mathematics pretest was not administered in fall 2005

For reading, the data in Table 11 show that across all HP schools and target grades, 26.0% of the students moved up at least one performance level from fall or spring 2005 to spring 2006. This proportion was the same for the comparison schools.

Table 12 shows that – in general – proportionately fewer students showed any performance level movement in mathematics than in reading. The percent of both HP and comparison students who moved up at least one performance level on the EOG Math from spring 2005 to spring 2006 was only 2.0%.

Are there significant differences in subgroup performance between HP and comparison schools in terms of mean scale scores?

In order to examine the extent to which different subgroups of students at the HP schools 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 cross-sectional mixed model ANOVAs. These results are presented in the following tables, as listed below:

- Low-Income Status (Tables 13 and 14)
- Ethnicity (Tables 15 and 16)
- o Language Proficiency (Tables 17 and 18)
- Special Education Status (Tables 19 and 20)

The cross-sectional analyses presented in the following tables show by group, the number of students in the HP and comparison groups included in the analysis (N), mean scale scores for each group, significance level and associated F-value, mean scale score differences between groups (if statistically significant), and post hoc significance (if applicable). The tables will also show an asterisk (*) if the difference between the mean scores resulted in a significant F-value at or below the .05 level of probability.

Table 13 – NCLB Grouping 1 (Free/Reduced Lunch) by HP Status Cross Sectional ANOVA Analysis Spring 2006 EOG Reading, All Grades

Group Mean Scale Score	Omnibus F- Value	Group (J)	Mean Difference (I-J)	Post Hoc Significance
	0.037			
	(p=0.848)			
248.44				
247.86				
atus	22.422*			
	(p < 0.001)			
249.94		Eligible	2.131*	а
247.81				
ee/Reduced	4.489*			
	(p=0.034)			
249.44		HP Eligible	1.144	b
		CS Not Eligible	-0.843	
		CS Eligible	2.155	
248.29		CS Not Eligible	-1.987	
		CS Eligible	1.011	
250.28		CS Eligible	2.998	
247.28				
	248.44 247.86 atus 249.94 247.81 ee/Reduced 249.44 248.29 250.28	Scale Score Value 0.037 (p=0.848) 248.44 247.86 atus 22.422* (p < 0.001) 249.94 247.81 ee/Reduced 4.489* (p=0.034) 249.44 248.29 250.28	Group Mean Scale Score Value O.037 (p=0.848) 248.44 247.86 atus 22.422* (p < 0.001) 249.94 Eligible 247.81 ee/Reduced 4.489* (p=0.034) 249.44 HP Eligible CS Not Eligible CS Eligible	Group Mean Scale Score Value

a No post hoc tests were performed for FRL eligibility as there were only two groups.

The data in Table 13 show that:

- The mean difference in spring 2006 reading scores was significant for free/reduced lunch eligibility, and in the expected direction of non-eligible students outperforming eligible students.
- The interaction of HP status and free/reduced lunch eligibility produced a statistically significant result, suggesting differences between eligibility are mediated by school status.
 - CS students not eligible for free/reduced lunch outperformed all of the other groups, although only minimally different from their HP counterparts.
 - The CS eligible students performed the worst, on average a full scale score point lower than their HP counterparts.
 - The performance gap between CS non-eligible students and CS eligible students is noticeably greater than the gap between the HP groups.

b Post hoc tests are not traditionally performed for interactions in n-way ANOVAs.

