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ABSTRACT

The Chapter 1 Successful Schools project is the product of collaborative development efforts by the Florida Department of Education, the state's Chapter 1 Evaluation Advisory Panel, and Technical Assistance Centers contracted through the Educational Testing Service. This report covers the initial pilot phase of the Successful Schools project. It is a companion document to the summary report released in October 1994. It contains a number of technical papers on which research summaries, findings, and conclusions were based. It is organized to be generally consistent with the summary report, and contains the following sections: (1) introduction; (2) impact of school poverty on Florida's elementary schools; (3) conditions related to student achievement and learning environment; (4) successful high poverty schools; (5) data base profiles of participating schools; (6) school staff and parent perceptions of effective school components; (7) successful schools staff survey, technical report; (8) what parents did and did not say about pilot project schools; (9) parent survey responses; (10) interview analysis from the successful high poverty schools study; and (11) procedural analysis of on-site visits in the Successful Schools study. Twenty-five tables illustrate the discussions. (Contains 22 references.) (SLD)

Chapter 1

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Technical Papers

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Section 1--Introduction to the Chapter 1 Successful Schools Project

For over twenty five years, Title I/Chapter 1 programs have been in the forefront of efforts to overcome some of the problems associated with high poverty schools, especially low scores on achievement tests in reading and math. While the overall success of these programs is a topic of continuing debate, there is no doubt that some high poverty schools have been able to overcome the odds against high student performance. Accordingly, the overall purpose of this project is to look within selected high poverty schools with Chapter 1 programs to discover what features distinguish successful, vibrant school programs from their counterparts where low student performance is the predictable norm.

The Chapter 1 Successful Schools project is the product of collaborative development efforts by the Florida Department of Education, Florida's Chapter 1 Evaluation Advisory Panel (composed mainly of district evaluation personnel), and Technical Assistance Centers (contracted through ETS, Atlanta). Over its entire scope, the Chapter 1 Successful Schools project is envisioned as a two to three year development and implementation effort which seeks to:

- Establish data base analysis protocols for use with Chapter 1 evaluation results, as well as information from Florida's School Reports;
- Develop survey instruments and analysis procedures for use with school staff and parents;
- Develop on-site observation guidelines, instrumentation, and analysis procedures;
- Identify distinguishing attributes of unusually effective Chapter 1 and school programs, develop training materials, and assist Chapter 1 schools in their planning and implementation efforts associated with Schoolwide Projects; and
- Provide leadership in the larger state initiative to provide strategic data for school improvement under Blueprint 2000, which also includes technical assistance linkages between successful schools and those that need extra help.

This report covers the initial pilot phase of the Successful Schools project, which began in September, 1993. The specific objectives of the pilot have been accomplished and include:

- Analyzing data from the 1992-93 Florida School Reports and related sources to document and verify the impact of poverty on elementary schools, as well as conditions associated with higher achievement in schools that serve large numbers of children from low-income families;

- Adapting and field testing staff and parent survey instruments that were based on previous, "effective" schools research; and

- Visiting a sample of high poverty schools to observe and conduct interviews to enrich paper and pencil survey data.

This is a companion document to the Successful Schools summary report to be released in October of 1994. It contains a number of technical papers upon which research summaries, findings and conclusions were based. It is organized to be generally consistent with the summary report and contains the following sections:

Data Base Analysis

Section 2: Impact of School Poverty on Florida's Elementary Schools
Section 3: Conditions Related to Student Achievement and Learning Environment
Section 4: Against All Odds: Successful High Poverty Schools
Section 5: Data Base Profiles of Schools that Participated in the Pilot Phase of Florida's Successful Schools Project

Staff and Parent Surveys

Section 6: School Staff and Parent Perceptions of Effective School Components In the Florida Successful Schools Project
Section 7: Successful Schools Staff Survey, Technical Report
Section 8: What Parents Said (and Did Not Say) about Pilot Project Schools
Section 9: Parent Survey, Responses to Open-Ended Questions

On-Site Observation and Interviews

Section 10: Successful High Poverty Schools Study, On-Site Interview Analysis
Section 11: Successful Schools Study, Procedural Analysis of On-Site Visits

These papers were developed as a joint effort between the Florida Department of Education, the Chapter 1 Evaluation Advisory Panel (see list on page 86), the Technical Assistance Centers in Atlanta.

Section 2: Impact of School Poverty on Florida's Elementary Schools

The purpose of this section of the interim report on Florida's Chapter 1 Successful Schools Project is to examine relationships between school poverty and some of the many factors that shape our perceptions about the quality of education in Florida schools. This discussion helps establish the broader context of the Successful Schools study--which seeks to identify the attributes of effective, high poverty schools--by re-examining the impact of school poverty on student achievement, learning environment, student characteristics and school inputs. As will be shown, the concentration of poor students in schools affects almost everything about schools that is measured and reported uniformly through the state data base.

Twenty school related variables were chosen for analysis within the context of low, medium, and high poverty schools. Many of the variables can be tied directly to one or more of the state goals outlined under Blueprint 2000; the remainder are related to student characteristics within schools or the human and financial resources which sustain them. The majority of data used to examine the impact of poverty was taken directly from the 1992-93 Florida School Reports--elementary version.

School Poverty

From a national perspective, poverty among American children remains a pervasive, negative influence on educational excellence, despite years of concerted efforts to alleviate the causes of poverty and renewed efforts at school reform. A generation after the great "War on Poverty" was declared, the National Assessment of Chapter 1 (1992) indicated that conditions have not improved:

> As poverty among the elderly fell in the 1980's, children became the poorest of all Americans. In 1991, more than 13 million children in the United State--more than one in five--live in families with income below the poverty line (Committee on Ways and Means, 1992). In 1990, 8.6 million school-age children (ages 5-17) were living in poverty (US. Department of Labor, 1990).

Recent increases in the number of poor children in Florida are not as high as in many other states, but the overall poverty level remains slightly higher than the national average. According to Hodgkinson (1993):

> The number of children in Florida who are poor increased from 18.5 percent to 19.9 percent during the 1980's, while nationwide this figure increased from 16.0 percent to 19.5 percent.

Coming from a low income background is one thing, attending a high poverty school is quite another. However debilitating family poverty may be on individual children, contemporary research studies point out that high concentrations of poor students in schools, not the poverty status of individual students, is the major problem. In a KAPPAN special on the Children of Poverty (1990), the featured authors (Knapp and Shields) summarized the problems associated with high poverty schools:

> The challenge of educating the children of poverty has long been recognized as a difficult one. Not only do many of these children perform poorly on academic tasks,

but also the typical school serving large numbers of such children faces a variety of problems that pose barriers to providing a high-quality education, among them: high rates of mobility among students' families, a high incidence of severe emotional or behavioral problems among students, large numbers of students with limited proficiency in English, low staff morale, and inadequate facilities and resources. The children from poor families and, to some extent, all children who attend such schools--are at a disadvantage in the pursuit of learning.

The poverty status of individual students, while important, has little practical significance in isolation of the school setting in which instruction is provided.

The general descriptions of high poverty schools suggest conditions which are antithetical to the current vision of school reform and the lofty goals of Blueprint 2000. Schools that serve large numbers of poor students are characterized as having low student achievement, discipline and attendance problems, high turnover rates among students and teachers, and inadequate resources. Under Blueprint 2000 in Florida, the aim is to have all students achieving at high levels in safe and orderly schools with adequate facilities, and resources.

If conditions in high poverty schools are as bad as the current literature suggests, then these schools would have to be the primary targets for concerted improvement activities. To do otherwise would ignore the tremendous liability associated with business as usual in high poverty schools. But first, it is important to verify the general condition of schools serving large numbers of poor children in our state with sufficient detail that constructive improvements can be made and recognized. In the process of investigating the effects of poverty in general, it will also productive to search for counter-examples--high poverty schools that actually do quite well and could serve as appropriate models for less successful, but demographically similar schools.

School Poverty Classification

Though far from perfect, one of the most common and most convenient ways of looking at school poverty is in terms of the relative concentration (percent) of students who receive Free or Reduced Price Lunch (FRL). In 1992-93 the percent of elementary students receiving federally subsidized meals in Florida ranged from zero to 99% with 46.7% being the median. With the aim of dividing schools into low, medium, and high poverty groups, a classification scheme established by Jung and Orland (1986) was used to determine which schools were in the lower, middle and upper quartiles of poverty according to the percent of students on Free or Reduced Price Lunch.

Florida schools which ranked among the lowest quartile in terms of the percent of student membership on FRL (zero to 29.2%) were classified as low poverty. Schools in the middle two quartiles of students on FRL (29.3% to 64.7%) were classified as medium poverty. Schools in the upper quartile of students on FRL (64.8% to 98.9%) were classified as high poverty. Using this approach, 353 (or 24%) of Florida's elementary schools were classified as low poverty, 737 (or 51%) were classified medium poverty, and 368 (or 25%) were classified high poverty. The total number of elementary schools in the analysis was 1,458.

Analysis of School Report Data

Almost all of the variables used to examine school poverty came directly from data contained in the 1992-93 Florida School Reports, Technical Version. These data were extracted from the Department of Education's Student and Staff Data Bases and were summarized into school level aggregates that were printed for all elementary, middle and high schools in the state. Despite extensive efforts to verify School Report data, there remains the possibility that inaccuracies exist due to the fact that the data are reported from individual schools and there may be occasions where the data do not receive adequate quality control. However, once printed, the Florida School Reports become official records.

Data from the Florida School Reports consist mainly of percentages or rates, (e.g. the percent of students scoring above the national median on standardized reading tests, the school's attendance rate); however, some School Report data were expressed in absolute terms (e.g., expenditures per Full-Time Equivalent student). For purposes of uniform analysis, Florida School Report data were considered to be generally ordinal in nature; that is, the values within a particular set of figures can be compared to others in the same set in terms of being higher or lower, but the differences are not uniform. In this type of data system, median values are probably the most appropriate expression of trends. Accordingly, analyses were conducted using a non-parametric test of medians (Siegel, 1956; Norusis, 1992), which can be viewed as a special case of the classic chi-square analysis. Here, values within each group of schools (low, medium, and high poverty) are categorized as being either greater than or less than (or equal to) the median for the total group of elementary schools.

The statistical results are chi-square values and their associated probabilities that categories of poverty are independent of (unrelated to) the particular School Report variable being considered. However, in the display of results, group medians are shown in order to facilitate comparisons between low, medium and high poverty concentration schools. It is important to note that this is a display convention and is not indicative of the analysis procedure which does not actually compare medians from the various groups.

Additionally, estimates of relative effect size are provided for each variable. Effect size classifications, when used as general interpretation guidelines, can provide useful information when sorting through large amounts of data. Accordingly, effect size calculations were made using a procedure described by Cohen (1988) which is appropriate for the types of data and the relationships included in this study. Effect sizes were classified in terms of the impact of increasing poverty levels on the variables examined. Using Cohen's protocol for interpretation of results, effect sizes of .05 through .09 are considered generally small (S); values of .10 through .19 reflect medium (M) effects, and values of .20 and above are classified as large (L) effects. In this analysis, effect size estimates represent the sum of discrepancies between the expected proportions of cases above and below state medians, given no relationship with poverty, and actual proportions observed for low, medium, and high poverty schools.

School Poverty and Student Achievement

In the area of student achievement, three outcome measures were chosen for analysis, all of which were based on the performance of fourth grade students. These achievement measures include: (1) the percent of students scoring above the national median on norm-referenced tests in reading comprehension, (2) the percent scoring above the national median on norm-

referenced tests in math applications or its equivalent and (3) the percent scoring at or above the midpoint of the state writing assessment program. As shown in Table 1, significant differences ($p<.001$) among low, medium and high poverty schools as well as large effect sizes were found in all three student achievement variables examined.

Table 1: Impact of Poverty on Student Achievement

Achievement Variable (4th Grade Students)	Medians by School Poverty Level				Chi-Square	p	Effect Size
	Low	Medium	High	Total			
% Scoring above National Median--Reading	64%	49%	25%	47%	356.2	<.001	.26 (L)
% Scoring above National Median--Math	70%	56%	37%	54%	303.9	<.001	.22 (L)
% Scoring at or above Scale Midpoint--Writing	28%	19%	9%	18%	281.2	<.001	.20 (L)

Reading achievement is certainly one of the first measures of student performance that comes to mind when judging school effectiveness. *Do students in high poverty schools score lower in reading than students in other schools with fewer students from low income families?*

As shown above, there is a clear indication that reading achievement was adversely affected by the relative poverty level in Florida's elementary schools. Reading achievement in high poverty schools tends to be far below the overall state median and even further below the achievement level of students in low poverty schools. The percent of fourth graders scoring above the national median in high poverty schools was about two and a half times less than in low poverty schools. Nevertheless, there were 60 high poverty schools (16%) that had reading scores above the statewide median for all schools. Even more encouraging, 32 high poverty schools (9%) had reading scores above the median for low poverty schools.

Do students in high poverty schools also score lower in math? Like reading, math would likely be a companion indicator of school effectiveness to round out the view of student performance on nationally standardized tests. From the data in Table 1, it can be seen that math achievement was also dependent on the poverty level in schools. Students in high poverty schools tended to score lower than the median for the state and much lower than students in low poverty schools. The percent of fourth graders scoring above the national median in high poverty schools was about half that of low poverty schools. However, 75 high poverty schools (20%) had aggregate math scores at or above the statewide median for all schools; 34 (or 9%) had scores at or above the median for low poverty schools.

How do students in high poverty schools perform on tasks requiring higher order thinking skills, such as writing? Writing performance was not scored on the same basis as reading and math. Rather than using national averages, writing performance was expressed in terms of the percent of students whose compositions were judged to be of at least minimal quality ("3" or better[1]) as defined by the *Florida Writes!* assessment program.

[1]A paper scored 3 generally focuses on the topic but may contain extraneous or loosely related information, exhibits some evidence of an organizational

As shown in Table 1, student writing performance declines as school poverty level increases. While the median percent of all fourth graders scoring at the midpoint or higher on a scale of 1 to 6 was only 18%, the figure for high poverty schools was less than 10% versus nearly 30% in low poverty schools. On a more favorable note, there were 41 high poverty schools (11%) where group performance was at or above the state median. Though rare, there were 6 high poverty schools (2%) whose writing scores were above the median for low poverty schools.

Summary

Median tests and their associated effect sizes show a consistently large, negative relationship between poverty level and student achievement variables. Given that student achievement will likely be among the most prominent of all accountability indicators used to judge schools in their efforts to accomplish Blueprint 2000's goals, it is clear that the lowest performing schools will most likely be those with the highest concentrations of students from low income families. Without careful attention to these schools, the issue of poverty will overwhelm the good intentions of Florida's school reform policy.

School Poverty and Learning Environment

Three variables that reflect on the opportunity for learning and pupil progress were chosen from the school report data base for analysis against the backdrop of poverty concentration: (1) the percent of students promoted, (2) school attendance rates, and (3) the out-of-school suspension rate. While these variables may not be as prominent as student achievement, they do provide insights into the learning environment. Also, it should be noted that school report data on promotion, attendance and suspension rates cover all grade levels, not just fourth grade as was the case for student achievement. For all three variables in this group, there were significant differences ($p < .001$) among low, medium and high poverty schools.

Table 2: Impact of Poverty on Promotion, Attendance, and Suspension Rates

	Medians by School Poverty Level						
Data Base Variable (All Grade Levels)	Low	Medi-um	High	Total	Chi-Square	p	Effect Size
Promotion Rate	97%	96%	91%	95%	207.5	<.001	.14 (M)
Attendance Rate	95%	94%	94%	94%	192.8	<.001	.13 (M
Out-of-School Suspension Rate	.5%	1.2%	1.6%	1.1%	88.4	<.001	.06 (S)

The promotion rate in a school reflects the degree to which students are progressing in their development of skills which are deemed necessary in each Florida school district. From a research perspective, retention in grade or otherwise falling behind one's chronological peers is commonly viewed as an at-risk condition that is strongly associated with school failure and a

pattern, has little development of supporting ideas, and may contain some errors in spelling and punctuation conventions.

propensity toward dropping out. This is especially important in Florida, since fully 81% of all dropouts in 1992-93 were one or more years over age. *Are students in high poverty schools promoted at a lower rate than students in other schools?*

The data in Table 2 show that a school's promotion rate is somewhat dependent on its poverty level. The median promotion rate in high poverty schools was about five percentage points less than the statewide figure for all schools and about six percentage points less than in low poverty schools. At the same time, there were a number of exceptions; 72 high poverty schools (20%) had promotion rates equal to or higher than the statewide median and 34 (or 9%) had promotion rates that were the same or better than in low poverty schools.

How does student attendance in high poverty schools compare? While school attendance[2], at least in theory, is related to students' opportunity to learn, differences in actual rates among low, medium, and high poverty schools were relatively small. Just over one percent separates the medians for high poverty versus all schools and less than 2% separates them from low poverty schools. Though poverty level was found to be statistically related to attendance and its associated effect was classified as medium, the absolute difference between group medians was extremely small.

Suspension, especially the kind that physically removes children from the learning environment, is typically viewed as a negative reflection on the safe and orderly environment which good schools are supposed to provide. This is especially true in view of the statewide effort to make in-school suspensions a viable alternative to pushing children out, unless the nature of the behavioral problem is severe. *Are students in high poverty schools suspended more frequently?*

Though relatively low in most cases, out-of-school suspension rates are at least partially dependent on school poverty. In high poverty schools the median suspension rate was over three times higher than in low poverty schools. While statistically significant, the effect size of poverty on suspension rates was relatively small, which is probably a reflection of suspension policies which affect all schools in a particular district. As with other variables, many high poverty schools had low suspension rates. In fact, 138 high poverty schools (38%) had rates equal to or lower than the state median, and 96 (or 26%) had rates equal to or lower than the median for low poverty schools.

