

Status Report on Year 1 : FULL/EXTENDED-DAY KINDERGARTEN STUDY (FEDS)

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EXECUTIVE SUMMARY

Technical Report #4: Status Report on Year 1: Full/Extended-Day Kindergarten (FEDS) Study presents findings from the FEDS study conducted during the 2004-2005 school year. The FEDS Team, representing three District divisions and UNLV, designed the study to address two broad goals:

- Goal 1:** To determine the effects of instruction in Program A and in Program B on full-day kindergarten students' literacy development, and
- Goal 2:** To compare the effects of participation in full-day kindergarten and half-day kindergarten on students' literacy development.

To address **Goal 1**, the literacy growth of two groups of full-day kindergarten students was studied over the course of the year:

- one group of students (Treatment 1) enrolled in 50 classrooms randomly selected from the 97 classrooms using *Program A*, and
- one group of students (Treatment 2) enrolled in 50 classrooms randomly selected from the 149 classrooms using *Program B*.

In order to be able to attribute literacy growth outcomes to program effects, and thus to achieve **Goal 1**, the Team acknowledged the necessity of determining the degree to which teachers in the 100 study classrooms actually implemented their respective programs with fidelity. To measure degree of fidelity of program implementation, the Team used actual program lesson plans as the basis for developing two original observation protocols. The Team then:

- trained observers in the use of the protocols;
- used the protocols as the basis for conducting three rounds of classroom observations (late October 2004; late January 2005; late April-early May 2005);
- developed a rubric-based, program-specific Implementation Index for each program;
- applied the rubrics to the results of the observation protocol data analyses; and
- categorized the 100 teachers as evidencing high, medium, or low degree of fidelity of implementation of their respective programs across the three rounds of observations.

To address **Goal 2**, two separate comparison group studies were conducted:

- one study comparing the literacy growth of lower socio-economic status students enrolled in 10 full-day kindergarten classes (Treatment 3) with the literacy growth of closely matched students enrolled in 10 randomly selected half-day kindergarten classes (Comparison 1), both groups using *Program C* as the core literacy program; and
- one study comparing the literacy growth of higher socio-economic status students enrolled in 13 tuition-based, extended-day classes (Treatment 4) with closely matched students enrolled in 13 half-day classes (Comparison 2) randomly selected from the same twelve elementary schools.

The literacy performance of students in all groups was assessed at three times during the year using DIBELS (*Dynamic Indicators of Basic Early Literacy Skills*) as the outcome measure. The assessments occurred in early October 2004 (to establish a baseline); in early January 2005; and in mid-May 2005. The assessment data were subjected to growth model analyses to produce estimates of students' growth-over-time for all three programs (A, B, and C) and for both full-day and extended-day versus half-day comparisons. The results are presented graphically in the report as trajectories reflecting the students' literacy growth across the three assessments.

The Team also assessed the achievement of one specific objective: *whether at least 75% of the ELL students had gained at least one level of oral English proficiency during the course of their participation in full-day kindergarten*. To estimate this gain, a random sample of 350 full-day kindergarten students with an initial rating of NEP or LEP was drawn from the total population of ELL students. Trained observers administered the Pre-LAS Oral to these students in May 2005. The results of this post-assessment were analyzed to determine what percentage of students had gained at least one level of oral English proficiency during the full-day kindergarten year.

The study design included two other components: (1) an assessment of the degree of fidelity of teacher implementation of programs A and B and (2) a Teacher Survey. For component #1, the Team designed an original observation protocol for each program, trained observers in their use, created a glossary defining key program content elements that observers used with the observation protocols in conducting the classroom observations, developed an original Implementation Index for each program, and used these Implementation Indices to determine the degree of fidelity of program implementation for each program over the course of the year.

For component #2, the Team designed an online survey to ascertain teachers' preparation for and experience with full-day kindergarten and to elicit their perspectives on:

1. which components of their literacy program they felt they had implemented with fidelity,
2. whether the training they received had been helpful in implementing their program,



3. whether the support they had received from program coaches, literacy specialists, and site administrators had been helpful in implementing the program, and
4. which components of the program they felt had been most useful in fostering their students' literacy development.

Findings Related to Goal 1

1. Students in both programs – *Program A* (Treatment 1) and *Program B* (Treatment 2) – demonstrated literacy growth on all four *DIBELS* subtests over the course of the year.
2. For both *Program A* and *Program B*, the rates of literacy growth were inversely related to the degree of fidelity of program implementation by teachers.

Findings Related to Goal 2

1. The lower SES full-day students (Treatment 3) demonstrated greater rates of literacy growth over the course of the year than the closely matched half-day students (Comparison 1), despite the fact the Treatment students achieved a lower mean score on two of the four *DIBELS* subtests on the baseline.
2. The higher SES students in the tuition-based, extended-day classrooms (Treatment 4) both started out ahead of the closely matched half-day students (Comparison 2) on all four *DIBELS* subtests (baseline) and demonstrated greater rates of literacy growth over the course of the year, thus widening the initial, baseline achievement gap between them.