Table 14 - NCLB Grouping 1 (Free/Reduced Lunch) by HP Status Cross Sectional ANOVA Analysis Spring 2006 EOG Mathematics, All Grades

			·		
Group (I)	Group Mean Scale Score	Omnibus F- Value	Group (J)	Mean Difference (I-J)	Post Hoc Significance
High Priority Status		2.132			
		(p=0.144)			
High Priority (N=1451)	344.47				
Comparison (N=1422)	343.11				
Free/Reduced Lunch St	atus	17.772*			
		(p < 0.001)			×
Not Eligible (N=458)	345.54		Eligible	2.079*	а
Eligible (N=2415)	343.46				
High Priority Status * Fr	ee/Reduced	5.331*			
Lunch Status		(p=0.021)			
HP Not Eligible	345.29		HP Eligible	0.943	b
(N=183)			CS Not Eligible	-0.420	
			CS Eligible	2.806	
HP Eligible (N=1268)	344.35		CS Not Eligible	-1.362	
			CS Eligible	1.863	
CS Not Eligible (N=275)	345.71		CS Eligible	3.225	
CS Eligible (N=1147)	342.48				

^a No post hoc tests were performed for FRL eligibility as there were only two groups.

It can be seen from Table 14 that:

- The mean difference in spring 2006 mathematics scores was significant for free/reduced lunch eligibility, and in the expected direction of non-eligible students outperforming eligible students.
- The interaction of HP status and free/reduced lunch eligibility produced a statistically significant result, suggesting differences between eligibility are mediated by school status.
 - CS students not eligible for free/reduced lunch outperformed all of the other groups, although only a minimally different from their HP counterparts.
 - The CS eligible students performed the worst, on average two full scale score points lower than their HP counterparts.
 - The performance gap between CS non-eligible students and CS eligible students is noticeably greater than the gap between the HP groups.

b Post hoc tests are not traditionally performed for interactions in n-way ANOVAs.

Table 15 – NCLB Grouping 2 (Ethnicity) by HP Status Cross Sectional ANOVA Analysis Spring 2006 EOG Reading, All Grades

Group (I)	Group Mean Scale Score	Omnibus F- Value	Group (J)	Mean Difference (I-J)	Post Hoc Significance
High Priority Status		10.900* (p=0.001)			
High Priority (N=1451)	248.44		Comparison	0.575*	a
Comparison (N=1422)	247.86				
Ethnicity		25.342* (p < 0.001)			
Black (N=2011)	247.75	965	Hispanic White/Others	0.022 -3.013*	0.999 0.000
Hispanic (N=476)	247.73		White/Others	-3.035*	0.000
White and Others (N=386)	250.76				
High Priority Status * Eth	nicity	1.926 (p=0.146)			
HP Black (N=968)	248.01				
HP Hispanic (N=348)	248.16				
HP White/Others (N=135)	252.19				
CS Black (N=1043)	247.51				
CS Hispanic (N=128)	246.55				
CS White and Others (N=251)	250.00				

^a No post hoc tests were performed for HP status as there were only two groups.

The most notable results in Table 15 are as follows:

- The mean difference in spring 2006 reading scores was significant for ethnicity, and in the expected direction of white and other ethnicity students outperforming Black and Hispanic students.
- The interaction of HP status and ethnicity did not produce a statistically significant result, suggesting that the difference between ethnicities is not mediated by school status.

Table 16 – NCLB Grouping 2 (Ethnicity) by HP Status Cross Sectional ANOVA Analysis Spring 2006 EOG Mathematics, All Grades

Group (I)	Group Mean Scale Score	Omnibus F- Value	Group (J)	Mean Diff. (I-J)	Post Hoc Significance
High Priority Status		24.409* (p < 0.001)			
High Priority (N=1451)	344.47		Comparison	1.358*	а
Comparison (N=1422)	343.11				
Ethnicity		43.680* (p < 0.001)	_		
Black (N=2011)	342.70		Hispanic White/Others	-3.091* -4.335*	0.000 0.000

Hispanic (N=476)	345.79		White/Others	-1.244	0.156
White and Others (N=386)	347.03				
High Priority Status * Ethnicity		5.496*			
		(p=0.004)			
HP Black (N=968)	343.0124		HP Hispanic	-3.680	b
			HP White/Others	-6.136	
			CS Black	0.604	
			CS Hispanic	-0.324	
			CS White/Others	-2.884	
HP Hispanic (N=348)	346.6925		HP White/Others	-2.456	
			CS Black	3.284	
			CS Hispanic	3.357	
			CS White/Others	0.796	
HP White/Others (N=135)	349.1481		CS Black	6.740	
			CS Hispanic	5.812	
			CS White/Others	3.252	
CS Black (N=1043)	342.4084		CS Hispanic	-0.928	
			CS White/Others	-3.488	
CS Hispanic (N=128)	343.3359		CS White/Others	-2.561	
CS White/Others (N=251)	345.8964				

a No post hoc tests were performed for HP status as there were only two groups.