Summary

While not as dramatic or newsworthy as student achievement, promotion, attendance, and suspension rates do have a bearing on the quality of education available to students in Florida. The summary findings in this area indicate that schools which serve a proportionately large number of poor children have lower promotion and higher out-of-school suspension rates. (While attendance rates were also lower, there do not appear to be substantive differences.) Effect sizes were found to be medium to small in contrast with large effect sizes for student achievement. Also, there were notable exceptions to the general trend--many high poverty

[2]The relative lack of distinction among attendance rates may be a function of how they were calculated in the 1992-93 Florida School Reports. Attendance rates reflected the number of days present divided by the number of days present + number of days absent, regardless of the length of school enrollment.

schools have promotion and suspension rates that rival even low poverty schools.

Poverty and Student Characteristics

Student characteristics which are unique to high poverty schools need to be considered for at least two reasons. First, it is important to understand the school clientele who are affected in high poverty schools. Second, such knowledge can facilitate the establishment of viable technical assistance linkages between successful and not so successful school sites. The variables under investigation in this section of the report do not reflect student achievement or related indicators, per se; rather, they help to narrow the focus of research so that positive exemplars among high poverty schools can be linked to appropriate settings where improvement efforts are needed the most.

Three indicators of uniqueness among students who attend high poverty schools were chosen for study--(1) percent of school membership who were minority students[3], (2) percent of Limited English Proficient (LEP) students, and (3) school mobility rate[4]. There were significant differences ($p < .001$) among low, medium and high poverty schools on all three student characteristic variables, but with varying effect sizes. The data in Table 3 suggest that high poverty schools tend to be considerably different from other schools by virtue of their minority composition and, to a lesser degree, their higher mobility rates. On the other hand, the proportion of students who need special services in English for Speakers of Other Languages (ESOL) is less affected by poverty level, in Florida at least.

Table 3: Impact of Poverty on Student Characteristics

Data Base Variable	Medians by School Poverty Level				Chi-Square	p	Effect Size
	Low	Medium	High	Total			
Minority Students	21%	28%	76%	31%	335.3	<.001	.23 (L)
Limited English Students	1.4%	0.6%	4.8%	1.3%	41.1	<.001	.03
School Mobility	25%	35%	44%	35%	146.6	<.001	.10 (M)

Are minority students concentrated in high poverty schools? The data in Table 3 reveal a very strong relationship between the proportion of minority students in a school and its poverty level. While the median percent of minority students across the state converts to about one in three students (31%), the ratio jumps to over three out of four in high poverty schools. This is in stark contrast to a student membership of about one out of five (21%) minority children in low poverty schools.

[3]Minority students include Black, Hispanic, Asian or Pacific Islander, and American Indian.

[4]Mobility rates in the 1992-93 Florida School Reports were derived through a comparison of enrollment at the beginning of the school year with the combined total of enrollments, reentries, and withdrawals occurring during the school year.

Exceptions to this trends are rarer than for most other variables examined; only 35 high poverty schools (10%) were below the state median for minority composition and only 13 (or 4%) were below the median for low poverty schools. These data argue strongly that minority composition will be an important consideration when developing technical assistance linkages between successful schools and those that clearly need to improve student achievement and/or processes. The most help for low performing schools can be gained from schools with similar student characteristics.

Is there a higher prevalence of Limited English Proficient students in high poverty schools? Though statistically significant, the relationship between the percent of LEP students in a school and its poverty level is weak. On the one hand, high poverty schools have a far greater proportion of LEP students than observed statewide. On the other hand, the overall trend is contrary to the pattern observed so far--medium, not low, poverty schools have the smallest percentage of LEP students. Regional differences probably account for more difference among schools than does poverty, hence its negligible effect size.

A high degree of student turnover or mobility is often cited as a characteristic of high poverty schools, the premise being that economic hardships make it difficult to maintain a permanent residence. *Are mobility rates in high poverty schools higher than in other schools?* The data in Table 3 indicate that mobility is somewhat dependent on school poverty level. The median mobility rate for high poverty schools was nine percentage points higher that the statewide figure and 19 percentage points higher than observed for low poverty schools. While about a quarter of high poverty schools had mobility rates below the state median, only 8% had rates below the median for low poverty schools. The existence of a significantly higher student turn over rate can be seen to affect the opportunity which students have to learn in a stable environment, as well as the opportunity which teachers have to provide adequate instruction.

Summary

Analysis of the relationship between poverty levels and selected student characteristics yields somewhat mixed results. On the one hand, there is a very strong relationship between high poverty and high minority composition in schools. The relationship between poverty and student mobility was considerable, as well. These findings are consistent with general trends nationwide. On the other hand, a very small effect size was found for the percent of Limited English Proficient students in low, medium and high poverty schools.

Poverty and School Inputs

School inputs reflect the adequacy of human and financial resources which schools have at their disposal to meet the high standards for student learning which are expected under Blueprint 2000. The Florida School Report variables chosen for closer examination include:

- ✓ School size,
- ✓ Class size,
- ✓ Support staff,
- ✓ "Regular" program expenditures, consisting of
  - ✓ Per pupil expenditures from general, plus
  - ✓ Federal fund sources,

- ✓ First year teachers,
- ✓ Experienced teachers
- ✓ Teachers with advanced degrees,
- ✓ Teacher salaries, and
- ✓ Minority teachers.

Though significant differences ($p < .001$) were found between low, medium and high poverty schools on all twelve school input variables; their relative effect sizes (practical significance) ranged from minimal to large.

Many of the same input variables were examined in a recent, national study of the impact of poverty on schools, "Translating Dollars into Services: Chapter 1 Resources in the Context of State and Local Resources for Education," (Chambers, et al, 1993). This study looked at such inputs as regular funding per pupil, number of staff (teachers and aides), teacher salaries, years of experience and degree level, all from a sample of schools in five selected states, not including Florida. Similar techniques were applied to the current study of poverty in Florida schools. Results from the two studies can sometimes be compared to assist in interpretation.

Table 4a: Impact of Poverty on School Inputs
School Size, Class Size, and Support Staff

Data Base Variable	Medians by School Poverty Level				Chi-Square	p	Effect Size
	Low	Medium	High	Total			
School Size	765	682	632	685	26.7	<.001	.02
Class Size (K - 5)	25	25	24	25	24.3	<.001	.02
Number of Support Staff (Per 500 Students)	12	15	19	15	64.3	<.001	.05 (S)

One of the most obvious features about schools is the number of students they serve. *Do high poverty schools tend to serve significantly more students than state averages? More than in low poverty schools?* These questions were examined by looking at the total number of students enrolled during the October, 1992 Fall Student Survey count. The data in Table 4a show that while there is a statistically significant relationship between school size and poverty level, its effect size is minimal. Nevertheless, an examination of median school membership suggests that high poverty schools actually have fewer students than medium or low poverty schools, but the differences were relatively small and apparently lacked consistency within poverty categories.

Beyond the sheer numbers of students attending a particular school, crowded classrooms are often cited as a condition that characterizes high poverty schools to the detriment of instructional quality. *Do high poverty schools have larger class sizes?* The data in Table 4a show that the effect of school poverty on class size[5] was statistically significant, but minimal.

[5]For the 1992-93 Florida School Reports, class-size was determined by the

According to data in the Florida School Reports, class size actually decreases as the concentration of poor students increases.

In addition to teachers and administrators, an important ingredient of a school's human resources can be found in its support staff. Beyond a standard complement of clerical, food service, transportation and custodial staff, there can be teachers on special assignment, administraive assistants, health service providers, teacher aides, tutors, computer specialists, resource officers--and many others. *Do high poverty schools employ more support staff than medium and low poverty schools?*

In order to address this question, the relative number of support staff was calculated per 500 students, to put the figures on the same basis for all schools, as was done in a related national study Chambers, et al (1993). The data in Table 4a suggest that high poverty schools do have substantially higher numbers of support staff than are found in low or medium poverty schools. On average, high poverty schools had about four more support staff than medium poverty schools and about seven more than low poverty schools (per 500 students). This finding is consistent with the national study of Chapter 1 resources, but needs to be further examined in terms of the precise composition of "support staff," which is not clearly specified in the Florida School Reports. Also, differences in training and assignments need to be explored, especially in view of a recent position paper for the International Reading Association, Rubin (1994) asserts that " . . . 85% of Chapter 1 schools with high poverty levels rely on untrained aides . . . individuals with little or no training above a high school diploma."

Poverty and Student Expenditures

Types and amounts of financial resources are among the most important school inputs that can be readily identified. Florida School Reports contain several indicators of resource availability with "Regular Program" expenditures[6] being perhaps the most common. Regular program expenditures include two major components: general funds (local and state general revenue) and federal funds (primarily Chapter 1 for elementary schools). The overall research question was: *Do high poverty schools have fewer financial resources than their lower poverty counterparts in the same district? Are there differences in types of funds expended?*

Financial data tend to be complicated by unequal expenditures among school districts and type of school. For example, districts with a larger tax base and/or higher cost of living spend more than other districts; the cost of instruction in high schools is typically more than required in elementary schools. One way to isolate the impact of poverty from other factors is to look at the difference between each school's per pupil expenditure and their own district's average.

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unduplicated count of students enrolled in specified courses divided by the unduplicated count of teachers in those same courses. Also, the following disclaimer appears in the Technical Version: "The average class-size may or may not reflect the actual number of students in a given class. However, this does represent an average number of students within the subject areas or grades indicated."

[6]Expenditures include: salaries + benefits + purchased services + materials and supplies + other direct expenses + capital outlay + school indirect cost + district indirect cost.

Accordingly, the data in Table 4b show expenditure differences in low, medium and high poverty schools as a percent of their district's average expenditures. Data are provided for so called "regular" program funds, as well as the two major components of such funds--general and federal.

Table 4b: Impact of Poverty on School Inputs
"Regular" Program (General + Federal) Expenditure Differences
As a Percent of the District Average

	Medians by School Poverty Level						
Percent More or Less Than District Average	Low	Medium	High	Total	Chi-Square	p	Effect Size
"Regular" Per Pupil Expenditure Differences	-5%	-1%	+8%	0%	117.3	<.001	.08 (S)
General Fund Component	-3%	-2%	-1%	-2%	15.2	.001	.01
Federal Fund Component	-79%	+25%	+147%	+28%	289.3	<.001	.20 (L)

The data in Table 4b suggest that "regular" expenditures are at least somewhat dependent on the poverty level of schools, but not in the direction one might expect. High poverty schools had sufficient resources to spend about 8% more per pupil than their district average and over 13% more than in low poverty schools. Thus, contrary to popular notions, inadequate resources do not necessarily characterize schools that serve large numbers of students from low income families. However, the whole story is not revealed by looking simply at what the Florida School Reports show as "regular program" expenditures.

Analysis of the general fund component of regular program expenditures indicated a statistically significant, but minimal impact associated with school poverty. The data reflected minimal differences among low, medium and high poverty schools, which if anything favor favor schools that serve increasing larger numbers of children from low income families. This finding is generally consistent with the national study of Chapter 1.

The federal fund component was calculated by subtracting general expenditures from what were called "regular" expenditures in the 1992-93 Florida School Reports. What remained for elementary schools was mainly Chapter 1 funds that are supposed to supplement local and state resources. The data in Table 4b reveal relatively large differences that favor high poverty schools over both medium and low poverty schools. This finding would suggest that in general Chapter 1 funds in Florida are concentrated where there are large numbers of children from low income families, as intended by federal legislation.

Table 4c: Impact of Poverty on School Inputs
Teacher Experience, Training, Salaries, and Minority Composition

Data Base Variable	Medians by School Poverty Level				Chi-Square	p	Effect Size
	Low	Medium	High	Total			
First Year Teachers	4%	4%	8%	5%	72.5	<.001	.05 (S)
Experienced Teachers	59%	56%	48%	55%	46.1	<.001	.03
Teachers with Advanced Degrees	35%	31%	31%	32%	22.3	<.001	.02
Teacher Salaries as a % of The District Average	+ 1%	+ 1%	− 2%	0%	56.2	<.001	.04
Minority Teachers	14%	13%	28%	16%	146.4	<.001	.10 (M)

The experience level of teachers in a school is sometimes cited as a factor that affects the quality of instruction and also differentiates schools serving large numbers of poor students. *Do high poverty schools have more inexperienced teachers?*

The proportion of first year teachers in a school reflects the lowest level of instructional experience among a school's certified staff. The data in Table 4c provide support for a statistically significant, but relatively small relationship between the percent of first year teachers and school poverty level. Closer examination shows that the median percent of first year teachers in high poverty schools was about double what was found in both low and medium poverty schools. Also, it is important to note that the percent of first year teachers was exactly the same in low and medium poverty schools. Since the difference was concentrated in high poverty schools, it is possible that the educational significance of this variable is somewhat understated in the statistical results. Rather, these data would tend to confirm that high poverty schools typically employ more inexperienced (first year) teachers. These findings are generally consistent with the national study of Chapter 1 resources previously cited.

The proportion of teachers in a school who have at least ten years' experience and have settled into the profession is another variable that can have at least an indirect influence on the quality of instruction available in a school. *Do high poverty schools have fewer seasoned instructional personnel?*

The data in Table 4c show a statistically significant, but minimal relationship between teacher experience and school poverty levels. As expected, high poverty schools are in fact staffed by proportionately fewer experienced teachers, those with at least 10 years in the profession. More than anything else, these data simply complement the previous finding that showed high poverty schools have more first year teachers.

The proportion of teachers with advanced degrees is indicative of the relative level of training that teachers have in a particular school. While the differences among high, medium, and low

poverty schools were statistically significant, the effect size was negligible for this variable. However, this finding is generally consistent with the trend observed in the national study of Chapter 1.

Difference in teacher salaries among low, medium and high poverty schools can also be viewed as an indirect reflection of how resources are expended to provide the quality of instruction necessary for attainment of high student performance. *Do teachers in high poverty schools earn less on the average than teachers in other schools in the district?*

Because teacher salaries vary considerably between school districts, it was necessary to adjustment for such differences before examining the impact of poverty. This was done by subtracting the district average from teacher salary figures at each school and then calculating the percent difference relative to the district average.

Table 4c shows that the difference between teacher salaries at schools and their respective district averages were significantly, but minimally related to school poverty. Salaries in high poverty schools were about 2% less than the state average and about 3% less than in low poverty schools. Since pupil expenditures were greater in high poverty school, these results only clarify that those extra resources were not spent on more experienced or trained teachers. This finding does not corroborate the substantial differences in teacher salaries found in the national study of Chapter 1 schools.

As previously shown, high poverty schools tend to have more minority students. What about instructional staff? *Do high poverty schools also tend to have more minority teachers?*

The data in Table 4c show that the proportion of minority teachers in a school is somewhat dependent on its poverty level. It can be seen that the percent of minority teachers was much higher than the state average and nearly double the figure for low poverty schools. As well, this variable had the second largest effect size of all twelve input variables examined. This finding can be partially explained by the fact that high poverty schools also tend to have large numbers of minority students.

Summary of Findings

Dividing Florida elementary schools into low, medium and high poverty groups produces results in support of the premise that schools serving larger numbers of poor children operate at a significant disadvantage. Table 5 consolidates the information presented thus far and ranks those variables that are most impacted by the poverty level of a school.

Table 5: Impact of School Poverty on Selected Data Base Variables

Data Base Variable (*Group*)	Low Poverty (n=353)	Medium Poverty (n=737)	High Poverty (n=368)	Effect Size
Student Achievement				
% Above National Median--Reading	64%	49%	25%	.26 (L)
% Above National Median--Math	70%	56%	37%	.22 (L)
% Above State Standard--Writing	28%	19%	9%	.20 (L)
School Indicators				
Promotion Rate	97%	96%	91%	.14 (M)
Attendance Rate	95%	94%	94%	.13 (M)
Suspension Rate	0.5%	1.2%	1.6%	.06 (S)
School Characteristics				
% Minority	21%	28%	76%	.23 (L)
% Limited English Proficient (LEP)	1.4%	0.6%	4.8%	.03
Mobility Rate	25%	35%	44%	.10 (M)
School Inputs				
School Size	765	682	632	.02
Class Size (K-5)	25	25	25	.02
Support Staff (per 500 Students)	12	15	19	.05 (S)
"Regular" Program Expenditures (% +/–)	– 5%	– 1%	+ 8%	.08 (S)
General Fund Component (% +/–)	– 1%	– 2%	– 1%	.01
Federal Fund Component (% +/–)	– 79%	+ 25%	+ 147%	.23 (L)
% First Year Teachers	4%	4%	8%	.05 (S)
% Experienced Teachers (10 Yrs or More)	59%	56%	48%	.03
% of Teachers with Advanced Degrees	35%	31%	31%	.02
Average Teacher Salaries (% +/–)	+ 1%	+ 1%	– 2%	.04
% Minority Teachers	14%	13%	28%	.10 (M)

Table 5 summarizes all of the data previously presented into a singly display, so that relative effect sizes can be seen for all data base variables. In the following discussion, symbols are used to designate large (■), medium (◘), and small (□) effect sizes. Effect sizes below the minimum criterion are shown as (▯).

The following are data base variables that are the most affected by or related to school poverty: In each case the effect size associated with differences between low, medium, and high poverty schools was large. As school poverty increased:

- Reading achievement decreased,
- The percent of minority students increased,
- Federal (Chapter 1) expenditures increased,
- Math achievement decreased, and
- Writing performance decreased.

