

Florida TaxWatch's Comparative Evaluation of CHILD: Phase III

Introduction

Academic achievement in schools is currently one of Florida's most important social policy issues, and for good reason. Education is one of the most important factors that will enable Floridians to thrive in an information age and is considered vital for both the economic and democratic future of our state and nation. It is the seed corn of Florida's future workforce. Consequently, it is hardly surprising that parents, community leaders and lawmakers are very concerned that many of Florida's children are not being educated in a manner that will enable them to thrive in the information age and prepare them to meet the challenges of the global economy.

In an effort to get to the bottom of the issue, Florida TaxWatch, in 1998, undertook a controlled, comparative evaluation of CHILD (Changing How Instruction for Learning is Delivered), an innovative management process instructional system designed to increase academic achievement.

The Origin of CHILD

CHILD was initially developed in 1988 at Florida State University by Dr. Sarah (Sally) Butzin and currently is operated by the Institute for School Innovation under the leadership of Dr. Butzin, Founder and Executive Director. CHILD has received numerous awards and has been recognized as an effective instructional management program by such groups as the National Diffusion Network and the Georgia Innovation Program. The CHILD model is designed to enable elementary schools (principally Kindergarten to Grade Five) to integrate technology into their reading, language arts, and mathematics curricula. It incorporates a variety of innovative instructional management and delivery strategies to actively engage students, improve student behavior, and heighten student learning. The model is centered on cognitive-based research, cooperative learning, continuous progress instruction, authentic assessment, and hands-on active learning. In addition, fully-developed CHILD instructional materials are aligned with state standards and intensive training of local staff is provided by the Institute for School Innovation. Further, certified consultants assist teachers in transforming their text-dominated traditional classrooms into multi-dimensional learning stations.

CHILD is an instructional system comprised of Essential Components for success. (See Appendix A). ISI assumes that the extent to which these components are implemented will affect student academic achievement—positively or negatively.

The CHILD system has redesigned and optimized the traditional instructional delivery system. The teachers work in teams of three with each teacher becoming a specialist in one of three core academic subjects, *i.e.*,

reading, writing, or mathematics. Three classrooms form an instructional cluster. A cluster consists either of primary grades K-2 or intermediate grades 3-5. Each CHILD teacher is responsible for one grade level as his/her home-room. Each CHILD classroom also consists of a fulltime paraprofessional to assist the CHILD teacher. Students receive instruction in additional areas such as science and social studies following their three one-hour rotations through their reading, writing, and mathematics subject area classrooms. The students stay with this team of teachers for three years. This allows teachers to become very familiar with each student's individual strengths, learning styles, and needs, so they are able to capitalize on the student's individual capacities and enable the student to work to their highest academic potential.

Results of the Phase III Quantitative Evaluation

This report applies to the third year of this three-phase study. It concludes that CHILD continues overall to have a positive impact on student achievement based on student scores on standardized tests and surveys of teachers, students, and parents. The report also documents substantial cost-savings that could be directed back into the classroom if CHILD were expanded to other schools across the state. Such an additional infusion of funding could have a positive impact on student achievement.

Four Evaluation Components

The Phase III evaluation of CHILD by Florida TaxWatch is both “process” and “outcome” oriented and composed of three evaluation components:

The first component is a replication of the quantitative portion of Phase II research.

The second component is a longitudinal study of individual student test scores across three years of evaluation.

The third component attempts to quantify the extent to which implementation and other factors affect student achievement in CHILD schools.

The fourth Component measures and compares aggregate per student costs in CHILD and non-CHILD schools. To benchmark and put into perspective the potential cost-saving that could occur were CHILD to be expanded Florida TaxWatch extrapolates cost-savings that would result if the program were fully implemented in a school of 1000 students.

The fourth evaluation component also examines cost-savings potential associated with construction avoidance if fewer classrooms were required as a result of CHILD expansion.

Four Major Research Questions

Phase III addresses four major research questions:

1. Do CHILD students outperform non-CHILD students on standardized achievement tests?

2. How does the implementation of CHILD in the classroom and other factors affect student achievement?
3. What major factors account for the disparate academic performance between the highest and lowest performing schools?
4. What are the projected per unit cost reductions for use of CHILD?

I. First Evaluation Component: Quantitative Evaluation

Selection of Comparison Schools

Phase III of the evaluation uses the same five comparison schools¹ as were evaluated in Phase II of the three-year evaluation. These include traditional, comparison schools located in the same districts as the CHILD schools—schools having similar student demographic and performance characteristics as determined by Florida TaxWatch in Phase I with the assistance of school district officials, CHILD school principals and on-site coaches, and staff of the Department of Education.

The selection of comparison schools was based on a wide array of school and student attributes such as urban/rural location, percent of students eligible to participate in the free/reduced lunch program, mobility, percent of students with limited English proficiency, percent of students absent for 21+ days, school grades, and student performance on the Florida Comprehensive Assessment Test (FCAT). In addition, class size of the comparison schools at the outset of the evaluation—Phase I—was factored into the selection process. Notably, over the course of the evaluation, the student populations and the student/school indicators reported by the Department of Education changed to an extent; *e.g.*, initially the “Florida School Indicators Report” included “mobility” which was subsequently changed to “stability,”² and the inclusion and calculation of factors into the school grades were changed³ via Rule 6A-1.09981 of the Bush/Brogan A+ Plan.

Data Selection, Collection and Analysis

In Phases I and II, the initial two research years (Academic Years 1999-2000 and 2000-2001), FCAT norm referenced scores were used to compare student academic achievement in reading, math, and writing when available. These scores were used because FCAT Sunshine State Standards scores (FCAT SSS) in all grades 3–5 for reading and math were not yet available. In order to more closely align student achievement with State Standards, in year 2002, the FCAT SSS scores were utilized. Where data inconsistencies across evaluation Phases exist, caution must be taken in making comparisons across Phases I, II and III.

¹ These include Tedder Elementary in Broward County, Windy Hill Elementary in Duval County, John D. Floyd Elementary in Hernando County, and Mascotte Elementary in Lake County and Wilkinson Elementary in Sarasota County

² Mobility is the rate at which students move into or out of the school population during the school year, shown as a percentage. It is calculated by dividing (a) the total number of new entries, reentries, and withdrawals during the 180-day school year by (b) the total number of students who were enrolled at the start of the school year. The mobility rate is calculated by school type. The Stability Rate is the percentage of students in the October membership count who are still present in the second semester (February count). District and state-level data is calculated by school type.

³ See “2002 School Accountability Report Guide Sheet, Grading Florida Public Schools,” Department of Education, Tallahassee, FL, 2002.

It also should be noted that no test scores were available during Phase II of the evaluation for Kindergarten, and Stanford Achievement Test Version 9 (SAT 9) score data for Grades 1 and 2 were not provided by all schools. Data were provided by the CHILD schools for those students in CHILD classrooms and by the respective districts of the comparison schools for whole school populations.

Classrooms were initially selected to participate in CHILD based on the classroom teacher volunteering to implement the CHILD instructional system. The students in these classroom were not specially selected for participation (However, Windy Hill, a magnet school, was something of an outlier in this regard. It is not known how parental choice may have affected its student demographics.). In addition, as students transitioned out of CHILD schools, replacement students were randomly selected, *i.e.*, the incoming students were placed in classrooms based on available seating rather than on their ability, performance, or other like attributes. Throughout their participation in CHILD, students were kept together in their initial classroom cohorts as much as possible across the three years of evaluation.

Because statistical tests have strengths and weaknesses regarding the credibility of the results yielded, two parametric and two nonparametric statistical tests were applied to ensure the statistical validity of student scores on standardized achievement tests in the Phase III evaluation. Two were parametric tests which measure the means of the reported score comparisons: the t-Tests for independent samples and the Analysis of Variance (ANOVA) test. Two were nonparametric tests which focused on the overall ranking of score comparisons and the ranking within score sets: the Mann-Whitney U (MW) and the Kolmogorov-Smirnov Z test (KS). Importantly, these four statistical test results corroborated each other.

Statistical significance was determined at the 0.01 level (no more than one percent of the reported scores occurred by chance) and at the 0.05 level (no more than five percent occurred by chance). Most of the score comparisons were significant at the 0.01 level and only a few at the 0.05 level.

While the results of the four statistical tests highly supported each other, it was assumed—and anticipated by Florida TaxWatch, even prior to beginning Phase I of the research—that, due to the increasing intensity of emphasis on standardized testing, there would be a regression toward the mean in the score comparisons between CHILD and comparison schools. Phase II results appeared to bear this out, and Phase III comparison results to an even greater extent. Test results for 2002 as compared to 2001 indicate that the CHILD Schools maintained similar scores or dropped somewhat while the comparison schools generally retained or increased their scores.

Test Score and School Grade Comparisons

Phase III comparatively evaluates student performance as measured by standardized test scores of CHILD school students with those of comparison school students in five Florida counties, *i.e.*, Broward, Duval, Hernando, Lake, and Sarasota Counties. While earlier evaluations included data from the “Florida School Indicators Report,” as well as “School Grades,” the former data will not be available from the Department of Education until later November, 2002, and cannot be addressed in this report. It also should be noted that SAT 9 scores for grades 1-2 were not reported by all schools. Thus, this preliminary analysis will focus on the FCAT SSS scores for reading, math, and writing for grades 3-5.

The reader also should keep in mind that the data and calculations of school grades changed for 2002 via Rule 6A-1.09981. The Rule emphasizes current measures of school performance, individual student learning gains, and progress of the lowest performing students. Learning gains are now derived from improvement in the FCAT achievement level, maintaining a high attainment level, i.e., a 3, 4, or 5 out of a possible 5, and demonstrating more than a full year of growth among students at the lowest achievement levels, i.e., levels 1 or 2. In addition, there now is additional emphasis on the students who earlier tested at the lowest 25% level of reading achievement. Importantly, the gain component of school grade calculations require such students to have been included in both the October and February student count and have FCAT scores from the previous year.

Notably, increased test scores among the lower achieving students appear to have been given considerable additional weight in calculating the overall school grade in this first year of implementation of the Bush/Brogan A+ Plan. In particular, there is special emphasis on those students in the area of gain for both reading and math and additional school grade points awarded for increased performance among the lowest 25% of students in reading. Together, these latter particulars constitute one-half of the total points calculated for the school grades. As more schools focus on their lowest performing students, it is anticipated that there will be a concomitant increase in their school grades. Those grade increases, however, eventually should become relatively stable, other things being equal, because schools that increased their grades are required to maintain the achievement levels of their students.

Broward County School Evaluation

The CHILD school evaluated in Broward County was Tedder Elementary School. Tedder earned a school grade of “D” in 2000, raised it to a “C” in 2001, and maintained a “C” grade in 2002. The comparison school, which had earned a “D” school grade for both 2000 and 2001 reported impressive gains in 2002, advancing to an “A” school grade. However, *a word of caution* must be added: As this report goes to press, the Florida Department Law Enforcement (FDLE) is investigating allegations that there were “irregularities in student answer documents” and the “administering of the FCAT” at this comparison school.⁴ Should the alleged irregularities be validated, it would not be appropriate to compare the test scores for the two Broward County schools. If found to be invalid, the test scores of both schools should be included for overall CHILD and non-CHILD school comparisons. This report, for this reason, will summarize test results, both with and without the inclusion of the two Broward County schools.

The entire battery of parametric and non-parametric statistical tests found all current reading and math mean score comparisons to be statistically significant at the .01 level of confidence. Tedder CHILD student scores were statistically significant (0.01 level) and higher than students in the comparison school in reading, grade 5 (See Table 1 below).

⁴ *South Florida Sun-Sentinel*, October 22, 2002, p. B-1.

Table 1
FCAT SSS Reading/Math Test Score Analysis for
Tedder Elementary and Comparison School

FCAT Scores - Reading Grade 3 Mean **	Tedder 276.28	Comparison School* 315.28 ✓
FCAT Scores - Math Grade 3 Mean **	Tedder 267.86	Comparison School* 354.88 ✓
FCAT Scores - Reading Grade 4 Mean **	Tedder 290.82	Comparison School* 349.11 ✓
FCAT Scores - Math Grade 4 Mean **	Tedder 274.55	Comparison School* 333.92 ✓
FCAT Scores - Reading Grade 5 Mean **	Tedder 295.48 ✓	Comparison School* 271.04
FCAT Scores - Math Grade 5 Mean	Tedder 330.56 ✓	Comparison School* 316.66

✓ Denotes a higher score.

*Test scores of this comparison school under review by Florida Department of Law Enforcement (FDLE)

** Denotes the scores were found to be statistically significant at the .01 level, i.e., 99% degree of confidence.

Notwithstanding the cautionary note regarding the astonishing improvement in mean test scores by the Broward County comparison school and alleged testing irregularities which, if true, would have considerably skewed mean test score differences in favor of the comparison school, it should be noted that the Tedder scores may have suffered during the Phase III evaluation period due to the fact that the CHILD classes included a number of teachers who were relatively new to CHILD. Also, as the CHILD implementation section of this report will show (see section III), CHILD was not fully implemented at Tedder, and this too likely reduced student exposure in the classroom to the program's impact.

The FCAT writing scores of Tedder Elementary and its comparison school also were analyzed in addition to reading and math scores (See Table 2 below). The FCAT writing scores included in this analysis are the combined scores of both the expository (writing to explain) and narrative (writing to tell a story) tests. Each student received either an expository or narrative test, and these tests were graded in the same fashion—randomly and evenly distributed among students—and considered equivalent. While the comparison school outperformed Tedder in the FCAT writing (0.01 level of statistical significance), it is important to note that Tedder was only slightly below the 3.5 writing score average that could have increased its school grade from a “C” to a “B.”

Table 2
FCAT Writing Test Score Analysis for
Tedder Elementary and Comparison School

FCAT Scores - Writing Grade 4 Mean **	Tedder 3.40	Comparison School* 3.75 ✓
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✓ Denotes the higher score.

*Test scores of this comparison school under review by Florida Department of Law Enforcement (FDLE)

** Denotes the scores were found to be statistically significant at the .01 level, i.e., 99% degree of confidence.

Duval County School Evaluation

Windy Hill Elementary, the CHILD school, maintained a “C” school grade in each of the three phases of the evaluation. The Duval comparison school during Phase I had a “D” school grade but was able to increase its grade to a “C” in Phases II and III.

Windy Hill Elementary School outperformed its comparison school in math, grade 3 (0.05 level of statistical significance) and in both reading and math in grade 4 (0.01 level of statistical significance on all parametric and nonparametric test results). Notably, none of the comparison school scores were statistically significant and higher than the Windy Hill scores in reading and math in any of the grades. (See Table 3 below).

Table 3
FCAT SSS Reading/Math Test Score Analysis for
Windy Hill Elementary and Comparison School

FCAT Scores - Reading Grade 3 Mean	Windy Hill 281.87 ✓	Comparison School 275.64
FCAT Scores - Math Grade 3 Mean *	Windy Hill 276.52 ✓	Comparison School 247.42
FCAT Scores - Reading Grade 4 Mean **	Windy Hill 317.93 ✓	Comparison School 276.01
FCAT Scores - Math Grade 4 Mean **	Windy Hill 289.91 ✓	Comparison School 249.88
FCAT Scores - Reading Grade 5 Mean	Windy Hill 275.57 ✓	Comparison School 257.81
FCAT Scores - Math Grade 5 Mean	Windy Hill 315.40 ✓	Comparison School 300.42

✓ Denotes the higher score.

* Denotes the scores were found to be statistically significant at the .05 level, i.e., 95% degree of confidence

** Denotes the scores were found to be statistically significant at the .01 level, i.e., 99% degree of confidence.

The FCAT writing scores of Windy Hill Elementary and its comparison school (See Table 4 below) were the only score set in which the comparison school outperformed Windy Hill Elementary School (0.05 level of statistical significance). It should be noted, however, that only one of the four statistical tests applied here—the KS nonparametric test—was statistically significant (0.05 level).

Table 4
FCAT Writing Test Score Analysis for
Windy Hill Elementary and Comparison School

FCAT Scores - Writing Grade 4	Windy Hill	Comparison School
Mean*	3.40	3.70 ✓

✓ Denotes the higher score.
*Denotes the scores were found to be statistically significant at the .05 level, i.e., 95% degree of confidence.

Hernando County School Evaluation

The Hernando County school analyses included the John D. Floyd Elementary School and its comparison school. The school grades for John D. Floyd Elementary School have fluctuated considerably across the three evaluation Phases: sliding from an “A” in Phase I, to a “C” in Phase II, then increasing back to an “A” in Phase III. Conversely, the comparison school had an “A” school grade in Phase I, but it fell to a “C” grade in Phases II and III.