The data in Table 16 show that:

- The mean difference in spring 2006 mathematics scores was significant for the ethnic subgroups, with both White and other ethnicities and Hispanics outperforming Blacks. Unlike the reading results, White and other ethnicities did not significantly outperform Hispanics.
- The interaction of HP status and Ethnicity produced a statistically significant result, suggesting differences between ethnicities are mediated by school status.
 - HP White and other ethnicity students outperform all other subgroups, including their CS counterparts.
 - Except for HP White students, HP Hispanic students outperform all other subgroups as well, including CS White students.
 - o There is less of a difference between CS Black and Hispanic performance than there is between HP Black and Hispanic performance.

b Post hoc tests are not traditionally performed for interactions in n-way ANOVAs.

Table 17 - NCLB Grouping 3 (Limited English Proficient) by HP Status
Cross Sectional ANOVA Analysis
Spring 2006 EOG Reading, All Grades

Group Mean	Omnibus F-		Mean	Post Hoc
•		Group (J)		Significance
			17	-18
	(p=0.093)			
248.44				
247.86				
ncy Status	40.120*			
	(p < 0.001)			
245.1196		Non-LEP	-3.355*	a
248.4744				
P Status	0.118			
	(p=0.731)			
245.5055				
248.8574				
244.3723				
248.1084				
	247.86 ncy Status 245.1196 248.4744 P Status 245.5055 248.8574 244.3723	Scale Score Value 2.829 (p=0.093) 248.44 247.86 1cy Status 40.120* (p < 0.001) 245.1196 248.4744 P Status 0.118 (p=0.731) 245.5055 248.8574 244.3723	Scale Score Value 2.829 (p=0.093) 248.44 247.86 1cy Status 40.120* (p < 0.001) 245.1196 248.4744 P Status 0.118 (p=0.731) 245.5055 248.8574 244.3723	Scale Score Value Group (J) Difference (I-J) 2.829 (p=0.093) 248.44 247.86 (p < 0.001) 245.1196 248.4744 P Status 0.118 (p=0.731) 245.5055 248.8574 244.3723

^a No post hoc tests were performed for LEP status as there were only two groups.

It can be seen from Table 17 that:

- The mean difference in spring 2006 reading scores was significant for limited English proficiency (LEP) status, and in the expected direction of non-LEP students outperforming LEP students.
- The interaction of HP and LEP status did not produce a statistically significant result, suggesting that the difference between limited English proficient students and their English speaking peers is not mediated by school status.

Table 18 – NCLB Grouping 3 (LEP) by HP Status Cross Sectional ANOVA Analysis Spring 2006 EOG Mathematics, All Grades

Group (I)	Group Mean Scale Score	Omnibus F- Value	Group (J)	Mean Difference (I-J)	Post Hoc Significance
HP Status		8.990*			
		(p=0.003)			
High Priority (N=1451)	344.47		Comparison	1.358*	а
Comparison (N=1422)	343.11				
Limited English Proficier	ncy Status	2.925			
		(p=0.087)			
LEP (N=276)	343.1848				
Non-LEP (N=2597)	343.8583				
High Priority Status * LE	P Status	0.887			
		(p=0.346)			
HP LEP (N=182)	344.0385				
HP Non-LEP (N=1269)	344.5272				
CS LEP (N=94)	341.5319				
CS Non-LEP (N=1328)	343.2191				
- 11 - 1 1		D 1 1 1 11	1.1.		