The following were at least moderately affected by or related to school poverty, (i.e., effect sizes were classified as medium). As school poverty increased:

- Student promotion rates declined,
- Attendance rates declined,
- Mobility rates increased, and
- The percent of minority teachers increased.

The following variables were also significantly affected by or related to school poverty, though their effect sizes were smaller. As school poverty increased:

- "Regular" program expenditures increased,
- Out-of-school suspensions increased, and
- The number of support staff per 500 students increased.

From these relationships, the following summary statements seem warranted:

High poverty schools are characterized by low levels of student achievement in the basic skills of reading and math, as well as higher order skills required in writing. Promotion and attendance rates are lower; suspension rates are higher.

High poverty schools tend to be characterized by relatively large numbers of minority students and higher mobility rates. However, the premise that high poverty schools serve more Limited English Proficient students was not sustained.

No substantial impact was found with regard to the number of students in a school or c lass-size; however, high poverty schools did have considerably more support staff.

High poverty schools have more, not less, monetary resources in comparison with lower poverty schools in the same district. This was especially true for supplementary federal funds (primarily Chapter 1) and to a lesser extent for local and general revenue funds.

High poverty schools have more first year teachers than is typically found in medium and low poverty schools. This trend is complemented by lower numbers of teachers with at least ten years' experience and slightly fewer teachers with advanced degrees. In addition, high poverty schools tend to have a greater proportion of minorities among their instructional staff, much like the student clientele they serve.

Most of the findings regarding differences between school inputs in high versus low poverty schools are in general agreement with the recent, national study of Chapter 1 resources in the context of state and local resources for education.

Least this summary of findings paint too dismal a portrait of high poverty schools, it needs to be emphasized that numerous exceptions were found: 16% of high poverty schools had reading scores higher than state averages; 20% had higher math scores; 11% had better writing scores; 20% had better promotion rates and 38% had lower suspension rates. These findings suggest that roughly one fifth of all high poverty schools actually did quite well despite the great challenges they faced.

Section 3:
Conditions Related to Student Achievement and Learning Environment in High Poverty Schools

The purpose of this section of the Successful Schools pilot project report is to narrow the scope of the previous data base analysis so that the focus is on those schools that are of greatest interest to Chapter 1 program managers. Instead of looking at all 1,458 elementary schools in Florida, the context was limited to the subset of 368 schools classified as high poverty on the basis of having about 65% or more of their students on Free or Reduced Price Lunch. Also, the study emphasis was shifted from the general impact of poverty to the more specific issue of conditions that affect students' achievement and their learning environment. *Can information from the Florida School reports identify conditions that promote higher achievement?*

Reading, math, and writing achievement, as well as promotion, attendance, and suspension rates for each of the 368 high poverty schools were categorized as being either above or below the median for all similarly situated schools. Data base variables that reflect student characteristics and school inputs were also categorized as being above or below the median for the high poverty school group.

This enabled the construction of 2 X 2 contingency tables that show what happens to student outcomes when schools are above or below the median for a particular data base variable or condition. When there is no relationship with a particular variable, one would expect higher levels of achievement or indicators of a positive learning environment to be somewhat randomly distributed (i.e., about 50% on either side of the median). The extent to which the distribution of positive outcomes is different than 50/50 is considered evidence that there is, in fact, a relationship with the variable being examined.

Table 6a provides a summary of the results for the first in a series of analyses of relationships between data base variables and school outcomes--in this case, reading achievement. As in the previous section, the analysis method was one of applying non-parametric median tests to determine initial statistical significance. Chi-square values are shown, as well as the probability of chance or random occurrence. For each variable whose probability of chance occurrence was less than 1 in 100 ($p < .01$), effect size estimates were also calculated. From the standpoint of practical significance, effect sizes between .05 and .09 were considered small (S), .10 through .19 medium (M), and .20 and above large (L)[7], as per Cohen (1988).

Since the primary interest of program managers is usually with conditions related to increased achievement or a more favorable learning environment, analysis results were framed in that manner. Table 6a, like all others in this series, shows the percent of schools above the median outcome level when selected data base variables were lower and when they were higher than what was typical for high poverty schools in general.

[7]In the discussion of results, the following symbols are used to designate large (■), medium (□), and small (□) effect sizes. ▯ denotes marginal effect sizes.

Table 6a: **Reading** Achievement in High Poverty Schools,
When Selected Variables Were Lower or Higher
Than the Group Median

Data Base Variable	% of Schools Above Median Reading Level When: Variable Was *Lower*	Variable Was *Higher*	Chi-Square	p	Effect Size
% Minority	76%	21%	101.6	<.001	.31 (L)
% on Free or Reduced Lunch	70%	25%	64.7	<.001	.20 (L)
% Minority Teachers	68%	29%	50.4	<.001	.15 (M)
% of Avg "Federal" Expenditures	68%	29%	49.1	<.001	.15 (M)
Support Staff/500 Students	36%	61%	20.4	<.001	.06 (S)
% Limited English Proficient	60%	37%	17.5	<.001	.05 (S)
Promotion Rate	39%	56%	9.2	.002	.03
% First Year Teachers	58%	41%	8.8	.003	.03
School Size	57%	41%	8.2	.004	.03

The data in Table 6a indicate that the percent of schools whose students scored **above** the median reading level for all high poverty schools **increased** when:

- ■ The percent of minority students was lower
- ■ The percent of students on Free or Reduced Price Lunch was lower

- □ The percent of minority teachers in the school was lower
- □ Differences between school level and district average expenditures of federal (Chapter 1) funds were smaller

- □ The number of support staff (per 500 students) was higher
- □ The percent of Limited English Proficient students was lower

The relationships between reading achievement and the following data base variables were also statistically significant; however, their effect sizes were somewhat low:

- School promotion rate,
- Percent of first year teachers, and
- Number of students enrolled in the school.

It is also important to note that the following variables were not significantly related to reading achievement in high poverty schools:

- Attendance rate,
- Suspension rate,
- School mobility,
- Class size,
- "Regular" per pupil expenditure differences,
- The general fund component of "Regular" expenditures,
- Percent of experienced teachers in the school,
- Percent of teachers with advanced degrees, or
- Average teacher salaries at the school,

Table 6b: **Math** Achievement in High Poverty Schools, When Selected Variables Were Lower or Higher Than the Group Median

	% of Schools Above Median Math Level When:				
Data Base Variable	Variable Was *Lower*	Variable Was *Higher*	Chi-Square	p	Effect Size
% of Avg "Federal" Expenditures	64%	32%	33.7	<.001	.10 (M)
% on Free or Reduced Lunch	62%	33%	26.0	<.001	.08 (S)
% Minority	60%	36%	18.5	<.001	.06 (S)
% Minority Teachers	57%	39%	10.8	.001	.03
% of Avg "Regular" Expenditures	56%	40%	7.8	.005	.03
Suspension Rate	56%	40%	7.6	.006	.02

The data in Table 6b suggest that math achievement in high poverty sch. ols increased when:

- ☐ Differences between school level and district average expenditures of federal (Chapter 1) funds were smaller
- ☐ The percent of students on Free or Reduced Price Lunch was lower
- ☐ The percent of minority students in the school was lower

The relationships between math achievement and the following data base variables were statistically significant; however, their effect sizes were lower than the standard used in this analysis:

- ☐ Percent of minority teachers in the school,
- ☐ Differences between school level and district average expenditures of "Regular" program funds,
- ☐ Suspension rate, and

No other database variables were significantly related to math achievement.

Table 6c: **Writing** Achievement in High Poverty Schools, When Selected Variables Were Lower or Higher Than the Group Median

Data Base Variable	% of Schools Above Median Writing Level When: Variable Was *Lower*	Variable Was *Higher*	Chi-Square	p	Effect Size
% on Free or Reduced Lunch	63%	36%	25.1	<.001	.08 (S)
% of Avg "Federal" Expenditures	62%	38%	18.6	<.001	.06 (S)
% of Avg Teacher Salaries	42%	57%	6.8	.009	.02
% Minority	57%	43%	6.8	.009	.02

The data in Table 6c show that writing achievement in high poverty schools increased when:

- ☐ The percent of students on Free or Reduced Price Lunch was lower
- ☐ Differences between school level and district average expenditures of federal (Chapter 1) funds were smaller

In addition there were other variables which exhibited statistically significant, but very small effect sizes:

- Average teacher salary differences and
- The percent minority students.

No other data base variables exhibited significant relationships with writing achievement in high poverty schools.

The following is a summary of relationships between selected data base variables and three indicators of school achievement--reading, math and writing. The list of variables has been ordered on the basis of effect size and the number of achievement indicators affected.

Table 6d: Summary of Relationships Between Data Base Variables And School Achievement

Data Base Variable	Reading	Math	Writing
% on Free or Reduced Priced Lunch	.20 (L)	.08 (S)	.08 (S)
% of Avg "Federal" Expenditures	.15 (M)	.10 (M)	.06 (S)
% Minority Students	.31 (L)	.06 (S)	.02
% Minority Teachers	.15 (M)	.03	
Support Staff/500 Students	.06 (S)		
% Limited English Proficient	.05 (S)		
% First Year Teachers	.03		
% of District Average Teacher Salaries			.02
Promotion Rate	.03		
% of Avg "Regular" Expenditures		.03	
Suspension Rate		.02	
School Size	.03		

Looking at the relationship of data base variables across achievement indicators, it would appear that the percent of students on Free or Reduced Price Lunch has one of the strongest set of relationships. This finding is particularly interesting since all of the schools in the analysis were already classified as high poverty. What this means is that the effect of increasing poverty concentration does not level out; it remains a potent influence even in "high poverty" schools. While program managers have little control over school poverty, it is something that should be brought to the attention of policy makers in charge of school zoning and transfers.

Another variable that stands out from the list of conditions that influence school achievement is federal expenditures, which had a moderately strong relationship with reading and math and a smaller one with writing. However, the direction of these relationships is opposite of what one might expect. As the difference between a school's expenditure of federal funds versus the district average increases, reading, math and writing achievement appear to decrease. These data have implications for Chapter 1 Schoolwide projects, where extra resources are concentrated in high poverty schools. In Schoolwide projects, the difference between school expenditures and the district average is much greater than for other types of Chapter 1 delivery systems; however, the pattern of negative returns argues that money alone cannot overcome obstacles to improved achievement associated with large numbers of students from low-income families. Rather, this finding reinforces the necessity of efforts like the Successful Schools project which seeks to identify characteristics of high achieving, high poverty schools, establish viable technical assistance linkages with similar, but lower performing schools, and strengthen needs assessment and planning activities to support school improvement activities.

The percent of minority students in a school was another variable that exhibited a strong relationship with a variety of achievement indicators. A parallel variable, the percent of minority teachers in a school exhibited a moderate relationship with reading and a significant, but somewhat weaker relationship with math.

Though all subject areas were not affected, it is noteworthy that the number of support staff per 500 students in a school appears to have a positive, though small, influence on reading achievement. As mentioned before, this is a variable that warrants extended investigation, because it is not clear from the Florida School Reports as to which kinds of support staff are involved in promoting achievement.

From a different perspective, it was informative to examine those data base variables that were not related to any achievement outcome. Given uniformly high attendance rates as calculated in the Florida School Reports, it was not surprising that this variable was not related to higher achievement. On the other hand, it was surprising that the student mobility rate for a school was not significantly related to any of the three achievement indicators studied. The mobility rate reflects the extent to which a school serves a changing population and is often cited as a reason why achievement might be low at particular schools. It was also interesting that the general fund component of so called "Regular" expenditures did not show evidence of a significant relationship with any of the three achievement measures. (Just the opposite was true for federal expenditure differences.) Last, the fact that the percent of experienced teachers in a school was not significantly related to achievement outcomes among high poverty schools may be a natural extension of a similar finding in Section 2 that showed no substantial difference between low, medium and high schools.

Learning Environment

The next series of tables feature data base variables that reflect on a school's learning environment. Included are promotion rate which indicates pupil progress, attendance rate which somewhat indicates opportunity to learn, and out-of-school suspension rate which often indicates the prevalence of serious behavioral infractions.

Table 7a: **Promotion Rates** in High Poverty Schools, When Selected Variables Were Lower or Higher Than the Group Median

Data Base Variable	% of Schools Above Median Promotion Rate When: Variable Was *Lower*	Variable Was *Higher*	Chi-Square	p	Effect Size
% on Free or Reduced Lunch	58%	42%	9.1	.003	.03
% Teachers with Adv Degrees	58%	42%	9.1	.003	.03
% Minority Students	58%	42%	9.1	.003	.03

The data in Table 7a show that the following three data base variables were significantly related to student promotion rates in high poverty schools; yet none were sufficiently strong to warrant even a small effect size designation:

- Percent of students on Free or Reduced Priced Lunch,
- Percent of teachers with advanced degrees, and
- Percent of minority students.

Table 7b: **Attendance Rates** in High Poverty Schools, When Selected Variables Were Lower or Higher Than the Group Median

Data Base Variable	% of Schools Above Median Attendance Rate When: Variable Was *Lower*	Variable Was *Higher*	Chi-Square	p	Effect Size
School Mobility Rate	58%	38%	14.9	<.001	.04

The data in Table 7b show that the only data base variable that was significantly related to student attendance rates in high poverty schools was the school mobility rate; however the strength of this relationship was below the criteria for a small effect size:

Table 7c: **Suspension Rates** in High Poverty Schools, When Selected Variables Were Lower or Higher Than the Group Median

Data Base Variable	% of Schools Above Median Suspension Rate When: Variable Was *Lower*	Variable Was *Higher*	Chi-Square	p	Effect Size
School Mobility Rate	41%	58%	9.8	.002	.03
% of Avg "General" Expenditures	58%	41%	9.1	.003	.03
% Limited English Proficient	57%	42%	7.9	.005	.02
Attendance Rate	57%	42%	7.9	.005	.02

The data in Table 7c show that the following four data base variables were significantly related to suspension rates in high poverty schools; yet effect sizes were minimal:

- School mobility rate,
- General component of "Regular" expenditure differences,
- Percent of Limited English Proficient students, and
- School attendance rate.

Looking back on promotion, attendance and suspension data, it is important to note that there were no data base variables or conditions for which there were appreciable effect sizes.

Summary and Discussion

The search for conditions that promote achievement in high poverty schools was more productive than the search for conditions that affect learning environment. In this regard, higher concentrations of students from low-income families were consistently associated with decreases in student achievement in all subject areas examined--reading, math and writing. While program managers may have little control over this variable, it is something that should be brought to the attention of those who make decisions concerning school zoning and transfer policies.

Another finding in this section questions the wisdom of concentrating federal resources in Chapter 1 Schoolwide Projects without comprehensive plans for improvement activities that will improve the entire instructional program. Currently, almost anything can be done with the extra federal funds that are provided to these projects. How are these extra resources coordinated with school improvement plans as required under Blueprint 2000? To what extent are Schoolwide projects based on the specific academic needs of students? How do Schoolwide projects enhance the delivery of technical assistance, staff development, and restructuring necessary to bring about improved student achievement?

The number, type and training of support staff in a school is one of the few variables examined in this section that was associated with higher achievement and that can be directly influenced by program managers. However, the school report data do not provide sufficient information to act. Extensive follow-up is needed in this area.

Section 4: Against All Odds: Successful, High Poverty Schools

Section 4 of the interim report on Florida's Successful Schools project represents yet another narrowing of research perspective, down from all high poverty elementary schools (n=368) to a smaller subset of those schools (n=58) that represent the extreme ends of an achievement continuum--highest achieving versus lowest achieving. The purpose here is to capitalize on a spin-off of the research reported in Section 2 regarding the impact of poverty on Florida's elementary schools.

During the course of comparing student achievement among high, medium and low poverty schools, it was found that some high poverty schools actually did quite well, despite overwhelming odds against them. For example, it was pointed out that 60 (or 16%) of the state's high poverty schools had reading scores above the statewide median for all elementary schools, 75 (or 20%) had higher math scores, and 41 (or 11%) showed evidence of better writing achievement.

In order to follow up on these encouraging findings, high poverty schools which exceeded overall state medians in at least two out of three outcomes categories (reading, math, or writing) were identified for further study. The result was a group of 29 schools, located in 20 of the 67 districts), whose students did better than most other schools, even though their high poverty status would predict the opposite. While exceeding the state average may not accomplish the very highest goals envisioned by Blueprint 2000, it is, nevertheless, a remarkable accomplishment. Accordingly, these schools can be classified as "successful" as compared to all other high poverty schools.

By way of contrast, lower achieving schools were defined as ones which fell below the median for all high poverty schools on at least two out of three subject areas. On this basis there were a total of 160 schools (43% of all those classified as high poverty) that would appear to need extra assistance. However, in order to have equal size groups and to present the sharpest contrast against "successful" schools, only 29 of the lowest achieving were subsequently identified for inclusion in a "comparison" group of schools.

The combined study group for this section of the report consisted of 58 out of 368 (or 16%) of those schools which had the highest concentrations of students from low income families, based on the percent on Free or Reduced Price Lunch in the 1992-93 Florida School Reports. In this group of 58 schools, the median percent of students on Free or Reduced Price Lunch was 80%, which is above the eligibility cutoff (75%) for Chapter 1 Schoolwide projects. Incidentally, seventeen of the 58 contrasting schools (35%) actually were operating a Schoolwide project at the time of the study; of these, only three were in the successful school group. There were fourteen Schoolwide Projects in the comparison group of schools.

The following data tables are organized to contrast differences between high and low achieving high poverty schools, relative to all elementary schools in Florida (n=1,458). In keeping with the overall goal of the pilot project, emphasis was placed on characteristics of successful high poverty school. Data from the comparison group of lower achieving schools was used to accentuate the differences.