John D. Floyd Elementary School outperformed its comparison school on reading and math in grades 3-5. All of the scores were statistically significant at the .01 level by all of the tests applied, except for grade 5 in reading which was statistically significant at the .05 level, but only according to the KS nonparametric test. (See Table 5 below).

Table 5
FCAT SSS Reading/Math Test Score Analysis for
John D. Floyd Elementary and Comparison School

FCAT Scores - Reading Grade 3 Mean **	John D. Floyd 322.21 ✓	Comparison School 288.27
FCAT Scores - Math Grade 3 Mean **	John D. Floyd 321.61 ✓	Comparison School 278.76
FCAT Scores - Reading Grade 4 Mean **	John D. Floyd 330.32 ✓	Comparison School 290.94
FCAT Scores - Math Grade 4 Mean **	John D. Floyd 318.95 ✓	Comparison School 286.65
FCAT Scores - Reading Grade 5 Mean *	John D. Floyd 312.32 ✓	Comparison School 285.70
FCAT Scores - Math Grade 5 Mean **	John D. Floyd 341.70 ✓	Comparison School 303.73

✓ Denotes the higher score.

* Denotes the scores were found to be statistically significant at the .05 level, i.e., 95% degree of confidence

** Denotes the scores were found to be statistically significant at the .01 level, i.e., 99% degree of confidence.

The mean comparison scores of the FCAT writing test for the John D. Floyd Elementary and its comparison school were not statistically significant, and therefore could have occurred by chance (See Table 6 below) rather than indicating that one school significantly outperformed the other.

Table 6
FCAT Writing Test Score Analysis for
John D. Floyd Elementary and Comparison School

FCAT Scores - Writing Grade 4 Mean	John D. Floyd 3.57	Comparison School 3.72
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Lake County School Evaluation

The CHILD school in Lake County was Mascotte Elementary. Mascotte and its comparison school have maintained a “C” school grade during all three Phases of the evaluation.

The Lake County comparison scored higher than the Mascotte Elementary School in math, grade 3 and reading, grade 5 (0.05 level of statistical significance) (See Table 7 below). In each case, the mean comparison score was found to be statistically significant by all of the statistical tests.

Table 7
FCAT SSS Reading/Math Test Score Analysis for
Mascotte Elementary and Comparison School

FCAT Scores - Reading Grade 3 Mean	Mascotte 286.99	Comparison School 291.93 ✓
FCAT Scores - Math Grade 3 Mean *	Mascotte 279.37	Comparison School 296.91 ✓
FCAT Scores - Reading Grade 4 Mean	Mascotte 285.22	Comparison School 289.85 ✓
FCAT Scores - Math Grade 4 Mean	Mascotte 274.80 ✓	Comparison School 265.39
FCAT Scores - Reading Grade 5 Mean *	Mascotte 268.19	Comparison School 288.30 ✓
FCAT Scores - Math Grade 5 Mean	Mascotte 324.01 ✓	Comparison School 308.70

✓ Denotes the higher score.

* Denotes the scores were found to be statistically significant at the .05 level, i.e., 95% degree of confidence.

The differences in mean scores on the FCAT writing test between Mascotte Elementary School and its comparison school were not statistically significant, meaning that the higher mean score by the comparison school occurred by chance (See Table 8 below).

Table 8
FCAT SSS Writing Test Score Analysis for
Mascotte Elementary and Comparison School

FCAT Scores - Writing Grade 4 Mean	Mascotte 3.13	Comparison School 3.31 ✓
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✓ Denotes the higher score.

Sarasota County School Evaluation

Wilkinson Elementary School was the CHILD school in Sarasota County. Wilkinson Elementary School increased its school grade from a “C” in Phase I to an “A” in Phase II and maintained the “A” school grade in the Phase III evaluation period. Its comparison school, however, fell from an “A” grade in Phase I to a “B” in Phase II, but regained an “A” school grade in Phase III.

Wilkinson Elementary School outperformed its comparison school in math, grade 5 (0.05 level of statistical significance according to the t-test) (See Table 9 below). The comparison school scored higher than Wilkinson Elementary School in reading (0.05 level of statistical significance) and math grade 3 (0.01 level of statistical significance). The reading mean score was statistically significant at the 0.05 level according to both parametric tests and the MW nonparametric test, whereas the math score was found to be statistically significant at the 0.05 level of confidence by all four statistical tests employed.

Table 9
FCAT SSS Reading/Math Test Score Analysis for
Wilkinson Elementary and Comparison School

FCAT Scores - Reading Grade 3 Mean *	Wilkinson 299.63	Comparison School 329.77 ✓
FCAT Scores - Math Grade 3 Mean **	Wilkinson 304.00	Comparison School 334.70 ✓
FCAT Scores - Reading Grade 4 Mean	Wilkinson 334.28 ✓	Comparison School 318.21
FCAT Scores - Math Grade 4 Mean	Wilkinson 314.64 ✓	Comparison School 301.94
FCAT Scores - Reading Grade 5 Mean *	Wilkinson 319.50 ✓	Comparison School 307.92
FCAT Scores - Math Grade 5 Mean *	Wilkinson 346.69 ✓	Comparison School 334.22

✓ Denotes the higher score.

* Denotes the scores were found to be statistically significant at the .05 level, i.e., 95% degree of confidence.

* Denotes the scores were found to be statistically significant at the .01 level, i.e., 99% degree of confidence.

The FCAT mean writing score differences of Wilkinson Elementary and its comparison school were found not to be statistically significant (See Table 10 below), indicating that the higher mean test score by the Wilkinson school occurred by chance by being outside the minimally acceptable 0.05 level of statistical significance.

Table 10
FCAT Writing Test Score Analysis for
Wilkinson Elementary and Comparison School

FCAT Scores - Writing Grade 4	Wilkinson	Comparison School
Mean	3.81 ✓	3.57

✓ Denotes the higher score.

School Mean Score Comparisons: Conclusions and Implications

The evaluation comparisons show (see Table 11 below) that, of 34 possible mean test score differences, 22 were statistically significant, meaning that they did not occur by chance. Of these 22 significant score comparisons, 12 CHILD school mean test scores were higher, whereas 10 of the comparison school mean test scores were higher. CHILD schools significantly outperformed their counterpart non-CHILD schools in six reading and six math classes, whereas their comparison schools scored statistically significantly higher in three reading, five math and two writing classes.

CHILD schools, therefore, significantly performed at a higher level of student achievement as measured by the FCAT on more than half of the score comparisons, despite the fact that the class sizes in the CHILD schools were approximately 30 students as compared to 20 students in the comparison schools. If class size made a difference in student achievement, CHILD schools were able to overcome its influence in more than half of the comparisons.

If the Phase III comparisons between the CHILD and non-CHILD schools tested in Broward County are removed from the evaluation comparisons due to the aforementioned allegations of testing irregularities at the comparison school, CHILD schools outperform non-CHILD schools by more than a two-to-one margin. That is, CHILD mean test scores were statistically significant and higher than those of the comparison schools in 11 instances, and comparison mean test scores were statistically significant and higher than those of the CHILD school in only 5 instances. Thus, comparison schools outscored CHILD schools only in two reading, two math and one writing class category and, interestingly, in no fourth grade class category.

Table 11

Statistically Significant CHILD Schools				Statistically Significant Comparison Schools			
Tedder	Reading	Math	Writing	Broward	Reading	Math	Writing
	Grade 5**				Grade 3**	Grade 3**	Grade 4**
					Grade 4**	Grade 4**	
Windy Hill	Reading	Math	Writing	Duval	Reading	Math	Writing
	Grade 4**	Grade 3*					Grade 4*
		Grade 4**					
Floyd	Reading	Math	Writing	Hernando	Reading	Math	Writing
	Grade 3**	Grade 3**					
	Grade 4**	Grade 4**					
	Grade 5*	Grade 5**					
Mascotte	Reading	Math	Writing	Lake	Reading	Math	Writing
						Grade 3*	
					Grade 5*		
Wilkinson	Reading	Math	Writing	Sarasota	Reading	Math	Writing
	Grade 5*	Grade 5*			Grade 3*	Grade 3**	

* Denotes the scores were found to be statistically significant at the .05 level, i.e., 95% degree of confidence

** Denotes the scores were found to be statistically significant at the .01 level, i.e., 99% degree of confidence

Notably, the expanded battery of parametric and nonparametric statistical tests that were applied to the mean comparison test scores in Phase III were highly corroborative of each other in virtually all score evaluation comparisons.

There was some slippage in the scale and statistical significance of differences in the Phase III scores. As earlier noted, as anticipated, even prior to beginning Phase I of the research, there increasingly was a regression toward the mean in Phase III comparison test scores as compared to Phase II and Phase I scores, respectively. This is likely due to the increasing intensity of emphasis that is being placed by Florida schools on standardized testing.

Importantly, given the increasing regression toward the mean, the FCAT may not be sufficient as a single tool to provide a comprehensive accounting in the future of the multifaceted contributions of CHILD to both student and school achievement. Florida TaxWatch recommends that future evaluations utilize a more comprehensive, comparative approach to the evaluation of student progress, i.e., one that incorporates a broader range of methodologies and data.

Also, as a consequence of the implementation of Rule 6A-1.09981, the data included and calculations of school grades were changed in 2002. The Rule includes current measures of school performance, individual student learning gains, and also emphasizes the progress of the lowest performing students in reading. Notably, because of the additional weight given to the performance of lower performing students in calculating the overall school

grade, it is likely that school grade increases of more than two levels are likely due to special efforts with such students. As more schools focus on the lower performing students, it is posited that there will be an across-the-board increase in school grades which will soon level out overall.

This may explain why 4 of the 5 CHILD schools maintained the same school grade level as last year, i.e., Tedder = “C”, Windy Hill = “C”, Mascotte = “C,” and Wilkinson = “A.” Floyd Elementary School laudably stood out by increasing its school grade from a “C” to an “A”. Three of the 5 comparison schools increased their school grades from last year, i.e., 2 with single grade level increases (“B” to “A” and “C” to “B”), and 1 with a 3 grade level increase (“D” to “A”). One comparison school dropped from a “C” to a “D”, and 1 remained at a “C” grade level.

II. Second Evaluation Component: Longitudinal Evaluation

Paramount among the CHILD results that need to be evaluated is its impact on student achievement, between each of the three years of evaluation. In what years of participation in CHILD do students show the greatest between-year gains, and do CHILD students outperform like students from the comparison schools who have not been afforded participation in the program? Armed with three years of data in Phase III, Florida TaxWatch longitudinally evaluated the between-year test scores for one school for which annual data were available for between-year comparison purposes.

The CHILD school selected for the longitudinal evaluation was the John D. Floyd Elementary School (Floyd). This school was paired for earlier research with another Hernando County school that had a like student population. All of the Floyd data were provided by the school staff, and all of the comparison school data were supplied by the Research Office of the Hernando County School Board (HCSB).

TaxWatch appreciates the efforts of both the Floyd staff and those of the HCSB Research Office for their considerable efforts in providing these data. The longitudinal data utilized were the FCAT norm-referenced scores (FCAT) for grades 3-5 and the Stanford Achievement Test Version 9 (SAT 9) scores for grades 1-2. The comparative data included the 2001-2002 FCAT norm reference scores for the two schools.

Although data from one CHILD school and its comparison school afforded only a limited evaluation, and ideally would be expanded to include other schools in order to provide a more comprehensive evaluation, those data are not available for 2002. The more limited evaluation, however, is sufficient for the purpose of considering student gains and comparing mean FCAT scores for initial review purposes.

Likewise, whereas data from the Florida School Indicators Report would be helpful in providing greater context, those data are not yet available for 2002.⁵

⁵ Because there is no current standard to measure acceptable yearly progress, the gains between and across years are used here to demonstrate student progress. Importantly, there was substantive gain made by all Floyd students of all grades except for the current grade 4 students when they were in grades 1 and 2.

Measuring the acceptable yearly progress of students will soon be done on a state and national level. The federal government, through the No Child Left Behind Act of the elementary and Secondary Education Act 2001, mandates that the annual yearly progress of all students be measured. The individual states will present their plans later in 2003.

Between-Year Changes in Student Performance in CHILD by Grade Level

The longitudinal data were compiled into matrices by grade level and years of participation in CHILD. They were then paired by student identification number so that the progress of individual students could be evaluated between-years for each of the three evaluation years. The difference in the CHILD scores was the change regardless of whether a positive or negative number resulted. In addition, students were also stratified by the number of years they had participated in CHILD. Those results were then averaged for the students by both test years and by years of CHILD participation. Finally, in the instances where data for three test years were available, an overall change in test score was derived by subtracting scores from the first test year from that of the third test year. Importantly, all student scores were paired so that only students with test scores across the respective evaluation years were included. It also should be noted that while various statistical techniques such as the paired-samples t-Test were applied for purposes of determining statistical significance, the cells resulting from the population stratifications were too small to provide reliable results. Thus, the following analyses were limited to descriptive results.

FCAT Gains for Floyd Students in the 5th Grade 2002

Every 2002 5th Grade student sector, in both reading and math, made positive gains in FCAT scores across the test years both between-years and overall. The specific FCAT data used here were for students who were in the 5th grade 2000-2002 when they were in the 3rd grade.

Positive between-year gains were found in FCAT reading scores for all years of participation in CHILD test years 2000-2001 (See Table 12 below). Notably, although there were a handful of students newly introduced into CHILD classrooms in 2000 and 2001, they were not paired, *i.e.*, they were introduced one or the other year but could not be tracked because they were not present both years. The highest 2000-2001 between-year gains made by these students in reading were among those with 4-5 years of participation in CHILD. This also was the case for the gains made between test years 2001-2002, when these students were in the 4th and 5th grade. It is likely that the gains were naturally smaller in 2002 because the scores had already been raised to a relatively high level in the 4th grade. The overall score gains among all of these students supported the above explanation in that students who had participated in CHILD for 5 years showed the greatest gain between test years 2000-2002.

Average FCAT test reading scores also reflected substantial increases from year to year, especially between test years 2000-2001 where there was a between-year increase of 18.97 points. Moreover, the overall gain between test years 2000-2002 was an exceptional 30.53 points.

The 2002 5th grader FCAT math scores from 2000-2002 also showed greater positive between-year gains than was the case with reading. Unlike the reading scores, the math scores indicated the highest between-year gain in 2000-2001 to be among students with 4 years of participation in CHILD while those with 5 years of participation had the highest gains in 2001-2002 (See Table 13 below). In addition, the greatest overall gains among students in math between 2000-2002 were found among students with 5 years of participation in a CHILD setting and was closely followed by those with 3 years of participation, 48.60 and 42.00 points of positive score gain, respectively.

Table 12
John D. Floyd Elementary School
Grade 5 Reading FCAT Score Gains

			2002		2001		2000
			Grade 5		Grade 4		Grade 3
Introduced to CHILD	Years in CHILD	Overall Gain	02/01 Gain	FCAT Scores	00/01 Gain	FCAT Scores	FCAT Scores
Grade 5	1 yr.			646.00			
Grade 4	2 yr.		24.33	691.17		666.83	
Grade 3	3 yr.	13.92	7.42	653.42	6.50	646.00	639.50
Grade 2	4 yr.	48.20	18.40	661.00	29.80	642.60	612.80
Grade 1	5 yr.	49.03	19.43	694.83	29.60	675.40	645.80
Grade K	6 yr.	28.22	9.04	689.78	19.19	680.74	661.56
	Overall	30.53	11.56	679.25	18.97	667.69	648.72

Grade 5 – 3 indicate the student grade level when taking the FCAT

Years in CHILD is the total number of years in which a referenced group of students participated in CHILD.

For example, a 5th grader with 6 years of participation began in Kindergarten.