^a No post hoc tests were performed for HP status as there were only two groups.

The most notable findings from Table 18 are as follows:

- The mean difference in spring 2006 mathematics scores was not significant for LEP status.
- The interaction of HP and LEP status did not produce a statistically significant result, suggesting that the difference between students with limited English proficiency and their English proficient peers is not mediated by school status

Table 19 – NCLB Grouping 4 (Special Education) by HP Status Cross Sectional ANOVA Analysis Spring 2006 EOG Reading, All Grades

	Opring 20	OO LOG NCGG	ng, An arades		
Group (I)	Group Mean Scale Score	Omnibus F- Value	Group (J)	Mean Diff. (I-J)	Post Hoc Significance
High Priority Status		2.263			
		(p=0.133)			
High Priority (N=1451)	248.44				
Comparison (N=1422)	247.86				
Special Education Status		160.719*			
		(p < 0.001)			
General Ed (N=2517)	248.8884		Special Ed	5.941*	а
Special Ed (N=356)	242.9466				
HP * Special Education Sta	atus	0.273			
		(p=0.601)			
HP General Ed (N=1278)	249.1142				
HP Special Ed (N=173)	243.4335				
CS General Ed (N=1239)	248.6554				
CS Special Ed (N=183)	242.4863				

^a No post hoc tests were performed for special education status as there were only two groups.

The data in Table 19 show that:

- The mean difference in spring 2006 reading scores was significant for special education status, and in the expected direction of general education outperforming special education students.
- The interaction of HP and special education status did not produce a statistically significant result, suggesting that the difference between special education and general education students is not mediated by school status.

Table 20 - NCLB Grouping 4 (Special Education) by HP Status Cross Sectional ANOVA Analysis Spring 2005 EOG Mathematics, All Grades

Group (I)	Group Mean Scale Score	Omnibus F- Value	Group (J)	Mean Difference (I-J)	Post Hoc Significance
HP Status		5.493*			
		(p=0.019)			
High Priority (N=1451)	344.47		Comparison	1.358*	а
Comparison (N=1422)	343.11				
Special Education Status		92.601*			
		(p < 0.001)			
General Ed (N=2517)	344.43		Special Ed	5.164*	a
Special Ed (N=356)	339.27				
HP Status * Special Educa	tion Status	0.021			
		(p=0.884)			
HP General Ed (N=1287)	345.09				
HP Special Ed (N=173)	339.87				
CS General Ed (N=1239)	343.76				
CS Special Ed (N=183)	338.70				

a No post hoc tests were performed for HP or special education status as there were only two groups.

It can be seen from Table 20 that:

- The mean difference in spring 2006 mathematics scores was significant for special education status, and in the expected direction of general education outperforming special education students.
- The interaction of HP and special education status did not produce a statistically significant result, suggesting that the difference between special education and general education students is not mediated by school status.

Summary

While there is a great deal of variability in the results produced by the student achievement analyses, there were some positive findings that should be noted. The following points summarize some of the more interesting messages conveyed by the data:

- For grades 4 and 5, schools that implemented on a high level over the five years of the initiative showed significantly greater mean reading and math gains from 2005 to 2006 than schools implementing on low or medium levels.
- HP Hispanic students outperform all other ethnic subgroups except for HP White students in math in spring 2006.
- Overall, HP schools displayed significantly greater gains from spring 2005 to spring 2006 than comparison schools in mathematics.
- In spring 2006 a greater proportion of HP students score at level 3 or higher (i.e., on grade level) in math than comparison students.

 While comparison schools continued to show a decline in percent of schools meeting AYP in Year 5 (spring 2006), HP schools showed a slight gain.

4. CONCLUDING REMARKS

Over the years, the HP Schools Initiative has been successful in **reducing class size** in grades K-3 at the target elementary schools. Average class size remained below the state prescribed policy that called for a ratio of 15 students for each teacher at the HP schools for each year of the Initiative. Moreover, the HP schools established average class sizes in grades K-3 that were significantly lower than those at the set of nine comparison schools at the same grade levels. This was true for each of year of HP implementation.