Table 8: Successful vs Comparison Schools:
Student Achievement, Related Indicators and Student Characteristics

	Reading	Math	Writing
Student Achievement			
All Elementary Schools (n=1,458)	47%	54%	18%
29 Successful, High Poverty Schools	50%	61%	20%
29 Comparison, High Poverty Schools	7%	16%	3%

- Students in the 29 high achieving, high poverty schools scored higher than statewide medians in all subject areas--reading, math, and writing. Students in the 29 comparison schools scored dramatically lower than students in successful schools. The two groups of high poverty schools appear to be worlds apart with regard to student achievement.

Table 8 (Continued)

	Promotion	Attendance	Suspension
Related Indicators			
All Elementary Schools (n=1,458)	95%	94%	1.1%
29 Successful, High Poverty Schools	91%	94%	1.2%
29 Comparison, High Poverty Schools	88%	92%	4.4%

- Differences on variables that reflect on a school's learning environment were not nearly as pronounced as those that dealt directly with achievement. Promotion and attendance rates in successful schools were lower than overall state figures; suspension rates were about the same. However, in contrast with comparison schools, the more successful group fared better on all indicators of learning environment, especially suspension rates.

Table 8 (Continued)

Student Characteristics	% Poor	Minority	L.E.P.	Mobility
All Elementary Schools (n=1,458)	47%	31%	1.3%	35%
29 Successful, High Poverty Schools	69%	41%	3.7%	47%
29 Comparison, High Poverty Schools	89%	99%	3.7%	46%

- High and low achieving schools were considerably different in terms of the percent of students on Free or Reduced Price Lunch. As a group, successful schools were in between the state median and the median for comparison schools.

- Successful high poverty schools had proportionately more minority students than the statewide median, but much less than their low achieving counterparts.

- There was almost no difference between successful and comparison schools with regard to percent of LEP students or school mobility rates.

Table 9: Successful vs Comparison Schools:
School Inputs

School Inputs	School Size	Class Size (K - 5)	Number of Support Staff
All Elementary Schools (n=1,458)	685	25	15
29 Successful, High Poverty Schools	566	24	21
29 Comparison, High Poverty Schools	752	25	15

- Successful schools tended to be about 100 students smaller than the state median and almost 200 smaller than the median for comparison schools.

- Class-sizes in high achieving schools were slightly smaller than in the comparison schools, which had about the same as the statewide figure.

- There was a big difference in relative numbers of support staff that favored high versus low achieving schools--about six staff members more per 500 students.

Table 9: (Continued)

School Inputs	% More or Less Than District Average		
	"Regular" Program Expenditures	General Fund Component	Federal Fund Component
All Elementary Schools (n=1,458)	0 %	- 2%	+ 28%
29 Successful, High Poverty Schools	+ 7%	+ 3%	+ 63%
29 Comparison, High Poverty Schools	+ 5%	- 7%	+ 208%

- Considering the percent difference between school level and district averages, per pupil expenditures of "regular" program funds were almost the same for successful and comparison schools.

However, when "regular" program expenditures were broken out, it was found that successful schools spent about 10% more per pupil in general funds, but nearly one and one-half times less in federal funds than comparison schools.

Table 9 (Continued)

School Inputs	First Year Teachers	Experienced Teachers	Teachers w/Adv Degrees	Teacher Salary Diff	Minority Teachers
All Elementary Schools (n=1,458)	5%	55%	32%	0 %	16%
29 Successful, High Poverty Schools	8%	48%	33%	- 2%	15%
29 Comparison, High Poverty Schools	14%	43%	31%	- 6%	51%

- The percent of first year teachers in both low and high achieving schools was higher than state averages, but was most pronounced among the group of comparison schools.

- Successful schools had a larger percentage of experienced teachers than comparison schools, but both groups were considerably below the state median for all elementary schools. Similarly, the proportion of teachers with advanced degrees was greater in high achieving schools.

- The difference between average teacher salaries in successful schools and their respective district averages was less than in comparison schools. This is likely a function of differences in the percent of experienced and first-year teachers in the two groups of schools.

- Successful schools had about the same proportion of minority teachers among their staff as the state median, but less than one-third the proportion found in comparison schools.

Summary and Implications

First, there is compelling evidence in the Florida School Reports that some high poverty schools do extremely well at promoting high levels of student achievement. On the other hand there is a relatively large number of high poverty schools that were not doing well and some that were in dire need of improvement.

Successful and comparison school groups were not distinguishable on such measures as promotion and attendance rates, percent of LEP students, mobility, class size, "regular" program expenditures, or teachers with advanced degrees. However, successful schools were clearly distinguished from their lower achieving comparison group by having fewer minority students and teachers, more support staff and lower suspension rates. Also, successful schools were somewhat distinguished from comparison schools by smaller numbers of students on Free or Reduced Price Lunch, smaller total number of students, more general funds/fewer federal funds, fewer first year teachers/more experienced teachers, and higher teacher salaries.

Beyond illustrating that some high poverty schools have beaten the odds against relatively high achievement, the question arises: *To what extent could the 29 successful schools serve as models and/or technical assistance providers to lower achieving schools?*

With regard to the 29 low achieving schools highlighted in this section, there are but a few successful schools which are comparable in terms of demographic characteristics. Only seven successful schools had concentrations of poor students above the median for all high poverty schools; only six were above the high poverty median for percent of minority students; and just five schools were above on both demographic features. However, these five schools might serve as role models and/or technical assistance providers to even the lowest achieving, high poverty schools.

Likely, there would be an additional number of successful schools which would be demographically comparable to many of the remainder of the 160 that were below the median achievement levels of two out of three subject areas for all high poverty schools. This is an area that warrants further investigation and feasibility testing.

Considering all results presented so far, it would appear that data base variables alone do not provide school personnel or program managers sufficient information to make constructive changes. The data from school reports are valuable in terms of reflecting achievement and learning environment conditions in schools, but do not indicate what to do to promote better conditions or point to specific features of "successful" schools that make them so.

Section 5:
Data Base Profiles of Schools that Participated in the Pilot Phase of Florida's Chapter 1 Successful Schools Project

This part of the Successful Schools interim report represents the final narrowing of research perspective in the series of data base explorations into characteristics that distinguish high achieving, high poverty schools. The focus now is on sixteen schools that were selected for the purpose of field-testing survey instruments and on-site observation procedures. The pilot project schools were located across the state, from the northwest Panhandle to south Florida and were supposed to represent a broad cross-section of all high poverty schools in the state.

The process for selecting pilot schools began with an analysis of reading achievement among Chapter 1 students in grades 2 and above over the previous two years. By design, the initial pool of potential study schools consisted of relatively equal numbers of high and low achieving schools (about 30 in each category), all of which had at least 75% of their students on Free or Reduced Price Lunch and were therefore eligible for Chapter 1 Schoolwide projects.

Next, the list of potential study schools was examined in terms of characteristics that would be appropriate for the pilot (e.g., continuity of administration, student membership, etc.). Finally, the list was narrowed to schools that were in the study committee's own districts in the hopes of expediting communication and participation. In the end, a broad mixture of schools was included in the pilot study, some of which appeared to be clearly successful in terms of raising the achievement level of Chapter 1 students, some of which had been identified for program improvement; some were rural, urban, suburban; and some had large concentrations of migrant and/or LEP students. This was a deliberate sample, chosen to maximize differences between higher and lower achieving schools, all of which had large concentrations of students from low income families.

The purpose of this section of the report is to compare data from the 16 schools chosen for the pilot study against all high poverty schools in the state (n=368), the latter having been shown to be generally characterized by student achievement that is significantly lower than observed in the general population. Essentially the research question was: *How do the two groups of pilot project schools fare on the same variables that were used to profile the larger set of high poverty schools in the state?*

In the summary tables which follow, data from pilot project schools were consolidated into two groups of eight schools each, based on a composite ranking[8] of student outcomes and related indicators. The eight schools included in Group "A" represent higher achieving schools. Group "B" represents lower achieving schools. The summary tables provide medians for 21 data base variables for the higher versus lower performing groups of schools--both to be viewed in relation to the median for all high poverty schools in the state. Data base variables have been organized into clusters representing student achievement, learning environment, school characteristics and school inputs. Data for individual schools are included in an appendix to this section of the report.

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[8] Weighted sum of normalized ranks, consisting of reading+math+writing (doubled), plus promotion+attendance+suspension.

Table 10a provides an overall summary of contrasts between group "A" and "B" schools on variables that reflect aggregate student achievement in reading, math and writing for fourth grade students in the state.

Table 10a: Summary of Student Achievement Variables
For Two Groups of Pilot Project Schools

Data Base Variables	Pilot Group "A" Schools (n=8)	Reference= All High Poverty (n=368)	Pilot Group "B" Schools (n=8)
Student Achievement			
% Above National Median--Reading	33%	25%	14%
% Above National Median--Math	45%	37%	27%
% Above State Standard--Writing	13%	9%	5%

At the outset, it should be noted that two of the schools in group "A" were among the 29 high performing, high poverty schools identified in an earlier section of this report; two in group "B" were among the 29 lowest performing schools in the state. This happened coincidentally, and was not part of the original design; however, their inclusion helps to reinforce that the intended polarization between higher and lower achieveing schools in the pilot project did occur.

- Schools in group "A" were clearly above their counterparts in group "B" in terms of student achievement in reading, math, and writing.

- Median achievement levels for group "A" schools were above the medians for high poverty schools in general in all subject areas considered. Just the opposite was true for schools in group "B"; median achievement levels were below that of all high poverty schools in the state in all subject areas.

- The magnitude of differences between group "A" versus "B" schools are notable. The median percent of students in group "A" schools who scored above national averages in reading was over twice that of group "B" schools. In terms of writing performance, group "A" schools outperformed group "B" by nearly three to one on the *Florida Writes!* assessment.

- These data substantiate that the originally intended design behind the selection of schools for the pilot project was met.

Table 10b continues with the contrast of pilot school groups, but with variables that characterize learning environment as the focus.

Table 10b: Summary of Learning Environment Variables
For Two Groups of Pilot Project Schools

Data Base Variable	Pilot Group "A" Schools (n=8)	Reference= All High Poverty (n=368)	Pilot Group "B" Schools (n=8)
Learning Environment			
Promotion Rate	95%	91%	89%
Attendance Rate	93%	94%	93%
Suspension Rate	1.2%	1.6%	1.4%

- In addition to better student achievement on fourth grade assessments, group "A" schools also had a substantively higher median promotion rate, slightly better attendance rate and lower suspension rate than group "B" schools.

- Group "A" schools exceeded the median for all high poverty schools on two out of three indicators of learning environment; group "B" schools were lower on all three indicators.

Table 10c concentrates on differences between student characteristics in pilot project schools in group "A" versus "B".

Table 10c: Summary of Student Characteristics
For Two Groups of Pilot Project Schools

Data Base Variable	Pilot Group "A" Schools (n=8)	Reference= All High Poverty (n=368)	Pilot Group "B" Schools (n=8)
School Characteristics			
% Poverty (Free or Reduced Price Lunch)	84%	79%	85%
% Minority	57%	76%	96%
% Limited English Proficient (LEP)	4.8%	4.8%	12.9%
Mobility Rate	69%	44%	51%

- Both groups of pilot project schools had very large numbers of students from low income families, 84% and 85% on Free or Reduced Price Lunch, respectively.

- Perhaps the most striking difference between group "A" and group "B" schools was the percent of minority students, 57% versus 97%, respectively. From the standpoint of identifying models of student achievement for linkage to lower performing schools, differences in minority concentration may inhibit the effective delivery of technical assistance by example.

- Group "B" schools also had considerably higher proportions of Limited English Proficient students, about 14% versus 5% for schools in group "A". This difference in student clientele between higher and lower achieving schools could also be a problem in future linkage efforts.

- Despite having lower proportions of minority and LEP students, schools in group "A" had higher mobility rates.

Table 10d changes the focus of comparison between group "A" and "B" schools to the area of school inputs, specifically staff and financial resources.

Table 10d: Summary of School Inputs
For Two Groups of Pilot Project Schools

Data Base Variable	Pilot Group "A" Schools (n=8)	Reference = All High Poverty (n=368)	Pilot Group "B" Schools (n=8)
School Inputs			
School Size	489	632	848
Class Size (K-5)	22	24	24
Support Staff (per 500 Students)	23	19	14
"Regular" Program Expenditures (% +/-)	+ 20%	+ 8%	+ 19%
General Fund Component (% +/-)	+ 5%	- 1%	- 5%
Federal Fund Component (% +/-)	+ 266%	+ 147%	+ 398%
% First Year Teachers	8%	8%	13%
% Experienced Teachers (10 Yrs or More)	58%	48%	40%
% of Teachers with Advanced Degrees	24%	31%	27%
Average Teacher Salaries (% +/-)	0 %	- 2%	- 5%
% Minority Teachers	20%	28%	45%

- The median student membership for schools in group "A"was about 350 smaller than for group "B"; class size was also lower.

- Another striking difference between schools in group "A" versus "B" was in the number of support staff per 500 students. The median number of support staff for group "A" schools was 23 which was 9 more than the median of 14 in group "B" schools.

- The two groups of schools were about the same in terms of "Regular" expenditure differences. That is, the median difference between what schools spent per pupil and their respective district averages was about 20% more per student. Both groups of schools appeared to fare better than other high poverty schools in terms of "Regular" program expenditures. However, there appeared to be substantive differences wth regard to general and federal expenditure differences.

- When compared against their respective district averages, schools in group "A" spent about 10% more in general funds per student than schools in group "B". Group "A" schools spent more than the median for high poverty schools in general; group "B" schools spent less.

- In relation to their own district average expenditures of federal funds, schools in Group "A" spent about one and one-half times less than schools in Group "B". Both groups were considerably above the median for all other high poverty schools in the state.

- In terms of the percent of inexperienced (first year) teachers, the median for schools in group "A" was the same as high poverty schools in general. Group "B" schools, however, had substantively more (5%) than was typical for high poverty schools in the state.

- Schools in group "A", on the other hand, had considerably more experienced teachers (those with 10 or more years) than the median for all high poverty schools and almost 20% more than schools in group "B".

- Interestingly, both group "A" and "B" schools had proprotionately fewer teachers with advanced degrees than high poverty schools in general.

- The combination of fewer first year teachers and more experienced teachers among schools in group "A" probably is reflected in a zero difference from district averages, which put them about 5% higher than schools in Group "B" and slightly higher than the median for high poverty schools in general.

- Proprotionately, schools in group "A" had about 10% fewer minority teachers than typically found in high poverty schools and less than one half the median for schools in group "B".

In the data tables which follow, pilot project schools are listed "A" through "O". Schools "A" through "H" and "I" through "O" were included in groups "A" and "B," respectively. Figures in bold type within column headings are reference medians for all high poverty schools in the state.

Table 11a: Profiles of Individual Pilot Project Schools--Student Achievement and Learning Environment

		Student Achievement			*Learning Environment*		
School	Ch1 School-Wide Project?	Reading (25%)	Math (37%)	Writing (9%)	Promotion (91%)	Attendance (94%)	Suspension (1.6%)
A	yes	50%	64%	27%	91%	92%	0.2%
B	yes	45%	56%	15%	99%	94%	2.2%
C	no	53%	61%	7%	92%	94%	0%
D	yes	28%	33%	14%	94%	94%	0%
E	no	26%	37%	16%	95%	94%	0.9%
F	no	38%	39%	10%	95%	91%	5.8%
G	no	17%	50%	7%	93%	93%	4.4%
H	yes	19%	28%	11%	96%	93%	1.4%
I	no	25%	42%	4%	90%	95%	0.3%
J	yes	14%	39%	6%	88%	94%	0.6%
K	yes	27%	25%	6%	83%	93%	2.6%
L	no	16%	29%	15%	92%	93%	5.0%
M	no	13%	33%	3%	83%	95%	0%
N	no	7%	17%	2%	92%	99%	1.0%
O	yes	5%	14%	7%	92%	92%	7.6%
P	no	3%	16%	3%	86%	93%	1.8%
Pilot Median		22%	35%	7%	92%	94%	1.2%

Table 11b: Profiles of Individual Pilot Project Schools--Student Characteristics and Selected Inputs

School	*Student Characteristics*				*Selected Inputs*		
	Percent FRL (79%)	Minority (76%)	L.E.P. (4.8%)	Mobility (44%)	School Size (632)	Class Size (K-5) (24)	Support Staff (19)
A	90%	46%	6.7%	82%	386	17	26
B	84%	45%	0.0%	57%	563	23	23
C	89%	100%	3.9%	52%	460	29	12
D	93%	97%	0.0%	53%	490	21	23
E	80%	30%	7.0%	92%	487	23	17
F	80%	34%	1.7%	83%	614	24	26
G	87%	76%	5.6%	81%	221	22	25
H	76%	68%	31.9%	43%	696	21	21
I	84%	95%	13.9%	52%	744	23	11
J	87%	97%	40.0%	32%	1,251	25	9
K	87%	32%	2.0%	63%	706	17	26
L	91%	96%	11.8%	49%	1,072	28	10
M	94%	99%	24.3%	93%	632	20	21
N	82%	98%	22.0%	37%	1,108	26	9
O	95%	76%	3.7%	74%	944	21	20
P	98%	99%	0.7%	49%	752	28	17
Pilot Median	85%	85%	6.2%	55%	664	23	20

Table 11c: Profiles of Individual Pilot Project Schools--Expenditures and Teacher Characteristics

School	*Expenditures*[9]			*Teacher Characteristics*				
	"Regular" Expenditure Differences (+ 8%)	Basic Expenditure Differences (– 1%)	Federal Expenditure Differences (+ 147)	1st Yr Teachers (8%)	Experienced Teachers (48%)	Teachers w/Adv Degree (31%)	Adjusted Avg Tea $ (– 2%)	Percent Minority Tea (28%)
A	+ 52%	+ 21%	+ 463%	12%	24%	15%	– 9%	9%
B	+ 21%	+ 2%	+ 225%	23%	51%	32%	– 15%	15%
C	+ 11%	+ 3%	+ 187%	11%	42%	16%	– 3%	37%
D	+ 16%	– 3%	+ 217%	0%	66%	48%	– 1%	45%
E	+ 19%	– 3%	+ 313%	7%	55%	17%	+ 2%	14%
F	+ 10%	+ 7%	+ 42%	0%	70%	24%	+ 2%	9%
G	+ 38%	+ 25%	+ 307%	0%	75%	50%	+8%	25%
H	+ 47%	+ 11%	+ 529%	9%	60%	24%	+ 4%	38%
I	+ 35%	+ 15%	+459%	14%	39%	44%	– 8%	39%
J	+ 3%	– 11%	+338%	6%	57%	49%	+ 1%	74%
K	+ 25%	+ 14%	+183%	14%	39%	13%	– 8%	7%
L	– 3%	– 12%	+198%	2%	63%	35%	+ 4%	48%
M	+ 75%	+ 37%	+ 888%	12%	54%	23%	– 4%	48%
N	+ 26%	– 1%	+588%	7%	40%	27%	– 6%	43%
O	+ 11%	– 9%	+268%	24%	24%	16%	– 13%	33%
P	+ 12%	– 10%	+541%	25%	38%	28%	– 3%	69%
Pilot Median	+ 20%	+ 2%	+ 310%	10%	53%	25%	– 3%	37%

[9]All expenditure as well as teacher salary figures are based on the percent difference between school level minus district averages.