Gain here is the between-year gain and was derived by subtracting the earlier average gain of each participation year from that of the next year, e.g., the average gain of paired students from test year 1999-2000 with 3 years of CHILD participation were subtracted from the gain of those same students for the next most current test year 2000-2001

Overall Gain was derived by subtracting the average paired student gain of the 1999-2000 test year from the average paired student gain of the 2001-2002 test year

FCAT Scores are the average paired student scores of each year of CHILD participation for each test year

Overall FCAT Scores were derived by averaging the paired student scores for each of the test years

Table 13
John D. Floyd Elementary School
Grade 5 Math FCAT Score Gains

			2002		2001		2000
			Grade 5		Grade 4		Grade 3
Introduced to CHILD	Years in CHILD	Overall Gain	02/01 Gain	FCAT Scores	00/01 Gain	FCAT Scores	FCAT Scores
Grade 5	1 yr.			641.22			
Grade 4	2 yr.		19.00	679.67		660.67	
Grade 3	3 yr.	42.00	16.00	654.08	26.00	638.08	612.08
Grade 2	4 yr.	36.80	10.20	644.80	26.60	634.60	608.00
Grade 1	5 yr.	48.60	41.20	682.40	7.40	641.20	633.80
Grade K	6 yr.	40.22	20.93	685.33	19.30	664.41	645.11
	Overall	42.19	20.55	673.95	21.64	653.40	631.76

Increases in the between-year average scores also were found between each of the test years, 2000-2002, and overall between 2000-2002. While the difference in reading was 18.97 points between 2000-2001, it fell slightly to 11.56 between 2001-2002. Nonetheless, the overall difference of average FCAT reading scores in reading rose from 648.72 in 2000 to 679.25 in 2002, resulting in an overall score difference of 30.53 points. Even greater increases, both from between-year and overall were reported in math for these same students. As

with reading, the increase between 2000-2001 was greater than the increase between 2001-2002. However, the difference was almost imperceptible between increases of 21.64 between 2000-2001 and 20.55 between 2001-2002, a drop of 1.09 points. Moreover, their increase overall between 2000-2002 was an impressive 42.19 points.

FCAT Gains for Floyd Students in the 4th Grade 2002

The students who were in 4th grade in 2002 also showed score gains in both reading and math and in every CHILD participation segment, for the 2001 and 2002 test years (It should be noted that no new students were introduced into the tracked research classes during 2001.).

The highest between-year gains in reading among the 2002 4th grade students were among those who had participated in CHILD for 4 years, followed by those who were in CHILD for 3 and 5 years, (33.35, 26.56, and 25.27 points respectively). Although there are only 2 years of FCAT data for these students, their between-year gain between their 3rd and 4th grade scores, 2001-2002, was impressive (See Table 14 below). Those students increased their average FCAT reading score from 650.89 in 2001 to 675.24 in 2002, some 24.35 points.

Table 14
John D. Floyd Elementary School
Grade 4 Reading FCAT Score Gains

		2002		2001
		Grade 4		Grade 3
Introduced to CHILD	Years in CHILD	02/01 Gain	FCAT Scores	FCAT Scores
Grade 4	1 yr.		665.54	
Grade 3	2 yr.	13.75	657.13	643.38
Grade 2	3 yr.	26.56	681.38	654.81
Grade 1	4 yr.	33.56	675.89	642.33
Grade K	5 yr.	25.27	675.73	650.45
	Overall	24.35	675.24	650.89

They also posted FCAT score gains in math scores across all segments of CHILD participation (See Table 15 below). Here, the highest between-year gain was among the students who had participated in CHILD 5 yrs, followed by students with 4 and 3 years of participation in CHILD, (35.64, 21.56, and 21.44 points respectively). These same students also increased their average FCAT math score by 22.89 points from 638.59 to 661.48.

Table 15
John D. Floyd Elementary School
Grade 4 Math FCAT Score Gains

		2002		2001
		Grade 4		Grade 3
Introduced to CHILD	Years in CHILD	02/01 Gain	FCAT Scores	FCAT Scores
Grade 4	1 yr.		643.00	
Grade 3	2 yr.	11.00	653.13	642.13
Grade 2	3 yr.	21.44	659.38	637.94
Grade 1	4 yr.	21.56	659.89	638.33
Grade K	5 yr.	35.64	669.82	634.18
	Overall	22.89	661.48	638.59

While the above increases in gain and scores may not appear remarkable at first glance, it should be noted that these students reported negative gains across all CHILD participation segments of their SAT 9 scores when in 1st and 2nd grade. Taking into account both the level of scores for these students when in 3rd and 4th grade, and their gains across all segments, this is a laudable achievement.

SAT 9 Gains for Floyd Students in the 2nd Grade 1999

These 2002 grade 4 students, who did so well with the FCAT in 2001-2002, on the other hand, did equally poorly on the SAT 9 tests in 1999-2000. They were the only Floyd class to post any negative between-year scores in any of the CHILD participation segments. It should be noted that only a few of the scores among students with one year of participation in CHILD were reported, and none were reported for two years of participation in CHILD. Consequently, scores for those years had to be omitted from this analysis.

All of the between-year score differences between 1999 and 2000 on the SAT 9 reading test for this group of students were negative and averaged a 10.47 loss of scores points between-years (See Table 16 below). The largest negative gain was among the students with 3 years in a CHILD setting and the smallest negative gain was among those with 5 years of participation in CHILD, 16.91 and 0.55 gain score points, respectively.

Table 16
John D. Floyd Elementary School
Grade 4 Reading SAT 9 Score Gains

		2000		1999
		Grade 2		Grade 1
Introduced to CHILD	Years in	02/01	SAT 9	SAT 9
	CHILD	Gain	Scores	Scores
Grade 4	1 yr.			
Grade 3	2 yr.			
Grade 2	3 yr.	-16.91	615.00	631.91
Grade 1	4 yr.	-15.25	614.75	630.00
Grade K	5 yr.	-0.55	639.27	639.82
	Overall	-10.47	623.83	634.30

Although the average SAT 9 math score for these students was higher in 1999 than was the reading score, the drop between the math scores of 1999-2000 was greater (See Table 17 below). This also held true for each of the score gains between the years across all segments of CHILD participation. As with the reading SAT 9 scores, the greatest negative gain was among the students with three years of participation in a CHILD setting, and this was the least negative change among those with four years of participation in CHILD, a loss of 37.00 and 26.25 gain score points respectively. While these students had very respectable average SAT 9 scores for reading when in 1st grade, their score average dropped some 28.36 points when they were in 2nd grade. Importantly, these students substantially increased their achievement test scores in both reading and math when entering the 3rd grade and were administered the FCAT.

Table 17
John D. Floyd Elementary School
Grade 4 Math SAT 9 Score Gains

		2000		1999
		Grade 2		Grade 1
Introduced to CHILD	Years in	02/01	SAT 9	SAT 9
	CHILD	Gain	Scores	Scores
Grade 4	1 yr.			
Grade 3	2 yr.			
Grade 2	3 yr.	-37.00	608.09	645.09
Grade 1	4 yr.	-26.25	614.88	641.13
Grade K	5 yr.	-27.00	611.09	638.09
	Overall	-28.36	614.21	642.58

SAT 9 Gains for Floyd Students in the 3rd Grade 2001

The 2002 grade 3 students reported remarkable gains in both reading and math across all CHILD participation segments for both 2000-2001. Although the average between-year scores for each of those years was lower than those of the 4th grade (see Table 18 below), the gains were extraordinary. Since this evaluation is focused on score gains, the scores for students with only 1 year of participation in CHILD were omitted from this analysis even though the average score for those students is posted here for reference.

The students here reported considerable gains in SAT 9 reading 2000-2001 across all CHILD participation segments. The highest between-year gain posted was for those students with 2 years of participation in CHILD, followed by those with 4 years in a CHILD setting, 75.42 and 63.00 score gain points respectively. Moreover, these students increased their average SAT 9 reading scores from 554.78 to 616.62, an increase of 61.84 score points.

Table 18
John D. Floyd Elementary School
Grade 3 Reading SAT 9 Score Gains

		2001 Grade 2		2000 Grade 1
Introduced to CHILD	Years in CHILD	02/01 Gain	SAT 9 Scores	SAT 9 Scores
Grade 3	1 yr.		602.00	
Grade 2	2 yr.	75.42	622.92	547.50
Grade 1	3 yr.	51.67	612.83	561.17
Grade K	4 yr.	63.00	632.00	569.00
	Overall	61.84	616.62	554.78

The between-year gains among the grade 3 CHILD students on the math SAT 9 also were unequalled. Students with 4 years of participation outperformed and out gained all others in reporting a gain of 75.00 points from 2000-2001 (See Table 19 below). Although the gains among students with three and two years of participation in CHILD were not as remarkable, they were substantial and showed score gains of 53.44 and 50.62 points respectively. In addition, these students increased their SAT 9 math score average from 559.03 to 614.44, a rise of 55.42 points.

Table 19
John D. Floyd Elementary School
Grade 3 Math SAT 9 Score Gains

		2001 Grade 2		2000 Grade 1
Introduced to CHILD	Years in CHILD	02/01 Gain	SAT 9 Scores	SAT 9 Scores
Grade 3	1 yr.	31.75	592.75	561.00
Grade 2	2 yr.	50.62	607.85	557.23
Grade 1	3 yr.	53.44	611.50	558.06
Grade K	4 yr.	75.00	642.20	567.20
	Overall	55.42	614.44	559.03

SAT 9 Gains for Floyd Students in the 2nd Grade 2002

The 2002 second graders had between-year gains in both their SAT 9 reading and math scores across all years of CHILD participation segments that were evaluated for the 2001-2002 test years. While only data from those with two or three years of participation in CHILD were analyzed here, students who had two years of participation had the highest gains in both reading and math scores (See Table 20 below). In particular, they posted a 69.64 point score gain in reading from 2001-2002 and had a 42.20-point gain in math for the same period. In addition, these students increased both their average SAT 9 reading and math scores considerably, reporting an increase of 25.91 points in reading from 2001 to 2002 and 41.16 points in math for the same period.

Table 20
John D. Floyd Elementary School
Grade 2 Reading & Math SAT 9 Score Gains

		Reading			Math		
		2002 Grade 2		2001 Grade 1	2002 Grade 2		2001 Grade 1
Introduced to CHILD	Years in CHILD	02/01 Gain	SAT 9 Scores	SAT 9 Scores	02/01 Gain	SAT 9 Scores	SAT 9 Scores
Grade 2	1 yr.		607.56			606.11	
Grade 1	2 yr.	69.64	558.56	488.92	42.20	554.88	510.68
Grade K	3 yr.	49.20	596.29	547.09	36.55	590.21	553.67
	Overall	25.91	573.00	547.09	41.16	568.93	527.77

Longitudinal Between-year Differences in Floyd Student Scores by Grade Level: Conclusions and Implications

CHILD students across most grades—the only exception being the 2002 4th grade SAT 9 scores when CHILD students were in 1st and 2nd grade (1999-2000)—had positive gains in between-year scores and overall, both on the FCAT and SAT 9, regardless of how many years they had participated in CHILD classrooms. Although only the FCAT reading and math data from only the 4th and 5th grade of 2002 could be analyzed, the 5th grade had higher between-year score gains, had the greatest increases of average scores between both the test years and overall. Nonetheless, given the negative between-year differences in scores of the 4th grade in both the reading and math (SAT 9), their between-year gains and average score increases in their FCAT scores from between years and overall in 2001-2002 demonstrate remarkable progress.

The evaluation also revealed that the 5th graders, with five years of participation in CHILD, had the highest FCAT reading score gains, while those with three years had the highest FCAT math score gains. In the 2002 4th grade, it was those students with four years of participation in CHILD that posted the highest gains in reading, whereas those with five years in a CHILD setting had the greatest gains in math.

In addition, the 2002 3rd grade reported extraordinary gains and increases in average scores on both the reading and math SAT 9 tests. These between-year gains were the highest among any of the 2nd – 4th grade scores. Among these 3rd grade students those with 2 years of participation substantially out performed the others in reading, while those in CHILD 4 years were the top performers in math.

Finally, the 2002 2nd graders also reported substantial between-year gains from 2001-2002 in both reading and math as well as like increases in their average SAT 9 test scores. Notably, both their between-year score gains and increases in average scores approached the extraordinary gains and increases of the 3rd grade. In this instance, it was the students with two years of CHILD participation that outperformed those who had been in a CHILD setting for either one or three years.

Overall, the impact of students participating in CHILD classes, as measured by between-year score gains and increases in average scores of both the FCAT and SAT 9, demonstrates that CHILD had a most positive longitudinal influence on student achievement. Importantly, this research included the student achievement of only one CHILD school and needs to be expanded to a wider population and a more complete data set in order to gain a more comprehensive understanding of its influence.

Two-Year Longitudinal Comparison of CHILD Student Performance

The following comparative evaluation includes the 2001-2002 FCAT data released by the Research Office of the Hernando County School Board and data supplied by the Floyd staff. It focuses on the FCAT norm reference reading, math, and writing scores earned by the students of the 3rd-5th grade of the John D. Floyd Elementary School and a comparison school in Hernando County. The selection of schools was based on the staff of Floyd volunteering for the research and the comparison school having a student population with like characteristics and performance. Importantly, the reader should understand that the student population for CHILD classrooms were stabilized as much as possible in cohorts that remained as a

group through kindergarten – 2nd grade and from 3rd-5th grade. When students left Floyd, for whatever reason, their replacements were selected on the basis of seat availability rather than a particular student attribute such as performance. Thus, the student data can readily be interpolated as being representative of the entire student population available for comparative evaluation purposes at of Floyd and the its comparison school.

As with the Phase III replication evaluation of Phase II, a battery of two parametric and two nonparametric statistical tests (t-Test, ANOVA, Whitney-Man, and Kolmogorov-Smirnov) was employed. Each of the tests was highly supportive of the others in that none was contradicted in any comparison and none indicated a different level of confidence. The scores analyzed here were the FCAT norm reference results from 2001-2002.

Floyd outperformed its comparison school on all grade 3-5 reading and math scores for both years (See Table 21 below). Notably, all of the analyses for the scores of 2002 were statistically significant at the 0.01 level of confidence, as were the grade 3-4 math and reading scores for 2001. The math scores for 2001 were statistically significant but at the 0.05 level of confidence.

Table 21
FCAT Norm Reference Reading/Math Test Score Analysis for
John D. Floyd Elementary and Comparison School

2001			2002		
	John D. Floyd	Comparison School		John D. Floyd	Comparison School
Reading Grade 3			Reading Grade 3		
Mean **	652.34 ✓	616.53	Mean **	322.21 ✓	288.27
Math Grade 3			Math Grade 3		
Mean **	639.68 ✓	613.83	Mean **	637.05 ✓	611.72
Reading Grade 4			Reading Grade 4		
Mean **	667.76 ✓	651.48	Mean **	330.32 ✓	290.94
Math Grade 4			Math Grade 4		
Mean *	653.85 ✓	641.49	Mean **	318.95 ✓	286.65
Reading Grade 5			Reading Grade 5		
Mean	664.15 ✓	656.14	Mean **	312.32 ✓	285.70
Reading Grade 5			Reading Grade 5		
Mean	654.18 ✓	647.84	Mean **	341.70 ✓	303.73

- ✓ Denotes the higher score.
- * Denotes the scores were found to be statistically significant at the .05 level, i.e., 95% degree of confidence.
- ** Denotes the scores were found to be statistically significant at the .01 level, i.e., 99% degree of confidence.

Floyd’s average writing score for 2001 as compared to its non-CHILD counterpart school was not statistically significant, indicating that the difference occurred by chance.

Table 22
FCAT Writing Test Score Analysis for
John D. Floyd Elementary and Comparison School

2001			2002		
Writing	John D. Floyd	Comparison	Writing	John D. Floyd	Comparison
Grade 4		School	Grade 3		School
Mean	3.5 □	3.4	Mean	3.57	3.72 □

Although the overwhelming majority of Floyd scores are laudable, it is interesting to note that the scores for grade 3 reading and math fell slightly from 2001 to 2002, 9.01 and 2.03 average score points, respectively. Moreover, the results of the 4th-5th grade reading and math scores show increases ranging from 3.08 in 4th grade math to 15.17 in 5th grade math. Conversely, all of the reading and math scores for the 3rd-4th grades of the comparison school dropped from those of 2001. While the reduction of scores among the comparison school are not typically exceptional, e.g., 0.85 in 5th grade math to 9.13 in 4th grade reading, the drop of 21.03 score points in grade 4 math was substantial.

Overall, Floyd substantially outperformed its comparison school in reading and math throughout all grades in both 2001 and 2002, and in writing during 2001. Of these 14 score sets, 10 were statistically significant, 9 at the .01 level of confidence. Thus, the veracity of these scores is well demonstrated and were not coincidental or simply caused by chance. In addition, Floyd outperformed its comparison school by an overall average of 14.96 score points in 2001 and increased that gain to 21.54 in 2002. The highest gains here were the score averages in 3rd grade reading and math 2001 (35.81 and 25.85 score points respectively), and in 4th grade reading and 3rd grade math 2002 (30.48 and 25.33 score points, respectively).