At the same time, teacher assistants appear to be playing a shifting role in K-3 classrooms (as reported by both the HP and comparison schools), assisting in providing individualized instruction, small group instruction, and other one-on-one instructional opportunities to students, as well as supporting easier classroom management.

Consistent with findings from previous evaluations, the HP schools did not generally hire a parent coordinator/liaison but added parental involvement to the responsibilities of the staff person that was hired with the HP allocation for **added instructional support**.

During 2005-2006, the HP schools consistently implemented the five additional days of teacher professional development. The content of the **extended teacher contract PD** focused mainly on reading/literacy instruction, writing instruction, and mathematics content.

Over the years, the **extended school year** component for students has been problematic for schools in terms of implementation. However, during 2005-2006, the remaining nine HP schools were generally successful in implementing this component as originally intended by the North Carolina legislation, by adding five instructional days to the end of the regular school year calendar. However, there is still concern about the overall effectiveness of this component because of the perceived lack of productivity on the extra days, which is mostly due to the ESY being implemented at the end rather than the beginning of the school year.

Student Achievement Outcomes

Presented below is the evidence of student achievement outcomes that have occurred in the HP schools over the five years of implementation.

When implemented fully, the HP Initiative may have longer-term effects

While no significant implementation effects were observed in grade 3, students from schools with medium and high levels of implementation over the course of the five years of the Initiative displayed significantly greater math and reading gains from spring 2005 to spring 2006 than schools with low implementation levels. As the HP Initiative is not implemented in grades 4 and 5, the differences observed in those grades suggests there may be long term effects of the Initiative on students within HP schools. Importantly, this finding is not unlike what has been cited in the literature about the lasting benefits of small

class size in the primary grades. For example, a follow-up to the STAR study (a 1980's K-3 small class size initiative in Tennessee) revealed that in fourth grade, students from smaller classes outperformed students from larger classes in all subjects and were better behaved. In 2005, Jeremy Finn, a nationally recognized education researcher, published additional follow-up research to the original Project STAR study involving a large sample of students followed for 13 years. His research showed that four or more years in small classes in elementary school (not unlike the HP Schools Initiative) significantly increased the likelihood of long-term achievement gains, especially for students from low-income families.

HP Initiative may continue to have particular advantages for Hispanic students

In the 2004-2005 evaluation, a notable finding was that the HP Hispanic students outperformed all other NCLB subgroups in reading and math. When comparing spring 2006 EOG scores, statistically significant interactions between school status (i.e., HP and comparison) and ethnicity were found, suggesting that differences in math gains between students of different ethnic/racial backgrounds may be mediated by school status. Most notably, on average, HP Hispanic students displayed greater math performance than comparison school white/other students and their Hispanic counterparts. While the same was not observed for reading, this is likely due to the large percentage of limited English proficient students served in the remaining nine HP schools. This finding also supports what has been noted in the research regarding small class size in the primary grades helping to close the achievement gap. Specifically, studies have shown that minority students often experience even greater gains than white students when placed in small classes in grades K-3. Recent research reveals that minority students tend to have achievement cores than white students before participation in smaller classes and make larger achievement gains by the end of the year.

Taken together, these findings suggest that there may have been some improvement at the HP schools attributable to appropriate implementation of the four HP components over time. It seems plausible that the components do not directly affect participants but rather provide the foundation for future performance improvements. This is certainly corroborated by school administrator comments regarding changes in former HP students now in either 4th or 5th grade (e.g., greater knowledge base in reading, improved student behavior). Further, particularly of note is the continued performance improvements seen among HP Hispanic students.

Recommended Next Steps

Should DPI decide to continue the HP Initiative or implement other reduced class size initiatives, we suggest that the set of recommendations offered at the conclusion of the 2004-2005 annual report be reviewed and carefully considered.