Section 6: School Staff and Parent Perceptions of Effective School Components in the Florida Successful Schools Project

The previous section presented a profile of characteristics and the selection process for the 16 schools that participated in the pilot phase of the Florida Successful Schools project. This section describes the developmental stages of a survey approach to gathering information about the components that define effective schools in high poverty settings. Survey results are reported. A technical study of the questionnaire was completed and is reported.

Conceptual Background, Questionnaire Development, and Procedures

The Successful Schools Sub-committee reviewed various sources of information that presented applications of Effective Schools research in terms of collecting information from schools. The sub-committee adopted (9/93) a definition of an effective school as "a school in which there is a high level of achievement sustained over time that is equitably distributed over all subgroups of students regardless of entry level skills."

They agreed that this definition would have the effect of broadening the concept of what makes a school successful. Although there were several frameworks describing the components of an effective school, the sub-committee adopted the seven correlates structure of Clear School Mission, Frequent Monitoring, Safe and Orderly Environment, High Expectations, Opportunity to Learn/Time on Task, Instructional Leadership, and Home/School Relations.

Effective Schools Correlates: Definition of Terms and Importance to School Improvement

1. Clear School Mission (CSM)

Effective schools have clearly articulated mission statements that have an academic focus. Mission statements convey high expectations, explain what students are to learn, and emphasize mastery of skills. To be effective in serving as the focal point for a school improvement planning process, the mission must be communicated to all school staff, students, and parents. The mission and school goals are implemented through detailed objectives and expectancies for each grade level and course area, and include the necessary instructional materials and a process for curriculum alignment.

2. Frequent Monitoring (FM)

Effective schools frequently assess student progress and the effectiveness of school programs. Teachers inform students and their parents about progress in achieving school objectives and mastery of course content. The assessment information is used to improve the program and to alter teaching strategies when necessary. Staff in effective schools make sure there is congruence between the objectives of the school's curriculum, what teachers are actually teaching, and tests used to assess the program.

3. Safe and Orderly Learning Environment (SOE)

In effective schools, the school climate is safe and orderly with all parties engaged in purposeful activities that are learning-related. A productive learning climate is created through a schoolwide discipline code, mutually agreed to by staff, students, and parents. The discipline code carefully spells out expected student conduct and consequences for misbehavior and is enforced consistently by staff and administration. Students are given regular and frequent recognition for good behavior and encouragement and support for improving behavior. In addition to positive discipline policies, effective schools ensure that the school campus is attractive and well-kept by staff, students, and parents. A positive spirit permeates the school, and extensive efforts are made to give recognition to students' work and achievements.

4. High Expectations (HE)

Research in effective schools supports the fact that when the staff believes and demonstrates that all students can obtain mastery of skills taught, achievement is higher. Teachers believe that it is their efforts that cause students to achieve such mastery. The school is organized in accordance with the belief that all students can learn the basic and essential skills contained within the curriculum. An effective school uses heterogeneous groupings, direct instruction, peer tutoring, cooperative learning groups, and team learning to ensure that all students are mastering the intended curriculum. Students and staff regularly celebrate learning and achievement through displays of student and staff work, awards assemblies, and other public acknowledgements of accomplishments in academics, citizenship, extracurricular activities, governance, and service.

5. Opportunity to Learn and Time on Task (OTL)

Time is a critical resource in the learning process, and in effective schools it is used efficiently through well-designed classroom operating procedures and interactive learning activities. Adequate time is allocated for essential and basic skills instruction in reading, language arts, and math at the elementary grades, and there is integration of basic skills instruction into other content areas in ways that develop critical thinking and problem solving skills. Teachers are trained in techniques that provide students with equal opportunities to respond, that meet the needs of a variety of learning styles, and that enable students to be successful with their work. Homework is regularly assigned as a way of extending the learning day, and students receive prompt feedback on assignments.

6. Instructional Leadership (IL)

In effective schools, principals demonstrate strong leadership, especially in the areas of curriculum and instruction, and they are able to share leadership by involving other staff members in leadership activities and positions. The principal plays a crucial role in communicating the mission and goals of the school to staff, parents, and students. The principal frequently monitors progress of both pupils and programs through interpretation of test results and observation of classrooms. In addition, the principal sets high expectations for students and staff, protects the school's instructional time, and engages the staff in regular discussions of teaching and learning. Effective principals identify and utilize the skills of staff members to improve the instructional program and strengthen teaching skills. Multiple opportunities are provided for staff growth and development.

7. Home-School-Community Relations (HSR)

In effective schools, parents and the community understand and actively support the purpose of the school. The school creates many opportunities for parents to support their children's learning both at home and at school. The school uses frequent and multiple methods of communicating about learning objectives, course content, student progress, and school programs. There are opportunities for teachers and parents to meet together at parent-teacher conferences and in class meetings about the curriculum and to work together through volunteer programs. Learning time is extended and home and school are connected through assigning carefully designed and regular homework. Parents are provided with opportunities to participate in parent education programs of their choosing. Community members are encouraged to donate their time and talents to the school and community, and governmental agencies cooperate to provide support for families. The parent/community organizations are considered important by both the administration and the staff, and members participate actively in goal setting and school improvement planning.

Questionnaires from the Connecticut Department of Education and the San Diego County Public Schools were viewed as being appropriate instruments for this kind of study. They were reviewed as a starting point and modified to reflect the particular focus of Florida's schools. A 117 item school staff questionnaire that represented all seven correlates and a 23 item parent survey that only represented the Home/School Relationship component was produced. In addition to being available in English, parent surveys were translated into Spanish and Haitian Creole to accommodate the multi-cultural environment in Florida.

The 16 pilot project schools were located in six school districts. Chapter 1 evaluators in each district took the staff questionnaires to each school, monitored the administration procedures, and collected all surveys after they were completed. All staff within a school were targeted to complete the survey. A total of 829 school staff questionnaires and 2,502 parent surveys were returned for analysis.

One purpose of this stage of the Successful Schools Project was to develop instruments and procedures for describing high and low performing schools in high poverty environments. A preliminary consideration was whether the survey detected differences in the high and low performing schools, or whether staff perceptions of the effective school components were different. Results showed that there were statistically significant differences between all component scores in the two groups of schools. Since there were detectable differences, a next step was to use the results to refine the questionnaire.

A basic concern when developing the questionnaire was that 117 items were too many. Therefore, a two-pronged approach was used to shorten and refine the instrument. First, achievement data were used as an external criterion to examine how well survey results corresponded with achievement outcomes. This was viewed as a measure of predictive validity. In conjunction with this analysis, items were reviewed for excessive amounts of "not applicable/don't know" responses. The second prong was to analyze items for those that were most able to predict the component differences that were being reported.

Another sub-committee took the results from the two-pronged item analysis to identify a set of questionnaire items that could be eliminated. A final consideration for item rejection was to compare component definitions with items to be deleted so that content validity was maintained. A 74 item questionnaire (final copy attached) was developed with the following estimates of reliability and predictive validity:

Table 12: Internal Reliability and Predictive Validity of Effective School Components

	Reliability[10]	Predictive Validity[11]
Clear School Mission: 9 Items	.87	.42
Frequent Monitoring of Student Progress: 5 Items	.84	.36
Safe and Orderly Environment: 13 Items	.93	.55
High Expectations: 11 Items	.88	.46
Opportunity to Learn: 12 Items	.88	.43
Instructional Leadership: 11 Items	.93	.42
Home/School Relationships: 13 Items	.89	.32
Total: 74 Items	.98	.50

An end result of piloting the effective schools questionnaire was the development of a valid and reliable instrument that can be completed in a timely manner, and that describes differences between high and low performing schools. The following results from school staff were based on the 74 item questionnaire.

10 Reliability was determined on the basis of Cronbach's alpha.
11 Validity was based on the correlation between subscales and achievement in pilot project schools.

Table 13: Results of the Staff Questionnaire

	Effect Size	Ranks	t*
Clear School Mission	.045	5	7.99
Frequent Monitoring of Student Progress	.03	7	6.04
Safe and Orderly Environment	.10	1	18.00
High Expectations	.056	3	10.09
Opportunity to Learn	.041	6	7.35
Instructional Leadership	.060	2	10.41
Home/School Relationships	.05	4	8.19
Total	.08		11.54

(* All differences between means were statistically significant; $p < .001$)

Staff results were analyzed by the two groupings of higher and lower performing schools described in the previous chapter. There were statistically significant differences between the two groups of schools in staff ratings for each of the effective school components.

The effective school components can be rank ordered by the effect sizes associated with each t value. The largest effect size (.10) would be classified as medium, according to Cohen (1988) for the greatest difference in the seven component areas between high and low performing schools.

The Safe and Orderly Environment component accounted for the strongest difference between the two groups of schools. Item data indicated that staff perceive that students do not treat each other with respect and that students are subject to verbal and physical abuse by other students. In addition, staff reported that they do feel safe during school hours.

Instructional Leadership and High Expectations were closely tied for the second and third most significant component in terms of effect size between the higher and lower performing schools.

Results of the Staff Survey for Each of the 16 Schools

The following results for each of the 16 schools are item response totals for each of the seven effective school components. These scores are a product of five point response scale of -2 (strongly disagree) to +2 (strongly agree) with a mid-point of 0 (don't know) multiplied by the number of items within each component to produce seven score ranges.

Table 14: Score Ranges

	#Items	Score Range
Clear School Mission	9	-14 to +18
Frequent Monitoring	5	-9 to +10
Safe and Orderly Environment	13	-26 to +26
High Expectations	11	-15 to +22
Opportunity to Learn	12	-17 to +24
Instructional Leadership	11	-22 to +22
Home School Relationship	13	-26 to +26
Total Effective School Score	74	-121 to +148

As the component total score approached the upper/positive range of values, it signified that staff agreed that this component was present in their school. Conversely, as the component total score approached the lower/negative range of values, it indicated that staff disagreed that a component was present in their school. A score that was around 0 indicated that staff as a group had no predominate perception about the component.

Results for each of the 16 schools across the seven effective school components were as follows:

Table 15: Effective School Component Scores for the 16 Pilot Schools

School	CSM	FM	SOE	HI	OTL	IL	HSR	Total
A	13.03	6.66	14.40	15.03	15.53	14.12	10.66	89.38
B	13.79	6.21	14.63	14.58	16.37	14.49	9.89	89.80
C	13.30	6.92	15.76	14.74	15.68	17.00	12.09	98.19
D	9.96	4.07	8.44	8.77	11.52	9.30	6.62	54.89
E	10.48	4.84	16.48	12.17	12.91	13.23	6.51	76.00
F	10.73	4.65	12.62	10.94	11.74	12.25	7.96	73.75
G	12.80	7.40	16.20	14.60	15.80	17.60	4.30	88.70
H	11.10	5.40	13.00	11.87	11.91	11.67	10.51	75.89
I	9.09	4.26	-3.65	8.14	10.17	5.97	1.77	39.33
J	12.83	6.88	12.40	13.47	14.51	15.85	11.58	88.43
K	9.07	3.50	6.07	9.57	12.39	5.19	4.30	51.48
L	7.49	3.47	-7.65	4.67	7.75	.12	-2.77	13.57
M	10.13	4.22	11.49	10.93	10.29	8.86	6.89	62.89
N	4.93	2.50	-1.96	5.33	7.55	4.31	3.01	24.69
O	8.71	4.00	-1.73	6.94	10.47	7.48	1.43	41.09
P	10.16	4.80	-.08	7.66	8.80	7.96	5.89	46.47

Results A-H were for high performing schools and I-P were for low performing schools. Comparing these two groupings in general, total scores were similar in the range of values although schools D, J, and M do not fit well into the categories. The indicators that divided schools into high and low performance were from a different school year than the staff questionnaire results. There may be changes in what was measured by the effective school components so that some schools were not fitting as well into a category that was based on prior performance.

Prior reported results showed that the Safe and Orderly Environment component described the strongest difference between high and low performing schools. Reviewing the column of scores for this component, differences between the two groupings of schools can be observed. With a component score range of -26 to +26, it can be seen that scores for schools A-H and I-P are different. Although schools D, J, and M do not fit well into the pattern, scores A-H are higher than scores I-J. Scores for schools I, L, N, O, and P presented negative values. The score for school P was close to 0.

Results of the Staff Survey Compared to the Parent Survey

When the staff survey was originally developed as a 117 item questionnaire, the Home/School Relationship component was refocused into a parent survey. A majority of the HSR items from the staff survey were rewritten to ask parents for their perceptions. In addition to having English versions of the parent survey, they were translated into Spanish and Haitian Creole to accommodate the cultural diversity of some pilot schools. Most schools distributed the survey to a sample of parents although several school-wide distributions occurred.

The parent surveys were analyzed first to determine the reliability of the results. The reliability statistic, Cronbach's Alpha, was .92 which indicated that the survey items accurately described the home/school relationship component and that results would be meaningful. Therefore, parent scores were compared to staff scores for both the high and low performing school groups and for each of the 16 schools individually.

An analysis of the parent-staff results for the two general groupings of high and low performing schools found statistically significant differences ($P = < .0001$) between staff and parent perceptions of the home/school relationship. Parent ratings in both the high and low performing schools were higher than staff ratings. In the high performing schools, there was closer agreement between staff and parents in their ratings. In the low performing schools, there was a greater discrepancy or difference between parent and staff ratings. To put the findings in another perspective, parent ratings were at a similar level across the high and low performing groups of schools, however, the staff ratings were lower at the lower performing schools than at the higher performing schools.

Parents from both the high and low performing schools rated every survey item, except one, higher than staff. Staff from both the high and low performing schools rated the following item higher than parents:

Beyond report cards, teachers use other ways of communicating student progress to parents (e.g., conferences, home visits, phone calls, newsletters, and notes).

School staff as a group were more positive that various ways of communicating to parents were occurring than the parents.

Results were analyzed for each of the pilot schools to compare parent ratings with ratings given by the school staff. Results are for items that have a one-to-one correspondence, or are identical, on both the staff and parent surveys. The total scores could range from -40 to +40.

Table: 16: Comparison of Parent and School Staff Ratings for Home/School Relationship

School	Parents	Staff		School	Parents	Staff
A	22.31	15.03		I	17.21	4.38
B	19.71	15.37		J	21.88	17.67
C	23.92	16.86		K	17.27	4.77
D	21.93	10.09		L	17.25	-2.03
E	16.66	9.18		M	22.28	11.11
F	16.93	10.43		N	25.43	5.82
G	---	6.27		O	18.46	2.50
H	22.87	15.52		P	---	10.38

Parents whose children attend either a high (A-H) or low (I-P) performing school rate the home/school relationship higher, or more positively, than staff do.

In the results from high performing and low performing schools, differences between parent and staff ratings were statistically significant from 14 of the pilot schools. Since five or fewer parent surveys could be included from schools G and P, average ratings were not reported.

Comparing the parent-staff ratings for the two groups of schools, the average difference between parent and staff total ratings was smaller for high performing schools than for low performing schools. The average difference between parent and staff ratings from schools A-H was 8.64. The same figure from schools I-J was 16.01. The parent and staff perceptions of the home/school relationship in the high performing schools were more in agreement than at low performing schools.

Section 7: Successful Schools Staff Survey, Technical Report

The purpose of this section is to provide technical documentation[12] for the Chapter 1 Successful Schools Staff Survey.

Neutral Responses

From the outset of the development effort there were concerns expressed that the survey had too many items and that school staff would not seriously respond if they faced too many questions. In fact there emerged from the development team the general feeling that the instrument ought be pared down by about one third. In order to substantiate this perception, an estimate was made of the impact of survey length on respondent tendency to be neutral or skip survey items. This was done by simply correlating item numbers (1-117) with the percent of responses recoded as "Don't Know" or missing. A significant correlation (.37 at $p=.001$) was found, thus confirming the initial suspicion that the sheer length of the original survey used during field-testing could have an adverse effect on the validity of responses. However, the percent of respondents who answered "Don't Know" or skipped a particular item ranged from none (questions 29, 36, and 37) to over 40% (question 18), thereby suggesting more of a selective problem with individual items, rather than a systematic problem affecting the entire survey.