Longitudinal Evaluation Conclusions

This longitudinal analysis of FCAT and SAT 9 scores and 2001-2002 FCAT score comparisons clearly demonstrates that student participation in CHILD results in very substantial improvement in student performance on standardized tests. In all instances of all grades among all tests for reading and math, except for the SAT 9 scores of the 2002 4th grade, John D. Floyd student scores demonstrated positive between-year scores overall and increases in score averages. These positive results were further substantiated by Floyd outperforming its comparison school in virtually all reading, math, and writing scores in 2001, and in all reading and math scores 2002. Notably, the only scores in which Floyd was not superior to its comparison school were the writing scores of 2002. Moreover, in the statistical analysis of 2001-2002 FCAT reading and math scores, 83% were found to be statistically significant, of which all but one was statistically significant at the 0.01 level.

The quantitative evaluation results indicate overall the substantial dedication of the staff at the John D. Floyd Elementary School and the positive impact of CHILD. Nonetheless, the results in this longitudinal evaluation are limited to the experience of one CHILD school. Additional evidence from more schools is needed to further validate these findings. In addition, it is highly recommended that additional measures beyond single test scores be developed to provide additional measures of student achievement as related to CHILD’s impact.

III. Third Evaluation Component: CHILD Qualitative Evaluation

The first and second evaluation components focused on student achievement based on FCAT score differences between CHILD and comparison schools. This third evaluation component focuses on implementation and other qualitative factors potentially affecting student achievement at CHILD schools.

The review of qualitative data includes content evaluation of several Institute for School Innovation (ISI) data gathering instruments and reports [Appendix B]; the CHILD Essential Components (Appendix A); and the Institute's *Final Report on Implementation and Quarterly Reports* (Appendix C). It also includes information gathered from site visits and Florida Tax/Watch survey data collected from principals, teachers, paraprofessional aides, on-site coaches and parents in three Project CHILD research schools. The survey instruments can be found in Appendix D and the tabulated results of the surveys in Appendix E.

The objective of this qualitative analysis is to determine whether differences in student achievement among high- and low-performing CHILD schools can be explained by how well CHILD was implemented in Phase III of the evaluation and, in turn, may have contributed to differences in mean test scores between CHILD schools and their comparison schools.

The Institute for School Innovation uses its Essential Components as the foundation for the analysis of the level of implementation of the CHILD model. These components encompass aspects of the CHILD model relating to support, instructional design, teacher collaboration, and student empowerment that are considered by ISI to be the essence of the CHILD model.

The Institute's *Final Report on Implementation and Quarterly Reports* (Appendix C) contains the results of their analysis. Florida TaxWatch's analysis of this report, the data gathering instruments and reports, and the Essential Components finds deficits in the assessment data for some of the components and weaknesses in the data collection techniques for other components.

A number of additional implementation variables was evaluated by Florida TaxWatch:

- Florida TaxWatch found that each CHILD school is using different strategies, activities and programs. Considering that the effectiveness of different school improvement strategies can vary, this could account for differences in student achievement between the Child schools.
- Some schools use strategies designed to remediate struggling students. These programs, to the extent that they pull students out of a CHILD classroom for considerable amounts of time, may impede or facilitate the ability of the CHILD model to improve student standardized test performance.
- The degree of technology training varied at each school. Survey data revealed that one relatively high-performing school was able to provide "meaningful technology training on a regular basis," in part, due to the availability of a specialized teaching resource—a Technology Resource Teacher—while at "the other schools that were dependent on county personnel, training was difficult to arrange and occurred less frequently."

- The amount of other professional development varies as well. For example, not all teachers attended the CHILD Annual Conference at the Florida Educational Technology Conference. This could also indicate less commitment to CHILD by some teacher than others.
- Some—but not all—of the CHILD clusters extended 70-minute class period blocks; at least one cluster used 90-minute blocks.
- Student mobility may have changed the demographics in CHILD classrooms. For example, randomly adding students, when attrition occurred, to maintain class sizes averaging 30 students could have positively or negatively influenced aggregate student performance. Of course, student attrition/replacement could have similarly affected the demographics of comparison schools. “Waiting lists” and principal comments indicated that some students in PC classrooms were self-selected. Moreover, one CHILD school had a magnet population that reportedly increased, mostly due to Project CHILD.
- Some clusters “traded” paraprofessionals for “advanced technology packages.” This resulted in some teachers receiving additional technology training, whereas others did not.
- The level as well as the type of district support that was provided to CHILD schools varied.
- Not all teachers take advantage of opportunities to visit other CHILD research sites—these occasions were designed to build collegial relationships to enhance teacher effectiveness. This could be an indication that some teachers did not “buy into” this very essential CHILD building-block component.
- Only one school added a resource teacher to help with remediation.
- The amount of common planning time for each cluster varied.
- There are school differences in the percentages of CHILD student populations that have attended preschool, have internet service connection at home, and receive tutoring or extra help after school.
- There are perceptual differences among some of the interviewees as to the quality of training opportunities available to CHILD personnel.
- The number of years experience that paraprofessionals, principals, teachers, and coaches have with CHILD varies.

The qualitative data provides information about the perspective of CHILD from the teachers and paraprofessionals who work directly with implementation of the model in the classroom. The data suggest problems at Tedder Elementary that could have contributed to its poor performance in relation to its comparison school.

- The Tedder coach reported that there were eight hours each week spent on non-Child activities.
- Tedder students have less access to computers at home than do other CHILD schools.

- Tedder parents report less satisfaction with their childrens’ academic performance and the amount and quality of communication they have with their childrens’ teachers.
- Tedder teachers have much less experience than do teachers at the other two schools.
- Tedder teacher’s average experience with PC is less than three years. This is notable because this is occurring the third year of the evaluation and, consequently, indicates a great deal of transitioning among the teacher population.
- Tedder teachers report insufficient time for collaborative planning, planning that is not productive, and insufficiency of uninterrupted quality instructional time.
- Tedder personnel did not file all of the required reports for CHILD implementation evaluation purposes. Therefore, degree of implementation is unknown. However, based on the limited number of reports that were filed, Tedder made less use of technology, and their station activities were the least “hands-on” of all the CHILD schools.
- Tedder paraprofessionals started the first quarter of the academic year only working half-time.
- Variance in the number of cluster meetings and peer observations at each school shows Tedder to be the lowest CHILD implementer in each academic quarter.
- The coach at Tedder reports that she had many duties that took away from the time she needed to spend on monitoring and support in the CHILD classes. For example, she reports spending eight hours each week on non-CHILD activities.
- Teachers at Tedder score the lowest of all CHILD schools on their effective practices/implementation rating. Additionally, Tedder’s implementation could be positively skewed by two teachers who are Child consultants.
- At Tedder, a primary reading teacher left in mid-year and was replaced with a teacher for whom this was her first teaching assignment.
- Two of Tedder’s three intermediate reading classrooms had low implementation—71% and 68%, respectively. One of the primary language arts classrooms had a 55% implementation rating.
- Tedder reports that there was a lack of district support, resulting in teachers feeling like “they are beating their heads against a wall.”
- Tedder teachers expressed concerns about not having sufficiency of time to preview software as compared to that available at other schools.

Other findings are counterintuitive.

- Paraprofessionals at Floyd report both spending less time working in the CHILD classroom and then, when in the classroom, spending less time assisting students at stations than Tedder paraprofessionals report. They also report that monthly paraprofessional meetings are less helpful and that they are less

satisfied with the availability, quality, and content of training they received. Perhaps they so reported because they had more work experience as CHILD paraprofessionals than paraprofessionals at Tedder.

- Teachers at Floyd have more teaching experience and more experience with CHILD than teachers at Tedder. They also report less enthusiasm and satisfaction with CHILD: less satisfaction with sufficiency of time available to plan with other teachers and less satisfaction with the helpfulness of structured observations; more student disruptive behavior; less satisfaction with students' abilities to correctly fill out passports; less satisfaction with parents' understanding of CHILD; less satisfaction with the principals' level of involvement in CHILD; and less satisfaction with the level of their own computer/technological skills.

Qualitative Evaluation Recommendations

Qualitative data indicate that several factors could be responsible for variance in student achievement between low and high performing CHILD schools. In order to more comprehensively examine these differences to determine more empirically in future evaluations their effect on student achievement in CHILD schools, Florida TaxWatch recommends that the following evaluation alternatives be explored:

- Further analyze the comparison of the ISI data collection instruments and the Essential components, examining the deficits in the assessment data for some of the components and weaknesses in the data collection techniques for other components.
- The ISI CHILD Essential Components provide a conceptual framework for the CHILD model, but some of them lack the specificity needed for comprehensive measurement. Each component must be carefully and operationally defined so that better data collection methods can be devised that will more effectively measure each component.
- The data that Florida TaxWatch was able to collect did not appropriately measure the implementation of all aspects of the CHILD Essential Components. The components must be reconsidered altogether as a tool for measuring CHILD implementation and/or the techniques utilized to administer the instrument refined.
- Self-reports of implementation should be avoided and classroom observations designed to determine the frequency of station activities should be unannounced.
- Issues of quality control should be addressed as pertains to CHILD teacher professional development opportunities. Quality enhancement of professional development would require evaluation of the training CHILD teachers receive and its impact as compared to the quality and impact of the training received by non-CHILD teachers from comparison schools.
- Future research should evaluate the quality of work performed at student learning stations to determine the impact this has on student achievement, whatever the measure. An assessment of student time-on-task [engagement] indicated that, when students are at their learning stations, they are “on task” and actively engaged in station activities. Correlation analysis shows there to be a positive correlation between degree of teacher implementation (as documented in the coach's monitoring reports) and the percent of students on task/engaged (Pearson Product-Moment Correlation—0.01 level of statistical

significance). This means that, when teachers more fully implement CHILD, students are more fully engaged with their work assignments, enhancing the probability that a higher quality of student learning will occur.

- CHILD school principals varied in their level of involvement in the extent to which they monitored classrooms for teacher implementation and in their evaluation of the quality of learning station activity. Future evaluations should examine the nature and contribution of the principal's implementation monitoring role to CHILD student achievement.
- Although the CHILD Passport is a management tool to help students become organized and focused on their work—as a practice record to assess students' effort at the learning stations and to set and assess goals—interviewees reported widespread problems about the time-consuming nature of passports relative to their potential benefit to student achievement. Future research should consider how essential this component is to student achievement.
- It is recommended that all problems revealed by the qualitative evaluation of CHILD be reviewed by Florida TaxWatch and ISI staff prior to subsequent evaluations of program implementation.

Qualitative analysis also provides evidence that CHILD adds value to the educational enterprise in ways that are not fully reflected by the focus on the FCAT as the sole assessment tool. Future research should attempt to quantify these benefits. Examples of the benefits reported but not quantified are:

- CHILD offers a choice of instructional strategies available to parents and students within the public school system.
- CHILD offers opportunity for differentiated staffing patterns that can enhance the teaching profession by creating career paths for non-traditional teachers, and add value to teaching for veteran teachers.
- Students become independent thinkers, responsible learners, learn to work as a group, and see the computer as an instructional tool.
- Teachers become subject specialists, learn to work as a team, increase their computer skills, become proficient at creating hands-on station activities for their students, and learn how to effectively use paraprofessional support.
- Schools gain increased parent support, additional funding for hardware and software, higher level of teacher skills, and a sense of pride.
- Discipline problems are greatly reduced and students are motivated--CHILD provides a busy, happy, learning environment.
- CHILD “enables teachers to spend more quality time with their students.

- CHILD provides a model that allows the teacher to work with small groups of students who were not able to master the lesson in a whole group environment.
- The opportunity to work with a full time assistant was a benefit to the students and to classroom management.
- Teachers have the opportunity to specialize in one subject area, become familiar with a grade level curriculum span (making them more effective teachers), and see the growth in their students over 3 years.

IV: Fourth Evaluation Component: CHILD Potential Cost-Related Impacts

Implementation of the CHILD model requires an initial expenditure—a “grant” cost—that diminishes each year. However, CHILD can generate savings because of differentiated staffing patterns. A CHILD primary strand—a primary (K-2) and intermediate (3-5) cluster—consists of 6 classrooms accommodating 30 students in each class. One teacher and one full-time paraprofessional aide teach each class. Each strand of 6 classrooms and 180 students generates costs. These include salaries and benefits for 6 teachers and “grant costs” associated with six classroom assistants, training for teachers, assistants and principals, training materials, software, hands-on manipulatives for student learning station activities, and quality assurance.

Comparing this to the “traditional” cost to teach the same 180 students, the statewide average elementary class size is 23.3 students per class. To teach these 180 students requires 7.73 teachers, which increases the costs associated with teacher salaries and benefits. The following table displays the CHILD cost with the traditional cost and the savings per student for the first year. An average teacher salary of \$38,233 plus benefits of 28% for a total per teacher cost of \$48,925 was used in this calculation. *Actual* savings will vary because this estimate uses *average* costs of teacher salaries and benefits. Notably, these estimates of savings are conservative because they do not consider the costs of instructional materials, computers, teacher aides, teacher training, etc. associated with the traditional classroom. (See Table 23).

Table 23

1st Year of Implementation	CHILD Cost	Traditional Cost	Savings Per Student
Teacher salaries & benefits	\$293,550	\$378,190	\$84,640.00
Grant cost	\$40,636	\$0	(\$40,636.00)
Total cost/savings	\$334,186	\$378,190	\$44,004.00
Per student cost	\$1,856.59	\$2,101.06	
Per student savings			\$244.47

The grant costs for the second year of CHILD operation include part-time classroom assistants, 24 computers, updated materials, training workshop, and quality assurance. Note in table 24 that per student savings for the second year increase because the cost of the grant decreases.

Table 24

2nd Year of CHILD Implementation	CHILD Cost	Traditional Cost	Savings Per Student
Teacher salaries & benefits	\$293,550	\$378,190	\$84,640.00
Grant cost	\$21,660	\$0	(\$21,660)
Total cost/savings	\$315,210	\$378,190	\$62,980
Per student cost	\$1,751.17	\$2,101.06	
Per student savings			\$349.89

In the third year of CHILD implementation and beyond, schools absorb the annual cost of updated materials (\$2,160) and any part-time assistance, if needed. Quality assurance is provided. Savings increase yet again over the second-year savings. (See Table 25).

Table 25

3rd Year & Beyond of CHILD Implementation	CHILD Cost	Traditional Cost	Savings Per Student
Teacher salaries & benefits*	\$293,550	\$378,190	\$84,640.00
Grant cost	0	0	0
Total cost/savings	\$293,550	\$378,190	\$84,640
Per student cost	\$1,630.83	\$2,101.06	
Per student savings			\$470.22

When more students participate in the CHILD model—30 students per class as compared to the state average of 23.3 students per class—the savings multiply. For example, if an entire elementary school participated, and its student population were 1000, the school would save \$244,470 the first year, \$349,890 the second year, and \$470,220 the third year.

Another source of savings is the cost avoidance associated with avoiding construction of new classrooms and also the continuing costs of their maintenance. Every CHILD classroom that accommodates 30 students rather than 23.3 students represents 6.7 student stations that need not be built. Florida’s Office of Economic and Demographic Research uses a cost estimate for construction of each student station at \$15,953. Therefore, the cost avoidance per CHILD classroom is \$106,890.

Ten CHILD classrooms can avoid construction costs of over one million dollars. A full CHILD school of 30 classrooms represents the opportunity to avoid construction costs of \$3,206,688.

Phase III Evaluation Conclusions

Notwithstanding the slippage in the scale and statistical significance of differences in the Phase III scores of CHILD and non-CHILD schools, the Phase III CHILD school test scores are impressive. If class size makes a difference in student achievement, CHILD schools were able to overcome its influence by scoring better than, or as well as, non-CHILD schools in almost 2/3rds—24 of 34—possible mean test score differences.

Twelve of the 22 statistically significant comparison test scores were those of CHILD schools as compared to 10 comparison schools. CHILD school scores are statistically significantly higher than their counterpart non-CHILD schools in six reading and six math classes; their comparison schools scored statistically significantly higher in three reading, five math and two writing classes.

The CHILD school performance is even more impressive if the Phase III comparisons between the CHILD and non-Child schools tested in Broward County are removed from the evaluation comparisons due to the aforementioned allegations of testing irregularities at the comparison school. This would result in CHILD mean test scores being statistically significant and higher than comparison school scores in 11 of 16 comparisons as compared to only five instances for the non-CHILD school test scores. Comparison schools would have outscored CHILD schools only in one reading, three math and one writing class category and, interestingly, in no fourth grade class category.

The longitudinal evaluation of between-year score gains and increases in average scores in both the FCAT and SAT 9 at Floyd Elementary show that the CHILD model can have a most positive impact on student achievement over time. It clearly demonstrates that student participation in CHILD can result in very substantial improvement in student performance on standardized tests. In all instances of all grades, among all tests, for reading and math, except for the SAT 9 scores of the 2002 4th grade, John D. Floyd student evaluations demonstrate positive between-year scores overall and increases in score averages.