Findings Related to the Specific Objective

On the post-test administration of the Pre-LAS Oral, 28.1% of the students remained at the same level; 71.9% of the students gained at least one level; and 40.7% of the students gained 2-4 levels.

Findings From the Teacher Survey

Sixty-nine teachers completed the Teacher Survey: 33 from *Program A*; 30 from *Program B*; and 6 from *Program C*. Of these, 20 reported having a degree in Early Childhood Education; 16, an endorsement in Early Childhood Education; and 33, neither. They also reported an average of 1 – 2.24 years of experience teaching full-day kindergarten and 3 – 4.79 years teaching at the current school. In reporting on the training they received for implementing the programs, 42.4% to 53.3% Strongly Agreed or Agreed that the training helped them “understand the program” and 30.3% to 56.6%, that the training helped them “implement the program.” In addition, from 42.4% to 73.3% of teachers either Strongly Agreed or Agreed that “Overall, I feel

supported in implementing the program.” The majority of teachers rated all the specific content elements from their programs “Extremely Beneficial” or “Somewhat Beneficial” to students in promoting their literacy growth.

Findings for Literacy Growth By Fidelity of Implementation

Though students in both programs achieved substantial literacy growth, thus demonstrating achievement of Goal 1:

- *Program A* teachers reported spending more daily time on literacy lessons and were observed implementing the program with a decreasing degree of fidelity, while
- *Program B* teachers reported spending less daily time on literacy lessons and were observed implementing the program with an increasing degree of fidelity.

The low number of teachers meeting high fidelity of implementation criteria may have occurred:

- Because the study took place during the first year of program implementation, and teachers were still learning how to implement the program correctly;
- Because the rubric resulting from the analysis of the observation protocols is too rigorous;
- Because teachers were not observed teaching critical elements because they were unaware of which program elements were considered critical; or
- Because the majority of the teachers using each program relied more on their own professional knowledge of their students' literacy needs combined with the techniques or practices that they knew would be most effective in fostering their students' literacy growth.

Many possible factors or combinations of factors may be responsible for the apparently contradictory observed literacy growth results and fidelity of implementation results. Possible responsible factors may include:

- The program(s) per se.
- The professional development teachers received in implementing the program(s).
- The amount of time teachers spent on daily literacy instruction.
- The teachers' degrees and endorsements.
- The teachers' prior experience in early childhood education.
- The support teachers received from coaches, literacy specialists, and site administrators.
- The quality of teachers' a priori knowledge-skill in early literacy teaching and learning.

Further analyses of the data must be conducted to determine which responsible factor or factors turn out to be most supported by the evidence. Nonetheless, it is possible to conclude (1) that students experiencing both core literacy programs (A and B) achieved literacy growth and (2) that full-day students achieved greater literacy growth than did half-day students regardless of their SES status.

Section 1: A Profile of Full-Day Kindergarten in the United States

Who Attends Full-Day Kindergarten – and Where?

Over the past fifteen years, early childhood education has received increased attention from educators and policy makers and, in some parts of the country, increased public funding support. Nonetheless, the national pattern of state funding of early childhood education, especially full day kindergarten programs, is “all over the map.”¹ Despite the fact, for example, that between 1992 and 1999 the number of states offering some public funding for pre-kindergarten programs increased from 24 to 42, state-funded preschool programs only reached about 10% of 3- and 4-year olds in 2003-2004.² Clearly, at a time when quality preschool education is widely recognized

“as an engine of success for our nation’s children, the disparity in availability of that engine within and among the states is startling. A difference of a few miles can make the difference between being guaranteed access to high-quality pre-school and having no access at all. And . . . pre-school spending per child in one state can be nearly 10 times as high as in another. Across our nation, high-quality and readily available state-funded pre-school programs are the exception rather than the rule.”³

The situation for kindergarten is different. A recent study, based on a sample “of 20,000 children from across the United States,” found that 57% of all public schools “offer a full-day [kindergarten] program” and that 60% of all kindergarten teachers “teach in a full-day class.”⁴ At the same time, the actual provision of full-day programs varies widely, both by region of the country and by the “socioeconomic background and ethnicity of the children served.”⁵

The regional variation is as follows:

- 84% of all public schools in the South offer full-day kindergarten;
- 57% of all public schools in the Midwest offer full-day kindergarten; while
- “only about one-third of public schools in the Northeast and West” offer full-day kindergarten.⁶

The reason for the regional variation is simple: only one of the nine states that require districts to offer full-day kindergarten programs is located outside the South.⁷