It is likely that the tendency toward respondent uncertainty is a function of many factors, not the least of which is ambiguous wording. Other factors that might influence neutral responses have to do with differences in respondents' background. The latter was explored by using a composite of all items in the original survey. The following trends were observed:

- Those without a college degree showed significantly more neutrality in their responses (19%) than did respondents who had at least a Bachelors (12%). Advanced degrees did not affect this response tendency.

- The percent of neutral responses was significantly and inversely related to both years of total educational experience and years of experience at their school. Those with less than one year of total experience and those with less than three years at their school responded neutrally about 18% overall compared to 13% or less in all other groups.

- Teachers were much more sure of their responses (12% neutral responses) than paraprofessionals (19%) or others (16%). Among teachers, those assigned regular classroom duties had the lowest overall amount of neutral responses (10%) of any other group (e.g., Chapter 1 teachers--16%, Special teachers--18%, and Exceptional Ed teachers--20%).

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[12] The text for this section was adapted from a memo on the same subject, dated 7/1/94.

• There was no significant difference in the percent of neutral responses attributable to respondents' racial/ethnic classification.

These results suggest somewhat predictable trends in neutral responding and none of the figures associated with respondent background approach the very high rates associated with particular items. As a general recommendation, the percent neutral or missing should be monitored for items, and only those few items with 30% or greater neutral responses should be removed automatically. These are items for which at least one out of three respondents did not understand the question or did not have a clear opinion. Included are questions 18, 42, 53, 86, 87, 114, and 117.

Calibration Sample

While the percent of neutral or missing responses should be given some consideration, this does not provide the most useful information for choosing the best items. Rather, an item's relationship (correlation) with student achievement outcomes ought to be given much greater weight. This is necessary in order to use the staff survey and its results for the purpose of distinguishing between high versus low performing schools in terms of their effective school attributes and is a reflection on the instrument's predictive validity. School achievement in this analysis was represented by a composite of reading, writing and math achievement.

The strategy for recommending which items to keep and which items to cull from the field-test instrument involved the use of a smaller calibration sample, instead of responses from all of the pilot schools. This was done to establish an analysis context that would maximize the potential contrast between high versus low performing schools. The calibration sample was used to calculate item correlations for the purpose of selecting items with the strongest relationship to student outcomes. Four schools from each end of the achievement spectrum were chosen for a total of eight in all. High performing schools in the calibration sample included schools A, B, C, and D. Low performing schools included M, N, O, and P. Also, responses made by staff who indicated they had less than one year of total experience were excluded. By focusing just on these eight schools versus all 16, there was an immediate improvement in overall correlation with student achievement from .33 to .49, even before any items were identified for possible exclusion.

In the tables which follow, item numbers, item correlations, and two alternative versions are shown ("X" denotes items recommended for deletion by the survey work group who met in Sanibel in July). In general, Version 1 accomplishes the goal of reducing the original survey by about one third. This was done by group consensus with consideration given to eliminating items with non-significant ($p > .05$) correlations and those with 30% or greater neutral responses. The second possible version represents an even greater reduction of items where the goal was to have just 35 items, seven for each subscale. At the end of each table are reliability estimates for the original and recommended revisions one and two. Ultimately, Version 1 was recommended for future survey administrations. Cronbach's alpha was used to

estimate reliability. For all analyses, the number of respondents from the eight schools was 386.

Table 17a: Item and Subscale Correlations with Student Achievement
School Mission

Item Number	Correlation	Version 1	Version 2
Q 1	.32	ok	ok
Q 2	.30	ok	ok
Q 3	.24	ok	X
Q 4	.25	ok	ok
Q 5	.14 (n.s.)	X	X
Q 6	.25	ok	X
Q 7	.21	ok	X
Q 8	.24	ok	X
Q 9	.20	ok	X
Q 10	.26	ok	ok
Q 11	.12 (n.s.)	X	X
Subscale Correlation	.35	.42	.39

Items	11	9	5
Reliability	.89	.87	.77

Table 17b: Item and Subscale Correlations with Student Achievement
Monitoring Student Progress

Item Number	Correlation	Version 1	Version 2
Q 13	.26	ok	ok
Q 14	.27	ok	ok
Q 15	.24	ok	ok
Q 16	.20	ok	ok
Q 17	.21	ok	ok
Q 18	.23	X	X
Subscale Correlation	.32	.36	.30

Items	6	5	5
Reliability	.83	.84	.84

(Note: Q 18 recommended for deletion due to percent of neutral responses=41%.)

Table 17c: Item and Subscale Correlations with Student Achievement
Safe and Orderly Environment

Item Number	Correlation	Version 1	Version 2
Q 19	.40	ok	X
Q 20	.33	ok	X
Q 21	.36	X	X
Q 22	.41	ok	X
Q 23	.38	ok	X
Q 24	.25	X	X
Q 25	.25	ok	X
Q 26	.26	ok	X
Q 27	.30	X	X
Q 28	.48	ok	ok
Q 29	.38	ok	X
Q 30	.49	ok	ok
Q 31	.45	ok	ok
Q 32	.48	ok	ok
Q 33	.53	ok	ok
Q 34	.29	X	X
Q 35	.39	ok	X
Q 36	.30	X	X
Subscale Correlation	.56	.55	.61

Items	18	13	5
Reliability	.93	.93	.86

Table 17d: Item and Subscale Correlations with Student Achievement
Student Expectations

Item Number	Correlation	Version 1	Version 2
Q12	.31	ok	X
Q 37	.36	ok	ok
Q 38	.48	ok	ok
Q 39	.16 (n.s.)	X	X
Q 40	.29	ok	ok
Q 41	.27	ok	X
Q 42	.23	X	X
Q 43	.30	ok	ok
Q 44	.22	X	X
Q 45	.20	X	X
Q 46	.26	ok	X
Q 47	.26	X	X
Q 48	.38	ok	ok
Q 49	.25	ok	X
Q 50	.28	ok	X
Q 51	.19	ok	X
Q 52	.20	X	X
Subscale Correlation	.45	.46	.49

Items	17	11	5
Reliability	.89	.88	.79

(Note: Question 42 recommended for elimination due to percent neutral responses=33%)

Table 17e: Item and Subscale Correlations with Student Achievement
Opportunity to Learn

Item Number	Correlation	Version 1	Version 2
Q 53	.20	X	X
Q 54	.16 (n.s.)	ok	X
Q 55	.26	ok	X
Q 56	.24	ok	X
Q 57	.18	ok	X
Q 58	.22	X	X
Q 59	.32	ok	ok
Q 60	.25	X	X
Q 61	.30	ok	ok
Q 62	.35	ok	ok
Q 63	.34	ok	ok
Q 64	.25	X	X
Q 65	.23	ok	X
Q 66	.28	ok	ok
Q 67	.25	ok	X
Q 68	– .14 (n.s.)	X	X
Q 69	.14 (n.s.)	X	X
Q 70	.10 (n.s.)	X	X
Q 71	.24	ok	X
Subscale Correlation	.34	.43	.43

Items	19	12	5
Reliability	.91	.88	.77

Table 17f: Item and Subscale Correlations with Student Achievement
Instructional Leadership

Item Number	Correlation	Version 1	Version 2
Q 72	.39	X	ok
Q 73	.37	ok	ok
Q 74	.30	ok	X
Q 75	.30	ok	X
Q 76	.23	X	X
Q 77	.11 (n.s.)	X	X
Q 78	.29	ok	X
Q 79	.28	ok	X
Q 80	.23	X	X
Q 81	.28	ok	X
Q 82	.31	ok	ok
Q 83	.28	X	X
Q 84	.28	X	X
Q 85	.24	ok	X
Q 86	.20	X	X
Q 87	.19	X	X
Q 88	.24	ok	X
Q 89	.16 (n.s.)	X	X
Q 90	.36	ok	ok
Q 91	.26	X	X
Q 92	.34	ok	ok
Q 93	.23	X	X
Subscale Correlation	.38	.42	.44

Items	22	11	5
Reliability	.95	.93	.86

(Note: Questions 86 and 87 deleted due to percent neutral responses=33%)

Table 17g: Item and Subscale Correlations with Student Achievement
Home-School Relations

Item Number	Correlation	Version 1	Version 2
Q 94	– .02 (n.s.)	X	X
Q 95	.07 (n.s.)	ok	X
Q 96	.13 (n.s.)	ok	X
Q 97	.09 (n.s.)	X	X
Q 98	.26	ok	ok
Q 99	.02 (n.s.)	X	X
Q 100	.15 (n.s.)	X	X
Q 101	.21	ok	X
Q 102	.15 (n.s.)	X	X
Q 103	.20	X	X
Q 104	.20	ok	X
Q 105	.34	ok	ok
Q 106	.18	X	X
Q 107	.21	ok	X
Q 108	.23	ok	X
Q 109	.31	X	ok
Q 110	.11 (n.s.)	X	X
Q 111	.08 (n.s.)	ok	X
Q 112	.19	X	X
Q 113	.24	ok	ok
Q 114	.41	ok	X
Q 115	.33	ok	ok
Q 116	–.01 (n.s.)	ok	X
Q 117	.15 (n.s.)	X	X
Subscale Correlation	.28	.32	.39

Items	24	13	5
Reliability	.92	.89	.82

Table 17h: Item and Subscale Correlations with Student Achievement
Summary for all Subscales

Item Number	Correlation	Version 1	Version 2
School Mission	.36	.37	.39
Monitoring Progress	.30	.30	.30
Safe School	.56	.59	.61
Student Expectations	.47	.48	.49
Opportunity to Learn	.40	.41	.43
School Leadership	.39	.41	.44
Home-School Relations	.32	.35	.39
Total Correlation	.49	.50	.54

Items	117	75	35
Reliability	.98	.98	.96

Summary of Findings and Recommendations

Given the approach that was used, the data in Tables 17a - 17g seem to suggest the following:

- Committee recommendations for eliminating items led to the reduction of survey items from 117 to 75 (Version 1).

- Use of a polarized calibration sample (top four high performing schools + bottom four low performing schools) increased item and subscale correlations with student achievement.

- In all cases except one (Monitoring Student Progress), successive shortening of the survey instrument led to improved subscale and total correlations with student achievement. Decreases in reliability estimates were negligible overall; however, the reliability of individual subscales was reduced as items were eliminated, but still maintained acceptable levels (e.g., minimum for Version 2 = .77; maximum = .82).

- The subscale of items pertaining to a school's Safe and Orderly Environment had the highest correlation with student achievement of any other subscale or even the total of all items. Next came the total of all items, then Student Expectations, School Leadership, Opportunity to Learn. School Mission and Home-School Relations subscales were followed only by Monitoring Student Progress.

- Though Version 2 was not chosen as the recommended survey form for future use, it remains a viable alternative should there be a compelling need for an even shorter version.

Section 8: What Parents Said (and Did Not Say) About Pilot Project Schools

The purpose of this section is to report on some of the technical issues associated with the Successful Schools parent survey and also to provide an analysis of results from the 16 schools which participated in the initial field-test of the instrument. It deals exclusively with the standardized (or "bubble" response) form. Parent surveys were supposed to help round out the picture of achievement and learning conditions in the pilot schools, but the major findings of the field-test suggest otherwise. Given a relatively short (23 item) survey, parents did not respond or answered "Don't Know" over 20% of the time. When parents did respond, they tended to be overly agreeable to most anything they were asked. Responses to the parent survey did not differentiate well between higher and lower achieving schools and did not appear to be strongly related to either the academic standings of schools or to the learning environment.

The Respondents

There was a total of 2,382[13] parent surveys returned at the end of the field-test administration. The first part of the parent survey asked for information about the person(s) completing the questionnaire or their children, such as the grade level of the child who brought the survey home, the total number of their children who attended the school, whether the parent worked outside of the home, the total number of adults living in the home, and the respondent's highest level of education. Unfortunately, more respondents left this area blank than answered the questions, perhaps because of the fine print used for instructions and/or the location of this section in a small rectangle at the upper right hand corner of the survey. The fact that the instructions for the demographic section began with the following statement: "Please leave id number blank" could also have contributed to the low response rate.

Of those respondents who did answer questions in the demographic section, it was found that:

- The grade levels of children attending the pilot schools were fairly evenly distributed from Kindergarten through grade five at between 14% and 18% each. There were only 2% reported as sixth graders.

- The total number of children attending a particular pilot school effectively ranged from one to five with the average being 1.8.

- The total number of adults living in the home effectively ranged from one to two, with the vast majority 97% indicating a single parent household.

[13]There was a total of 2,513 surveys originally scanned; however, 131 of these had missing responses for all items. Presumably, they were retained because of written comments on the reverse side of the survey form. For item analysis purposes, surveys with all missing responses were excluded.

- With regard to education level, 25% indicated they had not finished high school, 32% indicated they had at least finished high school, 29% indicated some college training, and 14% said they had a college degree.

While the demographic profile is interesting, the large number of missing responses raises questions as to its accuracy. Nevertheless, these were the only data available to shed light on characteristics of respondents to the parent survey. While much of the demographic information was sketchy, this appears to be as much a factor of physical layout of the survey as anything else.

Representation of Respondents

Prior to analysis of technical properties of the parent survey instrument, a preliminary research questions was addressed regarding how well the potential respondents were actually represented in the data. *To what extent do survey responses represent parents at large in the 16 pilot schools?* This question is of concern because a general lack of representation would limit the extent to which the technical properties of the survey (e.g., reliability and validity) could be estimated with any certainty. However, the question of overall representation could not be addressed directly because the total number of potential respondents could not be determined from the data available. Other field-test conditions also may affected the estimate. For example, schools did not receive a uniform number of survey instruments, or enough to send home with all students. The availability of instruments also varied as to whether they were printed in English, Spanish or Haitian.

Accordingly a fall back approach was used to address the issue of parent representation by looking at the number of survey responses in relation to student membership recorded during the 1993-94 Fall Student Survey (October, 1993). Because of the conditions cited above, this estimate will likely be an under-estimate of parent representation in most cases, which is reinforced by some of the demographic data that showed nearly two students per household and the predominance of single parent households.

Table 18 on the following page shows the percent of students represented by the actual parent survey data collected. The data are provided by site within the same groups of higher and lower achieving schools that have been used throughout various sections of the pilot project report. For consistency of terminology and ease of reference, the higher achieving schools (A through H) are referred to as Group "A"; whereas the lower achieving schools (H through P) are referred to as Group "B".

Table 18: Percent of Students Represented by Parent Surveys

Pilot School	Number of Students	Number of Surveys	Percent of Students	Pilot School	Number of Students	Number of Surveys	Percent of Students
A	410	116	28%	I	759	31	4%
B	516	155	22%	J	1,258	836	66%
C	475	111	23%	K	844	131	16%
D	468	197	42%	L	1,114	73	7%
E	505	176	35%	M	599	52	9%
F	673	164	24%	N	1,078	64	6%
G	631	8	1%	O	969	100	10%
H	687	146	21%	P	739	22	3%
Total	4,365	1073	25%	Total	7,360	1,309	18%

There was considerable variance between schools, with the percent of students represented ranging from 1% to 66%. Given a grand total of 11,725 students in membership and 2,382 parent surveys, the average over all schools was about 20%, though this figure is likely a very low end estimate. The data on representation of parents should not be viewed in the traditional sense of return rates, given full distribution, but rather in the sense of return rates, given limited distribution. From this perspective, it would seem reasonable to proceed with reliability and validity estimates.

As a footnote to the previous discussion, it can be pointed out that eight schools were above the overall rate of student representation and seven of these were among higher achieving schools (A through H). Conversely, there were six schools with less than 10% representation, five of which were among the lower achieving schools (I through P). In terms of follow-up questions, it would be interesting to know how some schools (e.g., D, E, and J) were able to accomplish a much higher return-rate than the average. Did they simply have more surveys to distribute? As well, it would be interesting to know what happened in other schools (e.g., G, I and P) that led to return-rates far below the average. Were adequate numbers of surveys not available, was the field-test not taken seriously, or were there genuine differences in respondents?

Reliability and Validity

To what extent did the parent survey yield reliable and valid responses? Basically the same procedures were used for determining the reliability and validity of the parent survey as were used with the staff survey. Instead of using all available responses, these technical issues were examined using a smaller, calibration sample that consisted of responses from the four highest and four lowest achieving of the 16 pilot project schools. This approach was chosen in order to maximize the potential contrast among respondents whose children attended schools at the opposite ends of the achievement spectrum.

Reliability estimates were determined on the basis of Cronbach's alpha. Predictive validity was estimated on the basis of item and subscale correlations with aggregate achievement and also with indicators of a school's learning environment as an alternative strategy. The highest achieving schools in the calibration sample included schools A, B, C, and D; the lowest performing schools included M, N, O, P. In both cases, the achievement status of a school was determined by a composite of reading, writing and math scores, converted to normalized ranks in relation to all elementary schools in the state. For comparative purposes, a similar index was created from normalized ranks associated with promotion, attendance and suspension rates. Relationships with both indices are shown in Table 19.