The longitudinal, quantitative evaluation results indicate overall the substantial dedication of the staff at the John D. Floyd Elementary School and the positive impact of CHILD. Nonetheless, the results in this longitudinal evaluation are limited to the experience of one CHILD school. Additional evidence from more schools is needed to further validate these findings. In addition, it is highly recommended that additional measures beyond single test scores be developed to provide additional measures of student achievement as related to CHILD's impact.

The Phase III evaluation of qualitative data concludes that CHILD adds value to the educational enterprise in ways that are not fully reflected by the focus on the FCAT as the sole assessment tool. More questions are raised that answered by the qualitative evaluation. However, important clues are provided as to why CHILD may not be as optimally implemented as it could be between and among CHILD schools and how this, in turn, could negatively influence student achievement. As pointed out, some of the qualitative findings are logically deductive and intuitive. Others are counterintuitive. All require further, more definitive research and several recommendations were proffered in this report regarding how future research might benefit from Phase III qualitative findings.

Phase III shows that CHILD would result in significant per student cost savings if expanded to other schools. Comparing CHILD-related costs with those of traditional model costs for each of three years of CHILD implementation, per student savings of \$244, \$350 and \$470 could be generated. Should more students participate in the CHILD model—30 students per class as compared to the state average of 23.3 students per

class—the savings multiply. For example, if an entire elementary school participated with CHILD, and its student population were 1000, the school would save \$244,470 in the first year, \$349,890 in the second year, and \$470,220 the third year.

There also could be significant school construction and maintenance costs avoidance should the CHILD be expanded to other Florida schools. Every CHILD classroom that accommodates 30 students rather than 23.3 students represents 6.7 student stations that need not be built. The Florida Department of Education estimates the cost of construction of each student station at \$12,733. Therefore, the cost avoidance per CHILD classroom is \$85,311. Maintenance savings would be in addition to this.

For every 6 CHILD classrooms (180 students), approximately 2 classrooms will not need to be built. A CHILD school of 30 classrooms means that 10 classrooms will not need to be built. This would result in a cost avoidance of \$853,110.

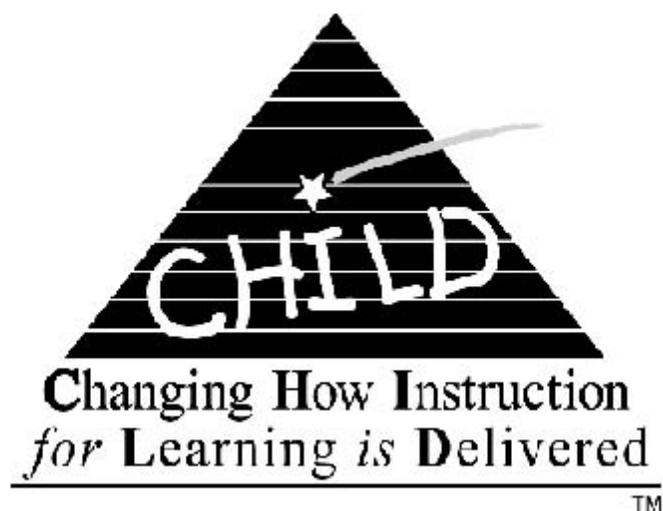
Because constitutional Amendment 9 reducing class-size was approved by Florida voters in the November 5, 2002 elections, the state should consider the CHILD model as a means of ameliorating the immense logistical effort and costs associated with building additional classrooms to accommodate state constitutional class-size reduction requirements.

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Appendix A

Essential Components of the CHILD Model



Instructional Design Components

Primary and intermediate grades form classroom clusters.

Three grade-levels form a cluster for instruction in reading, language arts, and mathematics. Kindergarten, first and second grades form the primary cluster; third, fourth, and fifth grades form the intermediate cluster. Each classroom in the cluster has learning stations equipped with computers, software, and other learning materials appropriate for either reading, language arts, or mathematics. Students spend one hour in each of the subject classrooms in their cluster every day.

Cluster teachers function as trained experts in a subject specialty.

CHILD teachers receive special year-long training in their content specialty (reading, language arts, or mathematics), in classroom-management techniques, and computer-integration skills. CHILD teachers continue their professional development through ongoing self-study, inservice, action-research, and by becoming mentor/trainers for new CHILD teachers.

Students work with the same teacher team for three years.

CHILD students work with the same reading teacher, language arts teacher, and math teacher for three years (kindergarten through second grade; third grade through fifth grade).

Teachers use research-based materials to plan lessons and coordinate instruction.

CHILD schools use their own curriculum and follow the multi-grade unit organization in the CHILD Planning Guides to coordinate lessons and incorporate a variety of appropriate software and learning activities for their students. Teachers incorporate suggestions from the teaching tips into their instruction. Teachers also use the CHILD Activities Guides to develop hands-on station activities tied to lesson objectives.

Students work at a variety of learning stations.

Each CHILD classroom has a Computer Station, a Text Station for written work, an Exploration Stations for hands-on activities, and a Teacher Station for small group work. Students work cooperatively at learning stations when they are not working with the teacher. The learning stations provide a variety of activities designed to accommodate all learning modalities and multiple intelligences.

Station activities are clearly defined and appropriate to students' abilities and needs.

Teachers clearly explain station activities and use Task Cards to specify assignment requirements at each station. The assignments are appropriate for the students' levels of intellectual and social development.

Teachers designate where students begin working each day.

The teacher prepares a Daily Station Assignment Board so that students know where to begin working after whole group instruction. Teachers insure that students begin at different stations each day by using information provided on the Station Visitation Chart of the CHILD Passport.

The classroom ambiance is supportive, equitable, and risk-free.

CHILD teachers create a risk-free learning climate which enables students to learn from their mistakes. Teachers set high expectations and follow equitable practices. There is a positive tone where students are frequently supported and encouraged.

Teacher Collaboration Components

Teachers work in cooperative teams.

Teachers within each cluster (primary and intermediate) work cooperatively. They participate in weekly structured cluster meetings, and in joint planning and unit-culminating activities.

Teachers observe students in other classrooms.

Once during each six-week unit, teachers spend thirty minutes observing the two other classrooms in their cluster. They complete the CHILD Observation Form and report to their colleagues at a team meeting.

Student Empowerment Components

Students are trained in CHILD management techniques.

Teachers follow a structured ten-day orientation plan to train students to responsibly use and care for materials and equipment, to stay on-task while working independently, and to move efficiently to various learning stations. They learn the purpose and use of the CHILD Passport.

Students set and assess unit goals.

Students are guided by their teachers to set reasonable goals at the beginning of each six-week unit. At the end of each unit, students assess whether they achieved their goals. They record this information in the CHILD Passports.

Students use CHILD Passports each day.

Students use their CHILD Passports to set goals, record information about their station work, express their opinions, and evaluate goal accomplishments. Students refer to the Passport to guide their movement to the various learning stations in each classroom.

Students have frequent and equitable access to computers.

Each cluster is equipped with a minimum of twelve computers (3 for reading, 3 for mathematics, and 6 for language arts). All students work at the Computer Station in each of the subject-area classrooms at least three times per week.

Students exercise control over materials and equipment.

Students have access to and control over all materials and equipment at designated learning stations. They use equipment carefully and store materials properly.

Students work as partners in cooperative teams.

At the Computer Station, student pairs follow specific strategies to work as cooperative teams (except when word processing). They receive recognition and rewards to foster cooperation.

Students know where to get help.

Teachers clearly communicate specific strategies to the students for getting help when the teacher is unavailable. The strategies are also identified on the Station Task Cards available at the learning stations.

Support Components

Parents provide input on a regular basis.

At the end of each unit, parents review their child's Passport and provide input by writing comments. Parents are encouraged to participate as co-learners with their child and to volunteer to help in the classrooms. Parents attend a CHILD orientation at the beginning of the school year and individual conferences throughout the year. There is frequent communication between the school and home.

The principal provides leadership and support.

The principal visits the classrooms frequently, and is well-versed in CHILD's methods, goals and objectives. The principal facilitates communication with parents, central office staff, and the community at large.

An assistant helps primary-grade students at the Computer Station.

A paraprofessional, volunteer, or older student helper is available to assist primary-grade students each day at the Computer Station, particularly for kindergarten and first grade students.

Teachers network through newsletters, e-mail, and an annual conference.

The Institute for School Innovation updates software correlations annually and coordinates teacher networking activities such as newsletters and an internet bulletin board. CHILD teachers also are encouraged to attend the annual CHILD conference to share station activities and brainstorm ideas. The Institute also sponsors an "Innovation Sustainer Award" to recognize teachers with three or more years of participation as a CHILD educator.

Appendix B

ISI uses the following forms to collect data and generate reports that evaluate the level of implementation of the CHILD model.

Exemplary coach criteria evaluation form. Completed once each quarter by the Project Manager. The coach is evaluated on checklist of 17 tasks.

Classroom associate survey. Quarterly paraprofessional self-report of the percent of time devoted to each of the 6 classroom-related activities.

Teacher survey. Quarterly teacher self-reports of amount of time spent in each type of instruction [whole group, station, wrap-up] each day, Monday through Friday. This survey also asks how often each child visits the computer station.

Structured observation form. Quarterly report by each teacher of observations in another CHILD classroom. Record of student behaviors and classroom routines.

Effective classroom practices form. Record of the coach's observations of the classroom visits—30 minutes in each classroom every two weeks—to monitor the implementation of the 20 essential components. The form assesses 15 practices in 3 areas: student passports, the daily assignment board, and the learning stations. Station activities are rated by the extent they include hands-on or paper and pencil activities, or are technology-related. The ratio of computers in use to computers available is also recorded.

Software Review Forms. Teachers are required to fill out one form showing that they have reviewed one piece of software each 9 weeks in order to show that they are staying current with instructional technology.

Cluster meeting agenda forms – Cluster teachers document the following in the required weekly meetings: successes, problems, observations, and uCHILDDoming topics.

Administrator's Report. End of semester survey completed by principal or coach.

On-site coach monthly report. School wide compilation of Effective Classroom Practices Forms.

Final Implementation Report. Project manager writes an annual report summarizing the On-site coach's monthly reports.

Project Manager's Quarterly Reports. Compilation of Administrator Reports, on-site coach Monthly Report, Effective Practices Report, and the Teacher Survey.

Appendix C

CHILD Class Size Research Study: Phase III

Final Report on Implementation

July 10, 2002

Debbie Pepin

Project Manager

The purpose of the CHILD Class Size Research Study was to investigate the effects on academic achievement of CHILD in classrooms with 30 or more students compared to smaller traditional classrooms.

The research study began in the fall of 1999 at three schools. Tedder Elementary School, John D. Floyd Elementary School and Windy Hill Elementary School. In January of 2000 the study was expanded to two additional schools. Wilkinson Elementary School and Mascotte Elementary School.

2001-2002 School Demographics

Tedder Elementary School, Pompano Beach, FL (Broward County)

School enrollment- 1093. Full-time CHILD Coach.

Urban, Title I, 89% free/reduced lunch, 92% minority. Excluding Pre-K and 6th grade school-wide CHILD. Excluding kindergarten, the average class size in the research classrooms was 29.8. Five of the seven CHILD clusters were in the research project.

John D. Floyd Elementary School, Spring Hill, FL (Hernando County)

School enrollment-914 Full-time CHILD Coach.

Suburban, 38% free/reduced lunch, 16% minority. School wide implementation except ESE classes. Excluding kindergarten the average class size in the research classrooms was 30.7 students. Five of the eight CHILD clusters were in the research project.

Windy Hill Elementary School, Jacksonville, FL (Duval County)

School Enrollment-828 Full-time CHILD Coach.

Urban, Title I, 62% free/reduced lunch, 57% minority. Windy Hill operated 2 intermediate clusters and 2 primary clusters in research and 1 primary expansion cluster and 1 intermediate expansion cluster. Excluding kindergarten, the average class size in the research classrooms was 29.5 students. Four of the six CHILD clusters were in the research project.

Mascotte Elementary School, Mascotte, FL (Lake County)

School enrollment-653 Half-time CHILD Coach

Rural, Title I, 67% free/reduced lunch, 56% minority. Mascotte operated 1 intermediate cluster and 1 primary cluster in research and 1 primary expansion cluster and 1 intermediate expansion cluster. Excluding kindergarten, the average class size in the research classrooms was 28.8 students. Two of the four CHILD clusters were in the research project.

Wilkinson Elementary School, Sarasota, FL (Sarasota County)

School enrollment- 891 Half-time CHILD Coach Urban, Title I, 42% free/reduced lunch, 22% minority. Wilkinson operated 1 intermediate cluster and 1 primary cluster in research and 1 primary expansion cluster and 1 intermediate expansion cluster. Excluding kindergarten, the average class size in the research classrooms was 28.6 students.

School Grades

Grades of schools participating in the research project

School	1999-2000	2000-2001	2001-2001
Floyd	A 4 Clusters	C 6 Clusters	A 5 Clusters
Mascotte	C (Not in study)	C 2 Clusters	C 4 Clusters
Tedder	D 4 Clusters	C 6 Clusters	C 7 Clusters
Wilkinson	C (Not in study)	A 2 Clusters	A 4 Clusters
Windy Hill	C 4 Clusters	C 5 Clusters	C 6 Clusters

Calendar of Activities

The following is timeline of support activities provided at/for the five research sites by the project manager.

August-September

Held leadership meeting in Orlando for principals and coaches to set forth clear expectations for final year of this study. Hosted gala kickoff dinners at each site for teachers and leaders. Visited all research sites to assure implementation of program for first quarter.

October-November

Provided on-going support to all sites. Attended PTA and SAC meetings. Met with every cluster at each site.

December

Met with Para-educators and teachers at each site. Distributed para-educator, teacher, and administrator surveys. Collected data for the second quarter report.

January-February

Held leadership meeting in Orlando. Provided on-going support to each site. Participated in technology training with para-educators and teachers.

March-April

Attended CHILD Conference in Orlando in conjunction with Florida Educators Technology Convention. (FETC) On-going support provided at each site. Worked with teachers previewing software and incorporating new titles into their curriculum. Served as co-host with coaches during key district personnel visits.

May-June

Held coaches meeting in Clearwater. Visited each research site to collect data for final summative report. Attended one day of Tedder Elementary's curriculum mapping workshop.

Implementation Issues Through the Years (1999-2002)

Throughout the three years of this research project, many adjustments were made to correct problems and help teachers more fully implement the CHILD essential components. The following is a summary of corrections and adaptations made through the years.

Year One: The para-professionals in their end of the year surveys asked for more training ranging from beginner to novice on all hardware and software. Additional technology training was provided for the para-professionals who assisted the teachers in the CHILD classes.

- **Years two and three: school personnel or the project manager delivered on-going training. The training was provided before, during or after school. Each site arranged times that were convenient for their staff.**
- At **Floyd Elementary** the Technology Resource Teacher had an important role in arranging and providing meaningful technology training on a regular basis. At the schools that were dependent on county personnel, training was difficult to arrange and occurred less frequently.

Year One: Half-time coaches and para-educators found it difficult to effectively support the teachers with the larger class sizes. The coaches found it difficult to collect the necessary implementation data for the Institute.

- Year two at Floyd, Windy Hill, and Tedder funded full-time coaches. At Mascotte and Wilkinson the coaches' remained on a half-time basis as they had only six classrooms to monitor rather than twelve to eighteen.
- Years two and three para-educators were funded full time at each site.
- Year three, Tedder para-educators started the first quarter working half time. The delay was due to the late school board approval of their continuing in the study.

Year One: The teachers felt overwhelmed the first year starting with thirty kindergarteners.

- Year two the schools were allowed to determine class size for their kindergarten classes. The five schools averaged 25 students in their kindergarten classes.
- Year three, as the school year progressed, the K teachers felt more comfortable as additional students were added to their classes. They found after the core of the students was trained in CHILD procedures, new students were mentored by existing students and quickly adapted to class routines.

Year One: The intermediate teachers found it difficult to provide both whole group and station time in a sixty-minute block. This increased as they felt the pressure to prepare students for the FCAT.

- Year two several of the intermediate clusters successfully extended their rotations to 70 minutes. The teachers found the extra time allowed them to work with more students at the teacher station. It also provided them an opportunity to work one-on-one with students who needed extra assistance.

- Year three schools began to look at extending the rotations to 90 minutes. One primary expansion cluster at **Tedder** found the ninety-minute periods very beneficial and provided the time necessary to meet county requirements. They also had time for academically focused holiday curricular activities that they had not been able to incorporate previously due to time restraints.