APPENDIX 1

Fourth Annual Evaluation of the High-Priority Schools Initiative High Priority School Principal Interviews

SECTION I - BACKGROUND

1. Confirm title of respondent:

SECTION II - REDUCED CLASS SIZE

- 1. Did your school receive additional K-3 classroom teacher positions to reduce class size under the HP Schools Initiative in those grades for 2005-2006 school year?
 - a. If no, why. Was reduced class size already implemented?
- 2. Over five years of implementation, what changes occurred in the K-3 classrooms with respect to teaching and learning that can be attributed to the reduced class size HP Schools Initiative? [Probe: What changes in student behavior and academic achievement did you notice? Were there changes in instruction?]
- 3. What differences have you noticed in grade 4 and 5 students who participated in the HP Schools Initiative, in contrast to those who did not?
- 4. With the provision of additional teaching positions under the HP Schools Initiative, teaching assistant positions were eliminated. Did your school retain its teaching assistant positions in grades K-3 during in the 2005-2006 school year?

	Yes, all		Yes, some		None	Not applicable
Kindergarten	□ Full time	□ Part time	□ Full time	□ Part time		
1 st Grade	□ Full time	□ Part time	□ Full time	Part time		
2 nd Grade	□ Full time	□ Part time	□ Full time	Part time		
3 rd Grade	□ Full time	□ Part time	□ Full time	Part time		

- a. *If yes,* how was their role changed (if at all) in classrooms where the class size was also reduced? Are teachers who have teaching assistants using them any differently given the smaller number of students in their classes?
- 5. Since 2002, how many teaching assistants has your school retained?
- 6. Did your school lose teaching assistants as a result of reduced class sizes?
 - a. *If so,* have the benefits associated with reduced class size outweighed the loss of the teaching assistants in grades K-3? How so?
- 7. What do you believe is the added value (if any) of the presence of the teaching assistants in a reduced class size setting?

SECTION III - PARENT INVOLVEMENT

1. Were HP funds used to hire one additional instructional support staff person at your school for the 2005-2006 school year?

Note - if respondent says no or don't know, skip to Q.5

- 2. What type of instructional support position was allotted to your school? [Note: Below is a list of possible answer choices.]
 - o K-3 Classroom teacher
 - o Curriculum Specialist (Math, Science)
 - Specialty teacher (Art, Phys Ed, Music)
 - Staff Developer
 - o Parent Liaison or Parent Coordinator
 - o Literacy Specialist
 - o Guidance Counselor
 - Social Worker
 - o Other, please specify:
- 3. What were the main responsibilities of the additional instructional support person?
- 4. Does the added instructional support staff person have any ancillary responsibilities related to improving parent involvement in the school? *If yes*, please describe.
- 5. In your opinion, has parent involvement increased at your school during the 2005-2006 school year *because* of the HP Schools Initiative?
 - a. *If yes*, what aspect(s) of the HP Initiative (if any) has caused an increase in parent involvement at your school?

SECTION IV – EXTENSION OF TEACHER CONTRACTS FOR PROFESSIONAL DEVELOPMENT

1. Was the 5-day extension of teacher contracts for professional development implemented during the 2005-2006 school year?

Note - if respondent says none, skip to Section V.

2. What are the major content areas or topics covered during the 5-day contract extension professional development that has been offered at your school? [Probe: Individualized instruction, project-based instruction, increasing parental involvement, specific strategies for teaching students with disabilities, Specific school-reform models (e.g. Comer School Development Program).]

SECTION V - EXTENDED SCHOOL YEAR INITIATIVE FOR STUDENTS

1. Did your school implement the extended school year component for students in the 2005-2006 school year?

Note – if respondent says none, skip to Section VI.

- 2. For this next question, I will read a list of possible answer choices. Please let me know if each statement applies. How was your school year extended by five additional days?
 - Holding school on Saturdays
 - Holding school during teacher workdays
 - o Offering a 5-day summer program
 - Starting school 5 days earlier
 - o Extending the school year by 5 extra days
 - o Holding school for students during school holidays or breaks
 - o Providing an after-school program
 - o Were there any other ways you extended your school year? If yes, how so?