Table 19: Item Correlations with Student Performance and Learning Environment

Item Number	Student Achievement	Learning Environment
Q 1	.03	.13
Q 2	- .02	**.21
Q 3	- .01	.16
Q 4	-.06	.07
Q 5	.04	**.27
Q 6	-.05	.06
Q 7	.04	.07
Q 8	.02	.07
Q 9	.03	.02
Q 10	.11	.08
Q 11	- .05	- .05
Q 12	- .07	.00
Q 13	.10	.04
Q 14	- .04	.04
Q 15	- .06	.04
Q 16	- .04	- 05
Q 17	.01	- .02
Q 18	.01	.07
Q 19	- .02	- .03
Q 20	.04	.06
Q 21	*.14	**.21
Q 22	.04	*.14
Q 23	.01	.09
Total	.02	.12

(* p<.01 and ** p<.001)

While the overall reliability (internal consistency) of the parent survey instrument was estimated at .92, there is little indication of predictive validity, especially with student achievement. Item #21 ("I would rate this school as superior") had the only correlation that was statistically significant, but was only weakly related to student achievement.

The correlation of parent survey items with learning environment was generally higher than with achievement, but still not high enough to argue for predictive validity. Items #21 (as previously stated), #5 ("Parents are encouraged to share ideas for school improvement with administration and staff in this school."), #2 ("The activities of the parent group support the school's goals."), and #22 ("Communication from the school is clear, effective and frequent.") were the only ones that had statistically significant correlations, but were still only weakly related to learning environment.

These findings are in stark contrast to the results of the technical analysis for the staff survey where all correlations with achievement were statistically significant and exhibited a somewhat consistent and substantial pattern of relationships. The major conclusion that can be drawn from these data is that the parent survey appears to be sufficiently reliable, but has very low predictive validity with regard to the major areas of concern in this study--student achievement and learning environment. On the other hand, the majority of items in the parent survey stem directly from the Home-School Relations section of the staff survey. Also, they were developed through consensus negotiation among a panel of evaluation specialists. From this perspective, there is support for face validity. But what are the items in the survey measuring?

Having at least passed the reliability test, perhaps the answer can be found in further analyzing the results from the pilot project administration. However, there are other technical issues that need to be addressed before responses are aggregated.

Representation of Schools

Looking back to Table 18, one of the most striking features of the data is the highly disproportionate number of parent surveys collected at school "J" as compared to all others. This observation leads to another research question dealing with representation: *To what extent do the responses represent parents at individual schools?* This question is important because an uneven distribution of survey respondents across schools could affect the extent to which aggregate results would be representative of the two groups. The question was addressed by comparing the percent of students in membership versus the percent of surveys within each group of schools. Results are provided in Table 20a on the next page.

Table 20a: Representation of Schools within Comparison Groups

Group "A"			Group "B"		
Pilot School	Percent of Students	Percent of Surveys	Pilot School	Percent of Students	Percent of Surveys
A	9%	11%	I	10%	2%
B	12%	14%	J	17%	64%
C	11%	10%	K	11%	10%
D	11%	18%	L	15%	6%
E	12%	16%	M	8%	4%
F	15%	15%	N	15%	5%
G	14%	1%	O	13%	8%
H	16%	14%	P	10%	2%
Total	100%	100%	Total	100%	100%

From the data in Table 20a, it can be seen that three schools (G, I, and P) are very much under-represented overall and that one school (J) accounts for nearly two-thirds of the survey data for Group "B" and over one-third of the total surveys collected. From the perspective of aggregate data for Group "B", school "J" was so much over-represented that it virtually dominated all other responses. In order to proceed with aggregation of responses by group, some adjustment had to be made in order to reduce the lopsided representation by just one school.

It was decided that random sampling would be used to reduce over-representation for the one dominant school. But how many cases should be drawn? The process of adjusting the number of survey responses for school "J" was one of successive approximation, taking into account their proportion of students in the group, as well as the extent of over-representation in the school with the next largest number of surveys (K). As seen in Table 20b, the adjustment process resulted in a greatly reduced number of surveys from school "J". Even so, parity was maintained between the relative number of students and the relative number of parent surveys in the group. As well, school "J" remained the most over-represented in Group "B", just more reasonably so. This adjustment also had the net effect of increasing representation for all other schools in the group. Unfortunately, there was nothing that could be done about the very low level of representation for schools G, I, and P.

Table 20b: Net Effect of Sampling Responses from School "J"

Group "B"			
Pilot School	Percent of Students	Number of Surveys	Percent of Surveys
I	10%	31	5%
J	17%	175	27%
K	11%	131	20%
L	15%	73	11%
M	8%	52	8%
N	15%	64	10%
O	13%	100	15%
P	10%	22	4%
Total	100%	648	100%

From this point on, all results are reported based on the adjusted number of responses from school "J". No other school's responses were sampled.

Missing and "Don't Know" Responses

Yet another consideration before aggregating results for Group "A" versus Group "B" schools was the issue of relatively large amounts of missing data and "Don't Know" responses, especially in reference to factual statements such as the existence of a written discipline policy, an active parent group, or a statement of purpose for the school. *To what extent did missing or "Don't Know" responses characterize the survey data? What do the patterns of missing data or "Don't Know" responses reveal?* The fact that so many respondents simply did not answer certain items or said they did not know turned out to be one of its most striking features of the field test results.

Table 21a lists five items for which half or more of the pilot schools had 33% or more (one out of three, or more) missing or "Don't Know" responses. The items have been arranged in descending order according to the number of schools affected.

Table 21a: Items with High Numbers of Missing and "Don't Know" Responses

Survey Item	High Achieving	Low Achieving	Total Schools
20	6/8	7/8	13/16
5	6/8	5/8	11/16
3	4/8	5/8	9/16
8	5/8	4/8	9/16
1	4/8	4/8	8/16

The following are the actual survey questions associated with items that had the highest incidence of missing or "Don't Know" responses:

#20: A written statement of purpose exists for this school

#5: Parents are encouraged to share ideas for school improvement with administration and staff in this school.

#3: The parent organization of this school is considered important by the administration and teachers.

#8: My child's teachers spend more time communicating with me about the good things my child does than the bad.

#1: There is an active parent group at this school.

Items for which there were large numbers of missing or "Don't Know" responses point to three areas of parental involvement where there appears to be a low level of awareness or a general reluctance to respond:

1. School mission or purpose
2. Status of the local parent organization
3. Positive feedback from/input to school improvement

On the other hand, there were five items which had a relatively low incidence of missing or "Don't Know" responses (10% or fewer in two-thirds or more of the schools).

Table 21b: Items with Low Numbers of Missing and "Don't Know" Responses

Survey Item	High Achieving	Low Achieving	Total Schools
6	8/8	7/8	15/16
12	7/8	7/8	14/16
17	6/8	7/8	13/16
18	5/8	7/8	12/16
16	4/8	7/8	11/16

The following are the actual survey questions associated with items that had the lowest incidence of missing or "Don't Know" responses:

#6: I feel free to initiate contact with my child's teacher.

#12: I make an effort to be informed about my child's educational program.

#17: I cooperate with my child's teacher to see that homework is completed.

#18: My child completes assigned homework before going to school.

#16: I support the school homework policy.

Items for which there were relatively low numbers of missing or "Don't Know" responses point to two areas of parental involvement where there appears to be a high level of awareness/understanding or a general willingness to respond. Incidentally, many of these represent things that parents are supposed to do.

1. Communication with child's teacher
2. Awareness of child's educational program
3. Support of homework policy

Results from the Field-Test Administration

Did parent survey responses distinguish between higher and lower achieving schools? Using the data from individual schools, grouped as higher versus lower achieving and with a sample of responses from school "J" instead of the original total, the following are results for each of the parent survey items: Also, positive response options (Agree and Strongly Agree) and negative response options (Disagree Strongly Disagree) have been collapsed for ease of display.

Table 22: Parent Survey Items and Responses for Group "A" and "B" Schools

	Don't Know		Agree		Disagree	
Item Number and Content	Group "A"	Group "B"	Group "A"	Group "B"	Group "A"	Group "B"
1. There is an active parent group at this school.	31%	33%	65%	61%	4%	6%
2. The activities of the parent group support the school's goals.	31%	31%	66%	63%	3%	6%
3. The parent organization of this school is considered important by the administration and teachers.	21%	21%	76%	72%	3%	7%
4. Parent activities and conferences are scheduled so that working parents can participate.	17%	13%	76%	75%	8%	12%
5. Parents are encouraged to share ideas for school improvement with administration and staff in this school.	14%	14%	81%	78%	5%	7%

Table 22: (Continued)

Item Number and Content	Don't Know		Agree		Disagree	
	Group "A"	Group "B"	Group "A"	Group "B"	Group "A"	Group "B"
6. I feel free to initiate contact with my child's teacher.	3%	4%	92%	90%	5%	6%
7. My child's teacher keeps me informed about my child through phone calls, class newsletters, and/or notes home.	3%	2%	88%	89%	9%	10%
8. My child's teachers spend more time communicating with me about the good things by child does than the bad.	10%	7%	66%	67%	23%	25%
9. I have been invited to visit and observe my child's classroom.	7%	7%	76%	77%	18%	17%
10. I attend school activities, such as sports events, plays, concerts, awards assemblies.	7%	8%	75%	74%	18%	18%
11. If my child break a school rule, I support the teacher in disciplining my child.	8%	8%	86%	85%	7%	8%
12. I make an effort to be informed about my child's educational program.	5%	3%	91%	93%	4%	3%
13. Parent and/or community members are frequent volunteers in this school.	29%	26%	67%	68%	4%	6%
14. Parent-teacher conferences usually focus on how well my child is doing in schoolwork.	10%	10%	79%	80%	11%	10%
15. Parent-teacher conferences usually result in a specific plan of how I can help my child.	10%	10%	83%	83%	7%	7%
16. I support the school homework policy.	7%	5%	88%	89%	5%	6%
17. I cooperate with my child's teacher to see that homework is completed.	4%	3%	93%	93%	3%	3%
18. My child completes assigned homework before going to school.	5%	3%	89%	90%	6%	7%
19. I am aware of a written discipline policy.	3%	14%	90%	79%	7%	6%
20. A written statement of purpose exists for this school.	34%	33%	61%	63%	5%	4%
21. I would rate this school as superior.	15%	15%	76%	72%	9%	13%
22. Communication from the school is clear, effective and frequent.	9%	9%	81%	80%	10%	11%
23. I am actively involved in my child's school.	9%	8%	61%	66%	31%	26%

With few exceptions, when parents did respond, they tended to agree with almost every item on the survey. These results are reminiscent of public attitudes toward local schools as

captured in recent years through the Annual Phi Delta Kappa Gallup Poll. The most recent poll results (Elam, Rose, and Gallup, 1994) indicate that:

- People gave the school attended by their eldest child good grades -- 70% gave it an A or a B, and 92% gave it a passing grade. But they continue to give the nation's schools considerably lower grades: only 22% award he nation's schools an A or a B, while 49% give them a C.

The parent survey data bear a striking resemblance to the poll. When asked whether they agreed or disagreed with the statement--I would rate this school as superior, parents in both higher and lower achieving schools responded affirmatively: 76% in Group "A" and 72% in Group "B".

There was only one item for which there was a difference of 10% or more between parent responses in higher versus lower achieving schools:

I am aware of a written discipline policy.

Despite the general trend to either not respond, answer "Don't Know", or be in agreement with most every item, it is important to note that the one item that most distinguished between higher and lower achieving schools dealt with awareness of the school's discipline policy. This finding very strongly reinforces the fact that the Safe and Orderly correlate on the staff survey was the area that provided the greatest distinction there between higher and lower achieving schools.

Section 9: Parent Survey, Responses to Open-Ended Questions

Overview

In addition to the 23 Likert-scale items on the parent questionnaire, the following three open-ended questions were included:

1. What is the school doing that is most helpful for your child?
2. Please tell us what the school could do to help your child.
3. Please provide other comments.

Responses from parents were coded as they related to the correlates of effective schools, with multiple codes possible for each response. Data were analyzed by group, the eight higher performing schools versus the eight lower performing schools. The percentage of responses in each category was calculated for each group by dividing the number of responses in a particular category by the total number of respondents to the question.

The difference in the percentage of responses for each group was then compared through the use of a Z-test for the difference between two population proportions (Hinkle, Wiersma, & Jurs, 1979), using an alpha level of .01. Results are presented in the tables below.

What is the School Doing That is Most Helpful for Your Child?

Paralleling the responses of parents to the main part of the questionnaire, parents in both higher performing and lower performing schools were generally positive about the school helping their child. Almost two-thirds of the parents in both groups indicated that providing the opportunity to learn was most helpful for their children. This opportunity was provided most often through effective teachers and teaching strategies. A typical parent comment was "Teachers do a great job in educating my child."

Although small, the percentage of parents in higher performing schools who indicated that special programs were most helpful in providing the opportunity to learn was significantly greater than that in lower performing schools. These special programs included Chapter 1, Exceptional Student Education, and after school programs, such as tutoring. One parent commented "Chapter 1 has helped my child more than anything."

Three correlates were approximately equal overall in helping students: Providing a safe and orderly environment, setting higher expectations. and providing for good home/school communication. Although a slightly higher percentage of parents at higher performing schools indicated that students were expected to do well, responses did not differ significantly from those at the lower performing schools for any of these correlates.

Table 23: Responses to Question 1

What is the School Doing That is Most Helpful for Your Child?					
	Higher Performing Schools (n=678)		Lower Performing Schools (n=539)		All Schools
Successful Schools Correlate	Number	Percent	Number	Percent	Percent
Provides Safe/Orderly Environment	107	16%	86	16%	16%
Has a Clear School Mission	25	4%	35	6%	5%
Provides Instructional Leadership	6	<1%	12	2%	1%
Sets Higher Expectations	107	16%	62	12%	14%
Provides Opportunity to Learn	444	65%	336	62%	64%
Provides Special Programs *	59	9%	23	4%	7%
Monitors Student Progress Often	24	4%	15	3%	3%
Has Home/School Communication	111	16%	88	16%	16%

* Significant at alpha < .01.

Please Tell Us What the School Could Do to Help Your Child

When asked what the school could do to help their child. parents at lower performing schools were significantly more likely to indicate that the school should provide a safe and orderly environment for their child than parents at higher performing schools. This response accords with the results of the staff survey, which showed that the strongest difference between staff in lower performing schools and those in higher performing schools was for the safe and orderly component. Parents indicated a need for more effective discipline, safer facilities, respect for students of all types, and improved behavior, including more responsible students.

Providing an opportunity for their children to learn was again the most frequent response for parents. This included extra help through after school programs, tutoring, more teacher's aides, greater computer access, more homework, better teachers or teaching strategies, and more time with academics. A significantly greater percentage of parents at lower performing schools indicated that more homework should be assigned or that the homework policy should be improved. Whether this indicates an actual difference in the amount of homework assigned at the two schools or a difference in perception is an area for further exploration.

About one-fourth of the parents at both types of schools indicated that the school was already doing a good job in its mission. Parents in general appeared to be satisfied with home/school communication, with about 15% in both groups of schools indicating that communication or cooperation should be improved.

Table 24: Responses to Question 2

Please Tell Us What the School Could Do to Help Your Child					
	Higher Performing Schools (n=678)		Lower Performing Schools (n=539)		All Schools
Successful Schools Correlate	Number	Percent	Number	Percent	Percent
Provides Safe/Orderly Environment	50	9%	72	14%	11%
Has a Clear School Mission	152	26%	124	25%	26%
Provides Instructional Leadership	5	<1%	4	<1%	<1%
Sets Higher Expectations	31	5%	34	7%	16%
Provides Opportunity to Learn	240	41%	212	42%	41%
Provide Extra Help	76	13%	58	12%	12%
Assign Homework *	31	5%	46	9%	7%
Provide Good Teachers/Strategies	13	2%	17	3%	3%
Provides Courses/Time in Class	91	16%	77	15%	16%
Monitors Student Progress Often	21	4%	8	2%	3%
Improve Home/School Communication	90	16%	74	15%	15%

* Significant at alpha < .01.

Please Provide Other Comments

Other comments from parents were divided into two categories for each correlate - positive comments and negative comments; for example, "I think that the children who walk to school should be better supervised" would be coded as negative for "Safe and Orderly Environment." Only those categories with more than five percent response per group are reported below.

Again, parents in lower performing schools were significantly more likely to comment negatively on the safety and orderliness of the environment at their schools. Sixteen percent of the parents in lower performing schools indicated that something was needed to make the environment safer and more orderly. These areas included more security, better traffic control. more respect for others of all races, and improved discipline procedures. Comments like the following reflected a general call for more discipline: "Teachers are handcuffed when dealing with discipline. Rules need to be enforced."

A significantly greater proportion of parents commented positively about teachers and teaching strategies at higher performing schools (19%) than at lower performing schools (8%). Typical comments were "She has a super teacher" and "Thanks for providing us with such terrific people."

A larger percentage of parents overall commented negatively about the opportunity to learn (12%) than commented positively (9%). However, there was no significant difference between the two groups of schools on either of these dimensions. Negative comments would include a need for more individual attention, more homework, and more time spent on academics.

About one-third of parents overall responded with a general statement of support for the school, which was coded as "Has Clear School Mission." These were comments such as, "This school is one of the best." Equal percentages of parents at lower and higher performing schools indicated that improvement was needed in the area of home/school communication.

Table 25: Responses to Question 3

Other Comments					
	Higher Performing Schools (n=301)		Lower Performing Schools (n=291)		All Schools
Successful Schools Correlate	Number	Percent	Number	Percent	Percent
- Needs Safe/Orderly Environment *	28	9%	47	16%	13%
+ Has Clear School Mission	94	31%	77	26%	29%
+ Sets Higher Expectations	19	6%	18	6%	6%
+ Opportunity to Learn (General)	30	10%	24	8%	9%
- Opportunity to Learn (General)	33	11%	36	12%	12%
+ Op to Learn - Good Teachers *	57	19%	22	8%	13%
- Need Home/School Communication	40	13%	39	13%	13%

* Significant at alpha < .01.