Year One: The mobility rate at the schools made it difficult to maintain the thirty students required by the grant.

- Year two the project manager worked closely with each principal to assure class sizes meet the grant guidelines. At two schools, as the enrollment fell below thirty, students on a CHILD waiting list were given the opportunity to move into the program.
- Year three the teachers requested that their classes be stacked with more than thirty students to allow for the natural mobility of their student population. Doing this made it more feasible to maintain thirty students. The teachers discovered by starting with a larger class size they didn't have to stop and provide training to new students as their class enrollment changed.

Year One: The students' activities while at the Computer Station were not directly tied to skills being taught.

- Year two the Institute revisited their software preview form. It was necessary to have a document that when completed made it possible for the teachers to know and successfully use their available software to support skills the students needed to master.
- Years two and three the teachers were given time either on their half-days or during their planning time to preview one piece of software each nine weeks.
- Year three, two of the schools also created task cards as they worked on their software previews.

Year One: Institute staff observed that the computer station and technology components of the CHILD model were very underutilized in most classrooms.

- During year three, experienced clusters were offered an opportunity to forgo their para-educator for an advanced technology package that included laptops for each teacher, a scanner, digital cameras, student cameras, presentation workstation, CD burner, and upgraded tool software (see Appendix). Each teacher also received a \$5,000 stipend.
- Four of the schools had already made commitments to the para-educators for continued employment and did not offer the option to their teachers.
- One intermediate cluster at **Floyd** took advantage of the technology package. Two teachers received the technology package and the training while the third teacher kept her para-educator. The stipends and para-educator were shared between the three teachers.
- The Institute provided five days of training and five days of release time for these teachers to preview software.
- The teachers were able to teach their students what they had learned and during the last quarter students created PowerPoint presentations.

Year One: The teachers discovered that in order to better prepare their students for the rigors of state required standardized testing, they needed higher order thinking station activities.

- The Institute put together a team of exemplary educators who created "Standards Based Activities." These activities were designed to support higher order thinking skills in Bloom's Taxonomy.
- Year two these new activities were sent in draft form to each research site. The teachers were asked to pilot them for one year. Throughout the year, a few teachers provided insight into the effectiveness of the activities.

- Year three the final version of the “Standards Based Activities” were sent to each CHILD school with their renewal. Feedback has been positive from many teachers. They were pleased the Institute listened to them and provided what they needed.

Year One: A common occurrence at each school included some dissention between the CHILD teachers and the traditional teachers. There was some resentment and misunderstandings.

- Year two the principals were given a suggestion to have a “Faculty Walk About.” The teachers were given a map of the school and asked to visit the classrooms on the list while looking for different academic enhancements in each room. At the end of their twenty-minute walk the principal met with the faculty and discussed quality practices that were evident in both CHILD and traditional rooms. Each site did this once during the last semester.
- The traditional teachers were given a “Focused Observation Form” (see Appendix) to fill out during their visit in a CHILD classroom. During their visit they were to look for components they could incorporate into their classroom settings.
- Year three the teachers began to meet for the purpose of sharing resources and successful classroom practices. Barriers began to dissipate as the teachers began to rely on each other’s suggestions, which proved to enhance what they were already doing. “It’s silly to re-invent the wheel, when it’s right next door if I had just asked,” shared one teacher.

Year One: The research began with the premise that each school would implement CHILD school wide within three years.

- Years two and three each school expanded its CHILD classrooms.
 - Floyd implemented school wide.
 - Tedder implemented school wide.
 - Mascotte expanded two more clusters for a total of four.
 - Wilkinson expanded two more clusters for a total of four.
 - Windy Hill expanded two more for a total of six.
- Year three we learned that district support was vital. The Institute encouraged the principals and coaches to invite key district personal to visit their schools. Each school sent out invitations, but response was poor, with only one district sending staff to tour the CHILD classrooms.

Year One: Strategies to build collegial relationships between the CHILD research sites were put in place.

- Travel funds were made available to the teachers to visit one other research site a year. The purpose of the visit was to gather information, share ideas, and find solutions to concerns they were having in their own classrooms.
- The coaches at each school worked together to find days that would allow for optimal visitation by the teachers. A majority of teachers took advantage of this opportunity.
- The visiting teachers shadowed a teacher who taught their same subject area for two hours. Then they went to another classroom to observe possible solutions to implementation issues they were experiencing.
- Funds were also provided for CHILD research teachers to attend the CHILD annual conference at FETC. Many teachers took advantage of this opportunity.
- The teachers developed friendships and began e-mailing ideas back and forth.

Year One: It became evident to the Project Manager that the principals, even though they attended training with the teachers, were unable to take an active roll in monitoring the degree of implementation in each of the classrooms.

- Year two the principals were asked, during their regular classroom visits, to become involved with the students at stations to determine the quality of station activities. As the year progressed, several administrators mentioned that they were providing resources and time for teachers to create more hands-on station activities.
- Year three the principals were requested to use the Institute’s “Effective Practices Monitoring Report” (see Appendix) form each semester with every teacher involved in the research study. It became evident the more they understood the essential components the more they were able to realize which teachers were effectively and correctly implementing the program.
- Four of the five administrators followed through with this request. The teachers discovered their administrator grew in their understanding of daily life in a CHILD classroom and were more sympathetic to their needs.

Principal’s final comments from their end of the study survey

The following comments have been taken from the principals’ surveys they completed this June. They were asked to report on successes, issues that arose and how their solutions as well as lessons learned from this three year study and the future impact it will have on CHILD at their schools.

What successes were achieved at your school during this study?

- Test scores increased.
- Our school attracted additional students.
- We were showcased as a National Demonstration site and hosted many visitors.
- Attendance of students and teachers increased.
- Behavior referrals were reduced.
- The teachers and para-educators became strong educational teams working to positively impact student achievement.
- The teachers began sharing station activities in their respective subject areas.
- Existing CHILD teachers became mentors to new CHILD teachers.
- The teachers worked in teams to create a curriculum map derived from test data and presented to students through station activities.
- We extended the class periods to seventy minutes for the intermediate students.

What issues and concerns were encountered during this study?

- Thirty students in kindergarten were too many.
- We added a resource teacher to help with remediation and lower achieving students who needed additional assistance.
- The intermediate language arts teacher had difficulty grading 105+ paper each day.
- It was difficult to maintain class sizes of thirty due to the mobility rate of our student population.
- Creating a school wide schedule that provided common planning time for each cluster was difficult.
- The teachers needed to take their station activities to a high level so as to better prepare the students for standardized testing.

- The intermediate reading teachers needed more instructional time to read the stories from the basal with the class.
- Several teachers were out for maternity and health issues and it was difficult to find long-term substitutes for the CHILD classrooms who would stay long enough to be trained.

The most beneficial thing our students gained from CHILD...

- Our students became independent thinkers.
- They learned to work as a group.
- They saw the computer as an instructional tool.
- School became fun and they became part of a family.
- Strong academic gains.

The most beneficial things our teachers gained from CHILD...

- Each teacher became a subject specialist.
- They learned to work as a team.
- Their computer skills were greatly increased.
- They became proficient at creating hands-on station activities for their students.
- They learned how to effectively use a para-professional.
- They became confident and enjoyed hosting visitors.

The most beneficial thing our school gained...

- Increased parent support.
- Additional funding for the purchase of hardware and software.
- Academic improvement.
- Higher level of the teacher skills.
- Our school gained a sense of pride from being involved in the research project.

My advice to new schools...

- Make certain your teachers buy-in to the new concept.
- Provide time for new CHILD teachers to prepare.
- Make certain computers, printers and electrical drops are in place.
- Give the teachers lots of positive feedback.
- Educate the entire staff about CHILD.
- Find ways to develop station activities for the teachers.
- Remember- Get through the first year; it's the toughest, then everything pulls together in the 2nd and 3rd years.
- Give the teachers latitude in delivering the CHILD model. Be flexible.

Teacher's final comments from their end of the study survey

“The variety of hands-on activities and technology are instrumental in my classroom. Each learning style is addressed and every child shows progress in his/her own unique way.”

“Discipline problems are greatly reduced and students are motivated while having fun. CHILD provides a busy, happy, learning environment.”

“I truly believe in CHILD and enjoy working with students in small groups and one-on-one. There are not many other programs that enable teachers to spend quality time with their students. The rapport that is established between the teacher and student is so very important.”

“Parents have been so supportive of our program and are amazed at how much their children have learned.”

“I can’t imagine ever teaching again without two teammates to confer and collaborate with.”

“I really believe in the program. The children love the stations. I’ve seen so much growth in my students over the two years I’ve been implementing CHILD. I also enjoy the strong support of the two other teachers in my cluster. When there are problems we work together to solve them.”

“It’s great having the children for more than one year. I like getting to know the children’s parents more personally too.”

“CHILD is good in concept. The kids love stations. As an intermediate math teacher, I feel the manipulatives at the stations are useful and provide positive learning experiences.”

“I like having the students for three years. It has allowed me the opportunity to see the growth that is being made.”

Problematic Concerns

The following statements were derived from the end of the year teacher surveys.

TEACHER-“CHILD is a wonderful program but needs to be more flexible. Everything is not in black and white as the Institute wants it to be.”

PROJECT MANAGER- *CHILD provides flexibility for the teacher to interpret and incorporate this delivery system into their classroom. CHILD is not a scripted program, but is extremely flexible in enabling the teacher to create a learning environment that best meets the needs of their students. However, there was not flexibility when it came to full implementation of the Twenty Essential Components. This caused discomfort in teachers unused to the rigorous demands of research criteria.*

TEACHER-“I feel that CHILD is misunderstood in this county because they have chosen not to observe the process in action.”

PROJECT MANAGER- *Invitations were extended to key district personnel asking them to visit the CHILD classrooms. A low percentage of response occurred in each district. It has proven to be a strong factor that support for the teachers must come from the district and filter down through the school administration. When teachers know they have full support they are sustained as they accept the challenge of changing their classroom paradigm.*

TEACHER-“CHILD is a great concept but I think it works best with moderate to high achieving students. (immediately) I feel lower achieving students can be successful with this model only after they have gotten accustomed to working independently.”

PROJECT MANAGER- *It has been reported to the Institute from numerous CHILD teachers that all children benefit from the methodologies used in a CHILD classroom. CHILD is a conglomeration of best teaching*

practices under one umbrella with strong attention given to keeping the students actively involved in their learning. Hands-on learning activities work well with all students and especially lower achieving that many times need to touch it to learn it. We do see that it takes some students longer to settle into the routines and independence required.

TEACHER-“I hate having to go to stations! EVERYDAY. I think to most of our kids, station activities are “play time” and not learning time.

PROJECT MANAGER- *The teacher creates the ambiance felt by the students in each classroom. If he/she is ambiguous in the implementation of daily stations the students interpret going to stations as unimportant. The students enjoy stations rather than listening to a teacher drone on and on. But, for the teacher the use of daily stations requires planning ahead and creating meaningful, academically focused activities. For example, a primary teacher explained to her children that everyone has to work to be able to achieve their goals. The class discussed their goals. They decided their goal was to move on to second grade at the end of the year. The teacher asked them what they thought they would have to do to achieve this worthwhile goal. The students said they needed to work, thus in that classroom the word work was added to stations. The children daily visited “work stations,” and under the guidance of their teacher began to see station activities as an important necessity vital to the achievement of their goal.*

Lessons Learned: Best Practices from CHILD

Finding time to make station activities.

Making station activities is an excellent way to involve parent volunteers. At **Windy Hill Elementary**, the on-site coach held a workday each semester. She invited parents from each classroom to come in and put together hands-on activities the teachers had created. Twenty-five to thirty volunteers worked for four hours and then were served lunch. It was a very successful practice and they plan on continuing with it this fall.

At **Floyd Elementary** the para-educators and parents volunteered to work on activities in the evening. They cut, colored and pasted approximately thirty activities each semester for every CHILD classroom.

Helping students take station work seriously.

The students need to know that their station work will be checked and they will be held accountable for quality work. Many teachers have students show them their completed task before they are allowed to move to the next station. Sloppy, incorrect work should be given back to the student and done over again. It may be necessary to “ground” a student at Teacher Station while they do their work until the quality improves. CHILD students need to know exactly what they are expected to do, thus allowing them to achieve high classroom expectations that have been set.

Patty Mullen, at **Mascotte Elementary**, developed a point system for station completion. High quality work at each station was expected for the students to receive the full point value. The points were recorded on a sheet and sent home to the parents weekly. Involving the parents in students daily work habits through this communication built a strong bridge between home and school. The outcome was each student began to produce quality work while at stations.

SAMPLE LETTER

Name _____

Week _____

Dear Family,

I am sending you a report of the work your child completed in my Language Arts class this week. Your child should have completed all six stations, correctly filled out their Passport, worked cooperatively and quietly at stations. If you have any questions, I will be more than happy to meet with you.

Computer Station	15 points	_____
Writing Station	15 points	_____
Publication Station	15 points	_____
Challenge Station	15 points	_____
Textbook Station	15 points	_____
Teacher Station	15 points	_____
Filling out Passport correctly	10 points	_____
Appropriate station behavior	5 points	_____
TOTAL	100 points	_____ points

Family Signature

Absences

Saving time when passing out the students' Passports.

We know this can be a problem in both the primary and intermediate classrooms. Several teachers have shared with us solutions that have worked for them.

1. Assign two students to pass out Passports as soon as they come into the classroom while you are collecting homework and taking attendance.
2. As the students pick their station for the next day, have them take their Passport to that station and assign one student to collect them at each station, clip them together. The next day as the students go to their station the Passports are already clipped together and available quickly for students to begin recording in.
3. Assign numbers to each student, 1-30 etc. and all Passports are put in numerical order. The students come into the room each day and sit in numerical order for whole group instruction, student number one is given the stack of Passports and they are passed down each row until the last student has received theirs.

Changing station activities between classes more effectively.

Delegate this responsibility to the para-educator. As the students are preparing to move to their next class, they put away their station activities and put out new activities for the class coming in. It is also a good practice to create station activities with Task Cards that have three skill levels for the three grades. The beauty of CHILD is that if you have a student working above or below the class there are materials available within the classroom for them to work on that are appropriate for their individual skill level.

Should a para-educator not be available, teachers have successfully used students or volunteers. If the classroom is well organized and materials are readily accessible, it is easy to train someone to switch and prepare for the next station rotation. It is also possible, if space permits, to have at each station color-coded activities in a basket for all three-grade levels.

Getting the students to put the station activities back how they found them so they are ready for the next students who visit that station.

The students go through an orientation the first ten days of school. It is vital during this time that students are shown where all materials are stored and how they are to be put away. Effective training must occur if correct procedures are going to be followed in the CHILD classroom.

At **Mascotte Elementary** the teachers assign a station sergeant to each station. The sergeant makes sure all materials are used correctly and not misplaced, and that each student at the station is involved in the clean-up process. Everyone is given an opportunity to be a sergeant through out the year. The teachers have found this gives the students ownership of classroom materials, and they work diligently to make sure station activities are not lost or ruined.

Year Three: Degree of Implementation

Teacher Collaboration Components

Built into CHILD are two components that encourage the teachers to work as a team. The first is the “Weekly Cluster Meeting.” (see Appendix) The team is to meet together once a week for thirty minutes. Each team member is to report on at least one success and one problem they experienced during the week. The team then discusses up coming academic topics to determine how each subject area can support the other. Notes are recorded on the Weekly Cluster Meeting Agenda form and turned into the on-site coach or administrator.

The second team-building component is the structured observation. The teachers observe two specific students in each other’s classroom each nine weeks. The goal of structured observations is to facilitate classroom management. Observation notes are recorded on the “Structured Observation” (see Appendix) form and then shared during the next weekly cluster meeting.

The coach positions at the Mascotte and Wilkinson were half time during Phase II. It was difficult to monitor and support the classrooms on a regular basis. The coach at Wilkinson was unable to monitor the classrooms as outlined in her job description. She did show some improvement during Phase III, but the monitoring was done sporadically rather than on a consistent bi-weekly basis.