Section VI - Effectiveness of Implementation

- 1. Thinking about all four of the components of the HP Initiative, what combination, if any, do you believe contributed to improved student achievement at your school?
 - Reduced class sizes in grades K-3
 - o Extended teacher contracts for professional development
 - Extended school year for students
 - Added instructional support position
 - o None

Reflecting on the 2005-2006 school year of HP implementation, what challenges were still problems at your school. [Probe: Lack of teacher assistants in the K-3 classrooms, retaining experienced teachers because of the 10 additional workdays required at the HP schools, not enough support from parents. To what degree are these still problems?]

- 2. From what you know, are teachers in your school resistant to working the 10 additional days required by the HP Schools Initiative (5-day contract extension PD and the 5 days for the extended school year), despite being compensated for this time?
- 3. What changes (positive or negative) have taken place at your school because of the implementation of the HP Schools Initiative?
- 4. What school-based plans (if any) have been made to sustain the components of the HP Initiative once state funding is no longer available? Please describe.

SECTION VII - WRAP UP

1. Finally, what changes can you suggest to improve the overall design or implementation of the different components to the HP Initiative?

Fourth Annual Evaluation of the High-Priority Schools Initiative Comparison School Principal Interviews

SECTION I - BACKGROUND

1. Confirm title of respondent:

SECTION II - REDUCED CLASS SIZE

1. What initiatives (if any) has this school implemented during the 2005-2006 school year that led to reduced class sizes in grades K-3? [Probe for the different funding sources used to support reduced class size, average class sizes.]

Note – if respondent says none, skip to Q.3

- a. Has any special staff development been provided for those teachers whose class sizes have been reduced? By this we mean training that was specially offered to help them be more effective in a smaller class setting. If *yes*, please describe.
- b. From what you've observed as a result of the reduced class size, what changes have occurred in classrooms with respect to teaching and learning? [Probes increased test scores, more time spent on instruction, less time spent on classroom management/student discipline, greater individualized instruction, increased use of small group or project-based work, greater parent involvement, greater use of alternative assessment]
- c. What types of challenges or constraints (if any) has your school encountered in trying to implement the reduced class size initiative?
- 2. Were your smaller K-3 classrooms staffed with teaching assistants in the 2005-2006 school year? If so, at which grades?
 - a. From what you've observed, do teachers use their teaching assistants differently now that they have smaller classes? In other words, how has the role of the teaching assistant changed (if at all) in classrooms where the class size was reduced?
 - b. What do you believe is the added value (if any) of the presence of the teaching assistants in a reduced class size setting?
- Did your school implement any type of extended school year program for students in the 2005-2006 school year? [Probe – summer programming, after/before school programs, year-round schooling, Saturday and/or school break/holiday weekend programming, extended school year calendar]
 - a. If *yes*, please describe who participated, how students are selected, what types of instructional activities were offered.
 - b. In your opinion, to what extent have these extended school year programs led to improved academic achievement for participating students? Why do you think that?

SECTION III - PARENT INVOLVEMENT

- 1. Did your school have a parent coordinator, parent liaison, or some other staff member who has the specific responsibilities of planning and conducting school-wide parent involvement? [If yes, ask for the name of the position (and the two follow-up questions below).]
 - a. What were the main responsibilities of the staff person you just mentioned? [Probe: What kinds of activities does the parent coordinator organize or facilitate for parents in your school?]
 - b. In your opinion, what effect (if any) has this staff person had on parental involvement in your school? Would you say it has been neutral, positive, or negative? Why do you think that?

SECTION IV - WRAP UP

1. Finally, from what you know about the HP Schools Initiative, what changes can you suggest to improve the overall design or implementation of the different HP Initiatives – reduced class size, added instructional support position, extended teacher contracts for PD, and extended school year for students?

Thank you for your time.