Summary

- In general, parents were positive about their schools, indicating that the way in which the school helps their children most is to provide them with an opportunity to learn.

- Parents at higher performing schools were significantly more likely to identify special programs as the way in which the school helped their child. These special programs included Exceptional Student Education, after school tutoring, and Chapter 1.

- Parents at higher performing schools were also significantly more likely to comment positively about their child's teacher.

- A significantly higher percentage of parents at lower performing schools indicated that the school should assign more homework or improve the homework policy.

- Reinforcing the results of the staff survey, parents at lower and higher performing schools differed significantly in their perception of whether the school provided a safe and orderly environment for learning. Parents at lower performing schools indicated that improvement was needed in such areas as security, respect for others, and discipline.

Section 10: Successful High Poverty Schools Study, On-Site Interview Analysis

Overview

The focus of this report is to offer interim results of the Successful Schools pilot project on-site interviews. The principal questions that guided the analysis of the interviews were the same as pilot project's main research questions. The questions were: Are the survey and interview instruments appropriate for continued research efforts? Which elements are characteristic of successful high poverty schools? However, the appropriateness of the instrument and other on-site interview logistical considerations are discussed in another section of this technical report.

There were more than 200 respondents to the Successful Schools interviews in sixteen Florida schools. Over 250 pages of transcribed notes and more than 1,000 supporting documents are being considered. The amount of information and data gathered was voluminous and its processing continues. Results presented here are a summary of the comments and feedback received from seven of the Chapter 1 schools. Included in the survey were supervisors, school principals, teachers, counselors, custodians, para-professionals and parents (see Table 25).

The schools that were visited are located across the state in six counties and represented a selection of high and low performing Chapter 1 schools. While all Chapter 1 schools offer compensatory services to students with academic deficiencies, the common element shared by the schools visited is their Free or Reduced Lunch (FRL) rate. All of the schools visited were at or over the 75% FRL rate.

The main tool used to interpret the comments and observations provided by the interviewees was QUALPRO (QP) software, a text-database manager. This software package provided the framework to code, group and identify significant features from interview results. The interview forms were transcribed into a word processing format (WordPerfect) then imported into QP. The program then blocked and numbered the transcribed text. Copies of the transcribed text were made available to the interviewers for their review. Edits were made to ensure that the transcribed text was as close to the interviewer's handwritten notes as possible. Initially, codes or key words were assigned for each answer. These codes were then entered into QP. The program could then provide code lists, frequencies, as well as citations of selected codes used. An intereliability check is also planned. A limit of 75% was set for the validity of the codes. The three coders need to agree at 75% or more of the times on the codes selected to represent the text being considered.

Codes used in this part of the report are synonymous with the main concepts expressed in interview answers. Whenever possible, the codes used were of "yes or no" types for quantification purposes. Nonetheless, many of the questions could not be, or were not, answered in this format and key descriptors were used as codes. The majority of the questions used were open-ended and therefore answers varied in length and scope. Interview questions, whenever possible, were grouped to match appropriate correlates.

Preliminary Findings

Instructional Leadership

The schools in this summary overwhelmingly identified their staff and teachers as the main element that made their schools successful. The majority of respondents (65%) identified the school staff as being the key to their success and specifically acknowledged their teachers as evidenced by comments such as the following in response to: "What makes this a good school?":

> "Dedicated, enthusiastic, talented staff who put in many hours beyond the school day." "High level of commitment of teachers." "Teachers make all the difference."

Additionally, teachers' attitudes, commitment and the behavior modeled were particularly cited by the interviewees. Respondents also mentioned other elements they considered contributors to their success such as: leadership, facility, resources, technology, parents, and others.

Of particular interest were the answers of two high performing schools and two low performing schools. Although all four schools agreed that teachers were the main element in the success of the school, principals' **Instructional Leadership styles were different.** The two high performing schools considered in this report, embraced shared decision-making and valued their teachers' ideas. Administrators at those two schools also encouraged risk-taking and creativity. In low performing schools, directors requested their teachers' input to approve or disapprove instructional programs or ideas that had been made by the school district or the director. The difference between high and low performing schools was evident.

Safe and Orderly Environment

Interviewees consider their work place safe. The faculty, staff and parents assessed the schools a safe place in which to study and work. Answers at six out of the seven schools provided the following comments:

> "Never thought about it. Do not feel unsafe. Safe haven. Police availability." or "Yes. No problems are anticipated; no fears; no unsafe events."

Personnel interviewed had no concerns for their welfare while in the school. Nonetheless, there was one school where some staff members did not feel completely safe. The responses received at that school indicated that they were concerned both with the neighborhood and the access from outside the school. These respondents made a distinction between feeling safe in the school and safe in the surrounding community. This fact was evidenced by comments such as:

"Yes. Environment outside not secure. Overall school kept safe. If something is going on in the neighborhood, we're safe and locked up in our rooms."; and "Basically, like any other place. Vandalism. Would not stay after six."

A comparison of the high and low achieving schools did not yield different results.

Of seventy-four respondents in the seven schools considered, sixty-four (86%) would want their own children to attend the school in which they work. The personnel interviewed considered their schools to have appropriate curriculums and they did not fear for their children's safety. The ten respondents who would not send their own children to the school where they worked had different reasons for not wanting their children there. Some of the reasons were fear of the neighborhood, fear of retaliation and religious reasons.

Respondents (71%) from one of the low performing schools would not have their children attend the school they worked in. They mentioned discipline problems, neighborhood, and vengeance as the main reasons for not wanting some close to them at their campus.

Additionally, there were various groups of children that were identified as presenting discipline problems. Some of the groups identified were: (1) students with emotional problems, (2) gender specific groups and (3) students with academic problems. Among the majority of respondents (31%) who answered "Yes," when asked: "Are there particular groups of students that present behavior problems?", identified students with family problems (ten of thirty-two responses). Comments were related to the home, parents and behavior problems out of school. Examples of those comments include:

"Of course. Children that have mothers who don't care."; "Yes. Students that are seeking attention - there is something going on at home." and others.

High Expectations

Ninety-two percent of the interviewees expected their students, in the schools considered in this summary to perform as well as students in other schools in the district. The expectations were high and the commitment to enhance and promote their potential was communicated throughout the interviews. Only one out of twenty-eight respondents did not expect students at their school to perform as well as other students; the person interviewed considered this a comparison and refused to compare students. Other respondents shared the dislike for comparing but would set the same expectations on any student in their district. An analysis of the low and high performing schools did not yield different results.

Clear School Mission

The main focus of the two top performing schools is their students when they are discussing the school mission. In contrast, the two low performing schools had difficulty agreeing on what their school mission is. The low performers viewed their mission as providing services

to the children and families that they may otherwise not receive. Other schools emphasized the development of self-esteem in their students as the main focus of their school. Nonetheless, the low performing schools could not agree on what the school mission was for their school.

The results of this analysis are inconclusive. All of the sixteen schools have not been considered for this report. Additionally, the documents provided by the schools visited are still being processed. Nevertheless, up to this point there appears to be no significant differences between high and low performing schools with the exception of the Instruction Leadership style of the administrators. All other features appear to exist in all of the schools considered.

Section 11: Successful Schools Study, Procedural Analysis of On-Site Visits

The purpose of this section is to share observations and recommendations related to the procedural aspects of the on-site visits.

Interview Questions

The interview was thought to need more focused questions and not to be tied to other knowledge, beyond the role of the interviewee. The focus of the questionnaire should not be redundant from the surveys that were sent out to the faculty members. There were a variety of comments pertaining to the elimination of questions from the on-site interview questionnaire. Only two teams identified the specific questions on particular questionnaires that should be dropped. The remaining teams, with few exceptions, made either broad comments about questions or suggested the elimination of certain personnel from the interview process. The main concern was that particular questions were not felt to be germane to the roles played by the staff. Other comments about specific questions included the elimination of the question on the "typical day". The remarks suggested that because we collect a sample schedule from teachers, there is no need to ask this question. **Recommendation: The question, "Describe a typical day for your students" should be eliminated from all the interview questionnaires used in the study.**

It was further suggested that the question on writing use in math and science, be clarified. There was a lack of understanding both on the part of the interviewee as well as the interviewer as to what this question meant and how it might be answered. **Recommendation: The question, "What opportunities are offered to your students to use writing in math and science?" should be changed to read "What opportunities are offered to your students to use the writing skills they have learned ?".**

Suggestions to modify the questionnaires pointed out the need to add the question "Is there anything you would like to say about the school?". **Recommendation: The question, "Is there anything you would like to say about the school?" should be added to all the interview questionnaires.**

Some members of the visiting teams felt that the parent interview did not reveal significant information. Others found the parent interview to be insightful. **Recommendation: The parent interview should remain a part of the on-site school study.**

In some cases the questionnaires were described as too long or repetitive. Team members mentioned that personnel who do not have recent classroom experience have difficulty answering some of the questions. There was a comment made that stated, "we're not getting at the instructional strategies with our questions". **Recommendation: The elimination of questions from the interview questionnaires will be addressed in remainder of this document. The question, "What instructional strategies are most successful for you?", should be added to the faculty and principal interview questionnaires.**

All the teams agreed that the questions need to change. The specific changes that were prevalent, include the district Chapter 1 coordinator interview. It needs to be focused. The instrument appears to have flaws for use at the district level. Most of the questions were difficult to answer, by school, without reluctance. It was seen as helpful when the Chapter 1 coordinator was interviewed at the school site. The larger districts might require a longer period of time for the interview. **Recommendation: The team leader, who interviews the Chapter 1 coordinator should make arrangements to hold the interview during a block of time that will allow freedom to extend its duration. Further, the team leader should try to arrange a meeting with the Chapter 1 coordinator at the school site to assist in channeling the interview toward the school in question.**

Questions for the paraprofessionals were not appropriate. Also, the questions were too academic and specific for the personnel at this level to know about curriculum decisions. These questions definitely need revision. **Recommendation: Reword the following questions:**

6. To what extent does the principal promote the discussion of instructional improvement? Change to " How does the principal promote the discussion of instructional improvement?"

11. What do teachers in this school believe is their responsibility in relation to student achievement? Change to "What do paraprofessionals in this school believe is their responsibility in relation to student achievement?"

The following questions should be removed from the paraprofessional interview:

9. How do you use test results to improve instruction?
14. Describe how you group for instruction in your classroom.
21. How would you improve student assessment?

It was suggested that the custodian interview be expanded and that a lunchroom worker interview be added to the interviewees. The Primary Specialist was mentioned as an addition to the interview schedule. The Assistant Principal/ PREP Coordinator questions need to "flow". **Recommendation: The following questions should be added to the custodian interview questionnaire:**

6. Is the school large enough for the population?
7. Are there designated areas for buses, cars, pedestrians and playground?
8. Are you given adequate supplies to keep the building in good condition?
9. Has there been a problem with vandalism in the school?
10. How do you interact with the children ?
11. Is there anything you would like to say about the school?

A lunchroom worker interview will not be added.

A Primary Specialist interview will not be added.

The counselor interview received a wide range of comments. Some team members felt the need to drop it altogether, while others thought that it needed to be revised. It was pointed out that this interview should be more related to the duties of the counselor in the school. Further it was suggested to drop questions 5, 9, 11, 14, and 21 from the interview. **Recommendation: The counselor interview should be dropped from the process.**

Other changes that were very specific suggested the elimination of question 6, 10, 11, 17, and 23 from the faculty interview. **Recommendation: Modify the following:**

6. To what extent does the principal promote the discussion of instructional improvement? Change to "How does the principal promote the discussion of instructional improvement?"

The following questions should be eliminated from the faculty interview:

17. Describe a typical day for your students.
23. Describe what you think a typical parent conference is like at this school. How is it set up, who initiates it, what is the purpose?

On-Site Process Logistics

Preorganization of materials was helpful. It was stated that all materials need to be available to team members prior to the site visits. This material would include one extra set of interview questions. Further, it was brought up that this is essential for those doing multi-day visits. Manila folders were suggested as a way to organize the materials. **Recommendation: All of the essential materials for each school to be visited, along with an extra set of interview questions should be sent to each team leader. The team leader should organize the materials in the way he or she sees fit, which may include the use of folders.**

The two person team worked well. Alternating questions was found to be very helpful. **Recommendation: The two person interview technique should continue to be used during the on-site visits.**

It was suggested that there be a random choice of teachers. The school staff were hand picked by principals. Staff could be selected by site visitors instead. Schools might send lists of staff members and visitors could select, from the list, those that will be interviewed. Also, a grade level teacher could be skipped in order to add a special area teacher to the interviewees. Another suggested technique was to keep at least six teachers , but focus on a grade level. **Recommendation: The issue of interviewee selection should be discussed further by the Chapter 1 Evaluation Advisory Panel. Asking that a list of faculty and staff be provided by the principal at each school site, may put school personnel into a "compliance frame of mind".**

The formula for interviewees should be as follows:

Principal(1)
Assistant Principal(1)
Parents(2)
Custodian(1)
Instructional paraprofessional(1)
Teachers(3)
Chapter 1 Supervisor (1) [to be interviewed only once by the first on-site team]
Select Teachers at random

It was brought up that there were too many interviews and that it would be better to observe more, while interviewing less. There should be some classroom visits or walk-bys. Observers should be available to walk through the school. Another view was to schedule classroom visits. Recommendation: An extra team member should be added to each team to tour the school and keep notes on what is observed. This will include student activities, classroom visits, building maintenance, filling out the documents list that is with the principal questionnaire and taking photographs at the school site.

Picture taking was seen as a very important aspect of the visit. It was suggested that additional pictures should be taken of students in the school. It was also thought that there should be a back up camera, in case something should happen to prevent photographs. Recommendation: The person on the visit, in charge of the photography, will take photographs of students engaged in interesting activities, unusual building problems or assets, as well as the four compass points and the front of the school. The team leader should see that two cameras are available for use at the school site.

Scheduling of interviews could be "smoothed out". Some of the interviews had to be rushed, while others were granted too much time. One way to prevent problems in scheduling was to review the schedules before arrival date. Each staff member interview took forty-five minutes. The timing was fine for teachers, but too much time was allotted for parents and custodians. Students should also be interviewed. A focus group might also be used to collect information. Recommendation: The amount of time needed for each type of interview should be given to principals after the team leader selects the personnel who will be interviewed. Approximate times required for the interviews are as follows:

Principal - 60 minutes
Assistant Principal - 60 minutes
Parent - 30 minutes
Custodian - 25 minutes
Instructional paraprofessional - 30 minutes
Teacher - 45 minutes
District Chapter 1 Supervisor -1 hour +

The team leader should review a tentative schedule furnished, by the principal, before

the on-site visit takes place.

It was suggested that school visits be done in one and a half days. This would allow more time to get information and to see what is going on in the school. **Recommendation: The on-site visit should remain at one day only. Potential benefits of a longer visit are outweighed by time and resource considerations.**

The school visits were a great advantage. We would not have gotten so much information, if we had not visited the schools. High performing Chapter 1 schools stand out in a low income neighborhood. **Recommendation: The on-site school visit should remain a part of the project.**

Responsibilities could be outlined in the form of a checklist for the team leader. This might help in making sure that everything is done in the school that would help the process. **Recommendation: The team leader should be given a checklist of responsibilities.**

The visiting team members should all meet the day before the visit. At this time details of the visit could be settled. The location of the school, the time to be on site, the schedule and other issues of concern could be addressed at this time. **Recommendation: The visiting team should meet before the first school visit to receive information on the school location and/ or maps, the appropriate interview forms, and decide on the time needed to reach the school.**

Some interviewers felt that further training was needed. Some thought that there were questions, on the interview instruments, that needed explanation. It was further felt, that there were previously decided upon answers and/ or interpretations that were planned beforehand. Some team members also felt that this was important to the way responses would be scored. They could not see how the scoring would be done. **Recommendation: The advisory panel should hold a workshop for interviewers to discuss any questions that need clarification, before the series of interviews begins. Ways of scoring should be discussed by the Advisory Panel and other interviewers at the regular panel meetings.**

It was felt by one team that we need the "real stories" of the schools and that this might be accomplished by a video or book "story of our school". One school gave the visiting team a video that is available for viewing. Another team saw the interview in the light of the fact that we would not have gotten the same information on what is going in the school and the dynamics of the building, if we had not visited the school sites. **Recommendation: The photographs and video should be available and on display at the Advisory Panel meeting, as well as at the Technical Assistance meeting in the fall. Future site visits might include a video camera to take videos that could be shown during the presentation of findings about the Successful Schools Project.**

There is a distinct advantage to the school visits. Observations have shown things that have given some insight into what is different in these schools. They show a contrast to the surroundings. Pride is apparent in both the facility and the people in the facility.

The comment of one team helps to sum up an underlying cause of success. "People can make a positive environment and a successful school in the most adverse circumstances".

On-Site Team Summary Statements

By design, the on-site teams typically visited one higher achieving and one lower achieving school in a district. Team members who visited both types of schools were in near universal accord that the differences were obvious and detectable after just a short time on campus. The following are some of the major differences as captured in the summaries written by on-site teams:

- ✡ Teams describe high performing schools as positive and strong.
- ✡ Teams describe discipline in a positive way in high performing schools more often than in low performing schools.
- ✡ Teams discuss leadership in a positive way more often in the high performing schools.
- ✡ Teams discuss staff development in high performing schools, but not in low performing schools.
- ✡ Teams discuss the positive atmosphere created by the personnel of high performing schools, but not the low performing schools.
- ✡ Teams discuss change four (4) times as often in low performing schools as in high performing schools.
- ✡ Teams describe the high performing schools as having a unified staff.

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The Chapter 1 Evaluation Advisory Panel gratefully acknowledges the cooperation of the district and school personnel who participated in the pilot study.

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