Floyd: Teacher Collaboration Components Implemented

Teacher Activities	Cluster Meetings	Peer Observations
1 st Quarter	100%	100%
2 nd Quarter	100%	100%
3 rd Quarter	100%	100%
4 th Quarter	100%	100%

Tedder: Teacher Collaboration Components Implemented

Teacher Activities	Cluster Meetings	Peer Observations
1 st Quarter	98 %	100%
2 nd Quarter	87%	73%
3 rd Quarter	98%	73%
4 th Quarter	93%	53%

Windy Hill: Teacher Collaboration Components Implemented

Teacher Activities	Cluster Meetings	Peer Observations
1 st Quarter	100%	100%
2 nd Quarter	100%	92%
3 rd Quarter	100%	83%
4 th Quarter	100%	75%

Mascotte: Teacher Collaboration Components Implemented

Teacher Activities	Cluster Meetings	Peer Observations
1 st Quarter	100%	100%
2 nd Quarter	100%	100%
3 rd Quarter	100%	100%
4 th Quarter	100%	100%

Wilkinson: Teacher Collaboration Components Implemented

Teacher Activities	Cluster Meetings	Peer Observations
1 st Quarter	83%	100%
2 nd Quarter	83%	100%
3 rd Quarter	100%	83%
4 th Quarter	100%	100%

Instructional Design Components

The instructional design components in CHILD require teachers to create a multi-modality classroom. In each classroom six stations provide a variety of hands-on, paper/pencil and computer based activities.

The following tables reflect the data reported in the coaches' quarterly reports. The purpose of bi-weekly reporting was to allow the teachers time to make any changes the coach deemed necessary in the implementation of the twenty essential components. Being monitored weekly rather than bi-weekly did not allow time for the teacher to correct any erroneous implementation issues.

Percentage of reports received from the coaches over the three-year period of the study.

SCHOOL	PHASE I 1999-2000	PHASE II 2000-2001	PHASE III 2001-2002
Floyd Elementary	60%	100%	100%
Tedder Elementary	27%	57%	93%
Windy Hill Elementary	28%	100%	100%
Mascotte Elementary	Not in Study	44%	100%
Wilkinson Elementary	Not in Study	88%	94%

At **Floyd Elementary** the coach refined her data collection techniques by creating and following a time-line for classroom visitations. The coach at **Tedder** had many duties that took away from her time she needed to spend monitoring and supporting the classrooms. The first year of the study at **Windy Hill** the assistant principal was the coach. She was unable to monitor implementation of the essential components due to her office duties. The second and third year a full-time coach was assigned to support and monitor the CHILD classrooms. The new

coach having no other duties was able to provide the Institute with 100% of all reports during both Phase II & III. The half-time coach at **Wilkinson** gathered data irregularly and not on a bi-weekly basis.

Mascotte's on-site coach was relieved of his duties during the second semester of Phase II. During Phase III, **Mascotte** hired a para-professional to monitor and support the classrooms who was selected by the teachers. She did an outstanding job and was able to provide 100% of all required documentation. The teachers and students developed a close bond with their coach as she was visible daily in each class. Her advanced technology training enabled her to assist the teachers as they developed academically focused activities at the computer station. The teachers with their coach's assistance were able to provide meaningful, stand-alone as well as Internet activities, at the Computer Station, which reflected skills that were currently being taught.

Floyd Elementary: Instructional Design Components Implemented

Station Activities	Hands-on	Paper/pencil	Technology
1 st Quarter	91%	109%	100%
2 nd Quarter	87%	119%	100%
3 rd Quarter	99%	110%	100%
4 th Quarter	88%	118%	100%

Tedder Elementary: Instructional Design Components Implemented

Station Activities	Hands-on	Paper/pencil	Technology
1 st Quarter	74% *	80%*	90% *
2 nd Quarter	88%	110%	92%
3 rd Quarter	73%	108%	83%
4 th Quarter	62%	100%	85%

* First quarter data is based on 70% of the required reports.

Windy Hill: Instructional Design Components Implemented

Station Activities	Hands-on	Paper/pencil	Technology
1 st Quarter	100.6%	113%	100%
2 nd Quarter	106%	91%	100%
3 rd Quarter	85%	100%	100%
4 th Quarter	92%	107%	100%

Mascotte: Instructional Design Components Implemented

Station Activities	Hands-on	Paper/pencil	Technology
1 st Quarter	118%	58%	100%
2 nd Quarter	94%	92%	100%
3 rd Quarter	105%	96%	100%
4 th Quarter	113%	82%	100%

Wilkinson: Instructional Design Components Implemented

Station Activities	Hands-on	Paper/pencil	Technology
1 st Quarter	113%	73%	100%
2 nd Quarter	83%	50%	75%
3 rd Quarter	96%	101%	88%
4 th Quarter	96%	90%	100%

Comparison of degree of student time-on-task with degree of teacher implementation

Most of the research teachers had a high degree of implementation of the CHILD essential components. However, in the intermediate research classrooms, three teachers had low degrees of implementation of the twenty essential components. This was documented during both the coach's and project manager's visits. The actual degree of implementation in these three classrooms-

- Intermediate Reading 74% (Low)
- Intermediate Lang. Arts 56% (Low)
- Intermediate Math 78% (Low)

The following tables depict the level of implementation in each classroom as documented in the coach's monitoring reports. Towards the end of the year the project manager did a time on task observation in each classroom. It was interesting to note there was a high correlation between level of implementation and student involvement.

Floyd Percentage of Students On Task at Stations

Teacher	Subject/Level	Degree of Teacher Implementation	I	II	III	Average
A	Int. Reading	239/240 99.9% H /M /L	100%	100%	100%	100%
B	Int. Lang. Arts	240/240 100% H /M /L	100%	100%	100%	100%
C	Int. Math	239/240 99.9% H /M /L	100%	100%	100%	100%
D	Int. Reading	213/240 89% H /M /L	No Stations	No Stations	No Stations	No Stations
E	Int. Lang. Arts	218/225 97% H /M /L	100%	100%	100%	100%
F	Int. Math	226/240 94% H /M /L	100%	100%	100%	100%
G	Int. Reading	203/239 85% H /M /L	No Stations	No Stations	No Stations	No Stations
H	Int. Lang. Arts	207/240 86% H /M /L	No Stations	No Stations	No Stations	No Stations
I	Int. Math	215/240 89% H /M /L	No Stations	No Stations	No Stations	No Stations
J	Pri. Reading	230/240 96% H /M /L	100%	100%	100%	100%
K	Pri. Lang. Arts	216/218 99% H /M /L	100%	100%	100%	100%
L	Pri. Math	222/232 94% H /M /L	100%	100%	100%	100%
M	Pri. Reading	191/208 92% H /M /L	100%	100%	100%	100%
N	Pri. Lang. Arts	214/239 93% H /M /L	100%	100%	100%	100%
O	Pri. Math	198/235 84% H /M /L	100%	89%	93%	94%

(High 90-100%, Medium 89-80%, Low 79-0%)

At Floyd four out of the fifteen classrooms during the project manager’s visit did not have stations available for student use. Several school activities conflicted with the teacher’s ability to provide stations. However, it should be noted thirteen teachers were able to have station time and incorporate the other school activities. Documentation throughout the year shows these same four teachers exhibited a lower degree of implementation of the essential components of CHILD.

Mascotte Percentage of Students On Task at Stations

Teacher	Subject/Level	Degree of Teacher Implementation	I	II	III	Average
A	Int. Reading	223/240 93% H/M/L	100%	100%	100%	100%
B	Int. Lang. Arts	233/240 97% H/M/L	100%	100%	100%	100%
C	Int. Math	236/240 98% H/M/L	100%	100%	100%	100%
D	Pri. Reading	233/233 100% H/M/L	100%	100%	100%	100%
E	Pri. Lang Arts	210/210 100% H/M/L	100%	100%	100%	100%
F	Pri. Math	233/234 99% H/M/L	100%	100%	100%	100%

(High 90-100%, Medium 89-80%, Low 79-0%)

Tedder Percentage of Students On Task at Stations

Teacher	Subject/Level	Degree of Teacher Implementation	I	II	III	Average
A	Int. Reading	170/240 71% H/M/L	100%	98%	90%	96%
B	Int. Lang. Arts	200/225 89% H/M/L	100%	100%	100%	100%
C	Int. Math	197/225 88% H/M/L	100%	100%	100%	100%
D	Int. Reading	142/210 68% H/M/L	89%	79%	75%	81%
E	Int. Lang. Arts	196/210 93% H/M/L	100%	90%	100%	97%
F	Int. Math	190/225 84% H/M/L	83%	100%	100%	94%
G	Int. Reading	165/180 93% H/M/L	100%	100%	100%	100%
H	Int. Lang. Arts	215/240 90% H/M/L	100%	100%	100%	100%
I	Int. Math	156/195 80% H/M/L	No Stations	No Stations	No Stations	No Stations
J	Pri. Reading	161/165 98%	100%	100%	100%	100%

		H /M /L				
K	Pri. Lang. Arts	132/240 55%	No Stations	No Stations	No Stations	No Stations
		H /M /L				
L	Pri. Math	240/240 100%**	100%	100%	100%	100%
		H /M /L				
M*	Pri. Reading	184/225 82%	100%	100%	100%	100%
		H /M /L				
N	Pri. Lang. Arts	197//225 88%	100%	93%	93%	95%
		H /M /L				
O	Pri. Math	240/240 100%**	100%	100%	100%	100%
		H /M /L				

NS-No Stations (High 90-100%, Medium 89-80%, Low 79-0%)

*Ms. M took over the second quarter for a teacher who left. This was her first teaching assignment. Her degree of implementation for the second, third and fourth quarter was 158/180 or 88%.

**The two teachers who implemented 100% of the twenty essential components are CHILD consultants. They attend annual training classes and then are assigned to train and mentor new teachers at schools just beginning to implement the CHILD model. This training occurs over the course of a full year.

Wilkinson Percentage of Students On Task at Stations

Teacher	Subject/Level	Degree of Teacher Implementation	I	II	III	Average
A	Int. Reading	224/225 99%	100%	100%	100%	100%
		H /M /L				
B	Int. Lang. Arts	223/225 99%	100%	100%	100%	100%
		H /M /L				
C	Int. Math	192/195 98%	100%	100%	100%	100%
		H /M /L				
D	Pri. Reading	220/225 98%	100%	100%	100%	100%
		H /M /L				
E	Pri. Lang Arts	203/240 85%	89%	89%	89%	89%
		H /M /L	3 out of 27 off task	3 out of 27 off task	3 out of 27 off task	
F	Pri. Math	232/240 97%	100%	100%	100%	100%
		H /M /L				

(High 90-100%, Medium 89-80%, Low 79-0%)

Windy Hill Percentage of Students On Task at Stations

Teacher	Subject/Level	Degree of Teacher Implementation	I	II	III	Average
A	Int. Reading	177/240 74%	93%	82%	79%	85%
		H /M /L				
B	Int. Lang. Arts	67/120 56%	100%	87%	90%	92%
		H /M /L				
C	Int. Math	234/240 98%	100%	100%	100%	100%
		H /M /L				
D	Int. Reading	239/240 99%	100%	100%	100%	100%

		H /M /L				
E	Int. Lang. Arts	219/240 91%	100%	100%	100%	100%
		H /M /L				
F	Int. Math	187/240 78%	100%	100%	86%	95%
		H /M /L				
G	Pri. Reading	240/240 100%	100%	100%	100%	100%
		H /M /L				
H	Pri. Lang. Arts	240/240 100%	100%	100%	100%	100%
		H /M /L				
I	Pri. Math	239/240 99%	100%	100%	100%	100%
		H /M /L				
J	Pri. Reading	239/240 99%	100%	100%	100%	100%
		H /M /L				
K	Pri. Lang. Arts	239/240 99%	100%	100%	100%	100%
		H /M /L				
L	Pri. Math	240/240 100%	100%	100%	100%	100%
		H /M /L				

(High 90-100%, Medium 89-80%, Low 79-0%)

Test Results Within the Research Schools

The Taxwatch evaluation compares CHILD classrooms with traditional classrooms at different schools. For year three, the project manager also compared test scores within each research school where there was a comparison population - Mascotte, Wilkinson, Windy Hill. Floyd and Tedder implemented CHILD throughout the entire school so there were no comparison data.

These data compared all CHILD students (research clusters and expansion clusters) with students at the same school who were not in CHILD classrooms. All test results, included in this report, were extrapolated from data provided to the Institute by each school.

Average Ranking on FCAT

Level 1-5

Mascotte- Third Grade

	<u>Reading</u>	<u>Math</u>
CHILD	2.7	2.7
Non-CHILD	2.2	2.3

Mascotte- Fourth Grade

	<u>Reading</u>	<u>Math</u>
CHILD	2.52	2.15
Non-CHILD	2.29	1.95

Mascotte- Fourth Grade

	<u>Writing</u>
CHILD	3.1
Non-CHILD	3.0

Mascotte- Fifth Grade

	<u>Reading</u>	<u>Math</u>
CHILD	2.3	3.5
Non-CHILD	1.7	2.2

Mascotte percentage of students that scored at or above Level III

Grade Three	<u>Reading</u>	<u>Math</u>
CHILD	64%	42%*
Non-CHILD	45%	48%

*It should be noted the third graders came from a second grade CHILD classroom where the teacher failed to implement effective classrooms practices and station activities. This resulted in her being removed from the research project.

Grade Four	<u>Reading</u>	<u>Math</u>
CHILD	56%	40%
Non-CHILD	44%	24%

Grade Five	<u>Reading</u>	<u>Math</u>
CHILD	54%	83%
Non-CHILD	25%	37%

Wilkinson Third Grade

	<u>Reading</u>	<u>Math</u>
CHILD	3.23	3.15
Non-CHILD	2.95	3.08

Wilkinson- Fourth Grade

	<u>Reading</u>	<u>Math</u>
CHILD	3.23	3.13
Non-CHILD	3.04	2.97

Wilkinson- Fourth Grade

	<u>Writing</u>
CHILD	3.6
Non-CHILD	3.6

Wilkinson- Fifth Grade

	<u>Reading</u>	<u>Math</u>
CHILD	3.16	3.48
Non-CHILD	2.88	3.18

The data sent to the ISI did not provide the information necessary to determine the percentage of students scoring at or above the fiftieth percentile.

Windy Hill- Third Grade

	<u>Reading</u>	<u>Math</u>
CHILD	2.71	2.37
Non-CHILD	2.54	2.0

Windy Hill- Fourth Grade

	<u>Reading</u>	<u>Math</u>
CHILD	2.66	2.31
Non-CHILD	2.54	2.22

Windy Hill - Fourth Grade

	<u>Writing</u>
CHILD	3.5
Non-CHILD	3.0

Windy Hill- Fifth Grade

	<u>Reading</u>	<u>Math</u>
CHILD	2.32	2.08
Non-CHILD	2.71	2.38

Windy Hill percentage of students that scored at or above Level III

Grade Three	<u>Reading</u>	<u>Math</u>
CHILD	57%	48%
Non-CHILD	61%	25%

Grade Four	<u>Reading</u>	<u>Math</u>
CHILD	54%	45%
Non-CHILD	54%	48%

Grade Five	<u>Reading</u>	<u>Math</u>
CHILD	42%	29%
Non-CHILD	64%	39%

Summary

Over the three years of this research we have learned there is a direct correlation between the degree of implementation and student achievement. The more rigidly the teachers adhered to the Twenty Essential Components, the more focused their students were while they were at stations. Time on task was increased in the classrooms that fully implemented each component, with higher standardized test scores being the outcome.

We also learned the importance of leadership for sustained success. It became evident that the teachers who received strong support from site administrators were better able to accept the challenges of change. With input from the five research principals and coaches, the Institute developed a *CHILD Leadership Guide* that is now used with new CHILD principals. Two leadership workshops were held in August and in January. All five school administrators and coaches attended. Comments made after these trainings were positive from both administrators and their teachers.

Even though they participated in the initial three-day training, it became evident that the principals needed to grow with the teachers in their understanding of the implementation process. So during Phase III the principals were asked to take a more active role in monitoring the twenty essential components being used in each classroom. The principals who followed through and became visible in the CHILD classrooms were perceived as a strong supporter of the project.

Support from the district staff also was an important component in sustaining the research schools over time. Each school was asked to arrange a time for key district personnel to visit the CHILD classrooms. **Mascotte** hosted a visit for their Superintendent, **Pam Saylor**. Windy Hill was visited by, **Dr. Janice Hunter**, who is in charge of elementary special programs for the district. **Wilkinson** provided a tour of their classrooms to their Superintendent, **Wilma Hamilton**.

Appendix

Teacher Option Form for technology upgrades
Focused Observation Form for non-CHILD teachers
Effective Practices Monitoring Report Form
Weekly Cluster Meeting Form
Structured Observation Form
Leadership Agendas

Appendix D

Florida TaxWatch Survey Instruments

THANK YOU FOR TAKING THE TIME TO INFORM US ABOUT YOUR WORK FOR PROJECT CHILD. PLEASE ATTACH ADDITIONAL PAGES AS NECESSARY. YOUR RESPONSES WILL BE KEPT CONFIDENTIAL.

1. Please explain your **in-classroom** Project CHILD activities and the number of hours per **week** that you spend on each.

Activity	Time spent per week
_____	_____
_____	_____
_____	_____
_____	_____

2. Please explain your **out-of-classroom** Project CHILD activities and the number of hours per **week** that you spend on each.

Activity	Time spent per week
_____	_____
_____	_____
_____	_____
_____	_____

3. Please explain other Project CHILD activities that you do—during the semester but not necessarily each week—and the time that you spend on these activities.

Activity	Time spent per semester
_____	_____
_____	_____
_____	_____
_____	_____

4. Please explain all activities that you do that are **not strictly for Project CHILD** and the time that you spend on these activities either weekly or each semester.

Activity	Time spent
_____	_____
_____	_____
_____	_____
_____	_____

Florida TaxWatch
Paraprofessional Survey
Project CHILD

School _____
Teacher(s) _____
Grade(s) _____

**Florida TaxWatch is working in conjunction with the Institute for School Innovation to evaluate Project CHILD.
Please help by informing us of your experiences with Project CHILD.**

Please place this completed survey in the attached envelope, seal it, and sign your name across the seal.

Your on-site coach will collect this envelope and forward it—unopened—to analysts at Florida TaxWatch

YOUR RESPONSES WILL BE KEPT CONFIDENTIAL.

1. How much time during the week are you working in a Project CHILD classroom _____
2. How much time during the week do you spend on NON Project CHILD activities/duties? _____
3. In an average week—when you are in the Project CHILD classroom—how much time do you spend assisting students at stations? _____
4. Rate the following [1=lowest, 4 =highest]. *Use the space provided to explain your rating. This is very important.*

Low->->->->->->-High

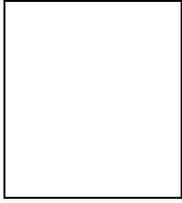
a) Your level of satisfaction working with Project CHILD 1 2 3 4

b) The training you have received in conjunction with Project CHILD 1 2 3 4

c) Helpfulness of monthly Project CHILD paraprofessional meetings 1 2 3 4

d) Availability of training 1 2 3 4

e) Quality of training 1 2 3 4



May 6, 2002



Dear Parent:

The Institute for School Innovation, which created and supports Project CHILD, has asked Florida TaxWatch to conduct an independent evaluation of Project CHILD.

As you know, your child is a student in a PROJECT CHILD classroom. Your child's classroom is part of this evaluation.

We would greatly appreciate if you would take a few moments to complete the questions on the attached survey. Please return the survey to your child's teacher within one week.

If you have any questions about this survey or the evaluation you may call your child's teacher. *Remember; please return the survey to your child's teacher within one week.*

Thank you for your time.

Sincerely,

Janet Herndon
Research Analyst
Florida TaxWatch Research Institute
106 N. Bronough Street
Tallahassee, FL 32301-7723
P. O. Box 10209
Tallahassee, FL 33202-2209

Please ask your child the following questions and record his/her answers here:

12. How much do you like school?

- a) Not at all
- b) A little bit
- c) A lot

13. What do you like and not like about school?

LIKE: _____

NOT LIKE: _____

14. How much do you like your station activities?

- a. Not at all
- b. A little bit
- c. A lot

15. What do you like and not like about station activities?

LIKE: _____

NOT LIKE: _____

16. Please explain any school-related problems or successes that you and your child experienced this year.

THANK YOU FOR TAKING THE TIME TO HELP US EVALUATE PROJECT CHILD.
Please return your survey directly to Florida TaxWatch in the attached postage-paid envelope.
YOUR RESPONSES WILL BE KEPT CONFIDENTIAL.

1. List your education, work experience, and the Project CHILD training in which you have participated:

a) Education

b) Work experiences (please include the number of years experience as principal, as principal in a Project CHILD school, and the number of years as a teacher prior to becoming a principal)

c) Project CHILD training (topic)

Number of hours

_____	_____
_____	_____
_____	_____
_____	_____

2. Rate your perception of the following [1=lowest, 4=highest, DK=don't know]. *Use the spaces provided to explain your rating. This is very important.*

	Low->->->->->->High	
	1 2 3 4	DK
a) Level of autonomy for school level staffing decisions	1 2 3 4	DK

b) Level of autonomy for school level budget decisions	1 2 3 4	DK

c) Your level of satisfaction with Project CHILD	1 2 3 4	DK

d) Your level of enthusiasm/support for Project CHILD	1 2 3 4	DK

e) Your level of knowledge of Project CHILD	1 2 3 4	DK

THANK YOU FOR TAKING THE TIME TO HELP US EVALUATE PROJECT CHILD.
YOUR RESPONSES WILL BE KEPT CONFIDENTIAL.

Please place this completed survey in the attached envelope, seal it, and sign your name across the seal.

Your on-site coach will collect this envelope and forward it—unopened—to analysts at Florida TaxWatch

1. Years of experience as teacher

2. Years of experience with Project CHILD

3. Degrees and certifications—

Level

Subject area

4. Training over last three years

[List only training that is in the subject area that you teach or that is technology related.]

Subject area

Number of hours

5. ISI-related events that you participated in over the last **three** years.

Event

Year(s)

hours

Support Days

Annual Reunion

Summer Institute

Advanced Training

Consultant Training

Other (please describe)

6. Number of times principal has visited your classroom over this past year _____

7. Amount of time per month that on-site coach spends in your classroom _____

8. How many CHILD faculty support meetings did you have this year? _____

9. **Do you use parent volunteers in your classroom?** **Y** **N** **If yes, # total hrs/wk.**

10. How much time per week does paraprofessional devote to your classroom? _____

11. Rate your perception of the following [1 = lowest, 4 = highest, DK = don't know]. *Use the spaces provided to explain your rating. This is very important.*

	Low->->->->->->->High	
	1 2 3 4	DK
a) Your level of satisfaction with Project CHILD		

b) Your level of enthusiasm for Project CHILD	1 2 3 4	DK
---	------------------	----

c) Quality of training opportunities available to you	1 2 3 4	DK
---	------------------	----

d) Sufficiency of training opportunities available to you	1 2 3 4	DK
---	------------------	----

e) Sufficiency of time available to plan with other teachers	1 2 3 4	DK
--	------------------	----

f) Sufficiency of time available to fully implement CHILD model	1 2 3 4	DK
---	------------------	----

g) Sufficiency of uninterrupted quality instructional time	1 2 3 4	DK
--	------------------	----

h) Amount of disruptive student behavior	1 2 3 4	DK
--	------------------	----

i) Students ability to work autonomously	1	2	3	4	DK
<hr/>					
<hr/>					
j) Students understand and follow procedures	1	2	3	4	DK
<hr/>					
<hr/>					
k) Student success at finishing station activities	1	2	3	4	DK
<hr/>					
<hr/>					
l) Student time on task during station activities	1	2	3	4	DK
<hr/>					
<hr/>					
m) Student's ability to correctly fill out passports	1	2	3	4	DK
<hr/>					
<hr/>					
n) Principal's familiarity with Project CHILD model	1	2	3	4	DK
<hr/>					
<hr/>					
o) Principal's support of Project CHILD	1	2	3	4	DK
<hr/>					
<hr/>					
p) Principal's level of involvement in Project CHILD	1	2	3	4	DK
<hr/>					
<hr/>					
q) Parent understanding of Project CHILD	1	2	3	4	DK
<hr/>					
<hr/>					
r) Parent support of Project CHILD model	1	2	3	4	DK
<hr/>					
<hr/>					
s) Paraprofessional's level of training	1	2	3	4	DK
<hr/>					
<hr/>					

t) Paraprofessional's level of experience	1	2	3	4	DK
u) Paraprofessional's time spent planning with cluster teachers	1	2	3	4	DK
v) Paraprofessional's rapport with cluster teachers	1	2	3	4	DK
w) Paraprofessional's rapport with students	1	2	3	4	DK
x) Paraprofessional's rapport with parents	1	2	3	4	DK
y) Quality of CHILD faculty support meetings	1	2	3	4	DK
z) Maintenance of required materials, software and equipment	1	2	3	4	DK
aa) Assistance with development/distribution of resources/station activities	1	2	3	4	DK
bb) Helpfulness of your observations of other classrooms	1	2	3	4	DK
cc) Quality of cluster meetings	1	2	3	4	DK
dd) Sufficiency of time to preview software	1	2	3	4	DK
ee) Your level of computer/technological skills	1	2	3	4	DK

12. Please explain any problems or successes with implementation that you experienced this year.

PROBLEMS _____

SUCSESSES _____

Thank you for your assistance with our research.

Appendix E

Summary Responses Parent Survey

(Percent of parents answering yes)

6. Child attended pre-school
 - Floyd – 77%
 - Windy Hill – 57%
 - Tedder – 60%

7. Child received tutoring/extra help after school
 - Floyd – 4%
 - Windy Hill – 12%
 - Tedder – 7%

8. Parent helps child with schoolwork
 - Floyd – 94%
 - Windy Hill – 89%
 - Tedder – 89%

9. Child has access to a computer at home
 - Floyd – 90%
 - Windy Hill – 76%
 - Tedder – 53%

- c) Internet service connection
 - Floyd – 83%
 - Windy Hill – 68%
 - Tedder – 44%

10. Would like to be more involved at school
 - Floyd – 66%
 - Windy Hill – 57%
 - Tedder – 63%

Rate your satisfaction of the following on a scale of 1[lowest] to 4[highest]

11. My child's academic performance
 - Floyd – 3.46
 - Windy Hill – 3.4
 - Tedder – 3.14

12. Amount of communication with my child's teacher
Floyd – 3.2
Windy Hill – 3.18
Tedder – 2.87
13. Quality of communication with my child's teacher
Floyd – 3.33
Windy Hill – 3.31
Tedder – 3.04
14. My child's behavior at school
Floyd – 3.47
Windy Hill – 3.38
Tedder – 3.37
15. My child's attitude toward school
Floyd – 3.48
Windy Hill – 3.45
Tedder – 3.38

Summary Responses Teacher Surveys
(Rate of return: 7/15 Floyd; 6/12 Windy Hill; 11/15 Tedder)

1. Years of experience as teacher
Floyd – 14.42
Windy Hill – 17.83
Tedder – 8.81
2. Years of experience with CHILD
Floyd – 3.92
Windy Hill – 4.5
Tedder – 2.9
3. Number of principal visits to classroom over this past year
Floyd – ranges from 3 to daily
Windy Hill – mostly 2 or 3 times
Tedder – ranges from 2 to 6
4. Number of CHILD faculty support meetings this year
Floyd – ranges from 0 to 12
Windy Hill – ranges from 6 to 20
Tedder – ranges from 2 to 10
5. Hours per week paraprofessional devotes to your classroom
Floyd – ranges from 5 to 36 hours per week
Windy Hill – ranges from 6 to 18 hours
Tedder – all are full-time

The following ratings were derived from averaging the ratings of teacher responses to each question. [1 = lowest, 4 = highest].

- a) Level of satisfaction with CHILD
Floyd – 2.85
Windy Hill – 3.66
Tedder – 3.36
- b) Level of enthusiasm for CHILD
Floyd – 2.85
Windy Hill – 3.83
Tedder – 3.4
- c) Quality of training opportunities available
Floyd – 2.71
Windy Hill – 3.33
Tedder – 3.09

- d) Sufficiency of training opportunities available
 - Floyd – 2.71
 - Windy Hill – 3.16
 - Tedder - 3.09

- e) Sufficiency of time available to plan with other teachers
 - Floyd – 2.14
 - Windy Hill – 2.16
 - Tedder – 2.72

- f) Sufficiency of time available to fully implement CHILD model
 - Floyd – 2.71
 - Windy Hill – 3.16
 - Tedder - 3

- g) Sufficiency of uninterrupted quality instructional time
 - Floyd - 3
 - Windy Hill – 3.33
 - Tedder – 2.8

- h) Amount of disruptive student behavior
 - Floyd - 3
 - Windy Hill – 2.08
 - Tedder - 1.77

- i) Students’ ability to work autonomously
 - Floyd – 2.5
 - Windy Hill – 3.16
 - Tedder – 2.9

- j) Students understand and follow procedures
 - Floyd – 3.14
 - Windy Hill – 3.16
 - Tedder – 3.36

- k) Student success at finishing station activities
 - Floyd – 3.33
 - Windy Hill – 3.25
 - Tedder – 2.9

- l) Student time on task during station activities
 - Floyd – 2.85
 - Windy Hill – 3.16
 - Tedder – 3.18

- m) Student's ability to correctly fill out passports
 - Floyd – 2.14
 - Windy Hill – 3.66
 - Tedder – 2.81

- n) Principal's familiarity with CHILD model
 - Floyd – 3.42
 - Windy Hill – 2.83
 - Tedder – 3.81

- o) Principal's support of CHILD
 - Floyd – 3.71
 - Windy Hill – 3.83
 - Tedder – 3.9

- p) Principal's level of involvement in CHILD
 - Floyd – 2.85
 - Windy Hill - 3
 - Tedder – 3.68

- q) Parent understanding of CHILD
 - Floyd – 2.64
 - Windy Hill – 2.91
 - Tedder – 3.18

- r) Parent support of CHILD model
 - Floyd – 2.92
 - Windy Hill – 3.83
 - Tedder – 3.22

- s) Paraprofessional's level of training
 - Floyd – 3.71
 - Windy Hill – 2.91
 - Tedder – 3.81

- t) Paraprofessional's level of experience
 - Floyd – 3.71
 - Windy Hill – 3.08
 - Tedder – 3.9

- u) Paraprofessional's time spent planning with cluster teachers
 - Floyd – 2.57
 - Windy Hill - 2
 - Tedder – 2.9

v) Paraprofessional's rapport with cluster teachers

Floyd - 4
Windy Hill – 3.8
Tedder – 3.81

w) Paraprofessional's rapport with students

Floyd – 4
Windy Hill – 3.5
Tedder – 3.9

x) Paraprofessional's rapport with parents

Floyd – 3.85
Windy Hill – 3.08
Tedder - 3.61

y) Assistance with development/distribution of resources/station activities

Floyd – 3.35
Windy Hill – 2.66
Tedder – 3.54

z) Helpfulness of structured observations

Floyd – 2.14
Windy Hill - 3
Tedder – 3.09

aa) Quality of cluster meetings

Floyd - 3
Windy Hill – 3.16
Tedder – 3.18

bb) Sufficiency of time to preview software

Floyd – 2.28
Windy Hill – 2.83
Tedder – 2.09

cc) Your level of computer/technological skills

Floyd – 2.85
Windy Hill – 3.5
Tedder – 3.4

Summary Responses Paraprofessionals Survey
(Rate of return rate=9/15 Tedder; 10/15 Floyd; 5/12 Windy Hill)

1. How much time during the week are you working in a CHILD classroom?
Floyd – 25.6
Windy Hill – 24.35
Tedder – 34.13

4. How much time during the week do you spend on NON CHILD activities/duties?
Floyd – 6.2
Windy Hill – 6.25
Tedder – 7.06

5. In an average week—when you are in the CHILD classroom—how much time do you spend assisting students at stations?
Floyd – 6.3
Windy Hill – 18.1
Tedder – 13.33

4. Rate the following [1=lowest, 4 =highest].
 - a) Your level of satisfaction working with CHILD
Floyd – 3.4
Windy Hill – 3.8
Tedder - 3.56

 - b) The training you have received in conjunction with CHILD
Floyd – 2.8
Windy Hill - 3
Tedder – 2.89

 - c) Helpfulness of monthly CHILD paraprofessional meetings
Floyd – 2.25
Windy Hill – 2.75
Tedder – 2.89

 - d) Availability of training
Floyd – 2.65
Windy Hill – 2.6
Tedder – 3.25

 - e) Quality of training
Floyd – 2.6
Windy Hill - 3
Tedder – 3.63

f) Content of training
Floyd – 2.9
Windy Hill – 3.2
Tedder – 3.86

g) Time spent planning with CHILD teachers
Floyd – 3.3
Windy Hill – 3.4
Tedder – 3.44

h) Your level of rapport with teachers
Floyd – 3.9
Windy Hill - 4
Tedder - 4

i) Support from on-site coach
Floyd – 3.7
Windy Hill – 3.2
Tedder – 3.67

j) Your familiarity with available software
Floyd – 3.1
Windy Hill – 3.2
Tedder – 3.11

k) Your level of computer skills
Floyd – 2.8
Windy Hill – 2.6
Tedder – 2.89

6. Work experience (please include the number of years experience as CHILD paraprofessional)

Floyd – 3.89
Windy Hill – 1.9
Tedder – 2.56