The socioeconomic/ethnic variation is as follows:

- 76% of schools whose population is at least 75% minority offer full-day kindergarten;
- more than 90% of private schools that enroll a high minority population offer full-day kindergarten; and
- 69% of public schools “that have a majority of low-income children offer full-day kindergarten.”⁸

The reason for the socioeconomic/ethnic variation is equally simple: there are wide differences in state funding levels for full-day kindergarten. For example, 29 states and the District of Columbia “encourage districts to offer a longer schedule by providing funding

that exceeds that offered for half-day programs,” and, in some cases, full-day kindergarten funding levels in these states “are equal to – or greater than – the amounts provided for Grade 1.” **None of the states that provide these funding incentives are in the West or the Northeast.** In these two regions, the substantially lower levels of full-day kindergarten programs occur because “the per-pupil kindergarten funding” that states provide is “typically about half of the amount provided for students in Grade 1, serving as a ‘disincentive’ to the provision of a full-day program (italics ours).”⁹

Nonetheless, despite the differences in state laws and in state funding levels for public pre-school and full-day kindergarten programs, nationwide about 60% of age-eligible children nationwide attend full-day kindergarten programs. In the West, however, only slightly more than 30% of eligible children attend full-day kindergarten programs, and those programs are typically supported by federal or private funds not state funds. Despite this “crazy quilt” pattern of public support, the demand for full-day kindergarten programs continues to grow among parents who believe that “full day programs will help their children better adjust and perform in school.”¹⁰

What Are These Kindergarten Children Like?

Quite strikingly, in a time of national concern about closing achievement gaps, the “inequalities of children’s cognitive ability are substantial” right from the start. At least “half of the educational achievement gaps between poor and non-poor children exist” when children start kindergarten.¹¹ Children from lower socio-economic status (SES) backgrounds start kindergarten “with significantly lower cognitive skills” than do children from higher socioeconomic backgrounds. Before entering kindergarten, “the average cognitive scores of children in the highest SES group are 60% above the scores of the lowest SES group.”¹² Researchers who “examined differences in the reading readiness of kindergartners grouped by gender, race/ethnicity, socioeconomic status (SES), and age” found “statistically significant differences in reading readiness among different subgroups,” with “socioeconomic status . . . strongly related to reading proficiency.”¹³ Many other reports present these same findings.¹⁴

Not only do children entering kindergarten show wide achievement gaps by socioeconomic status, but also these gaps are evident later in the kindergarten year as well. At the end of kindergarten many children lag behind in one or more of “three areas of potential vulnerability – health, cognitive achievement, and social and emotional development.” In the study which identified these three “areas of vulnerability,” the authors established ‘cut points’ to identify vulnerable children in each



area." Of the "approximately 3.9 million kindergarten children in the 1998-1999 school year, 2.2 million lagged behind in at least one area," and "610,000 lagged behind in at least two areas." Fortunately, only 5% of the children (approximately 192,000) lagged behind in all three areas.

- About 20% of the children (or approximately 780,000) lagged behind in the cognitive area, which "means that they were behind in multiple areas of their educational achievement according to standardized test scores and/or teacher ratings."¹⁵
- Boys are more at risk than girls: e.g., "boys accounted for two-thirds of the kindergartners who were lagging behind across all three areas – health, cognitive achievement, and social and emotional development - but only 50 percent of those who were not lagging behind in all three areas."
- Non-Hispanic blacks were overrepresented among kindergartners who lagged behind in all three areas" and underrepresented among kindergartners who did not lag behind in any area.¹⁶

The findings of these studies suggest three conclusions:

1. **Children enter kindergarten showing wide achievement gaps by family socioeconomic status (SES).**
2. **These achievement gaps tend to persist through the kindergarten year unless schools take specific steps to reduce them.**
3. **Unless this "social stratification in educational outcomes" is successfully addressed in kindergarten, the gaps "increase as children move through school."¹⁷**

It is clearly the case nationwide that these "economically based discrepancies" in cognitive ability and in achievement between groups of children, particularly in their language and literacy learning, "persist throughout the school years."¹⁸ This reality has both good news and bad news aspects.

- The bad news is: the larger the gaps at school entry, the harder they are to close in later years.
- The good news is: while kindergarten attendance benefits all children, whether the programs they attend are half-day or full-day, **full-day kindergarten programs particularly benefit children from low income families.**

What Can Full-Day Kindergarten Do For Children?

While the national picture of SES-based achievement differences for children of kindergarten entry age is disturbing, recent studies of full-day kindergarten, especially those comparing high quality full-day kindergarten programs with half-day kindergarten programs, offer encouraging findings.

Several studies report that full-day kindergarten leads to higher academic performance.

- "Children in full-day kindergarten classes learned more during the year in both reading and mathematics compared to those in half-day classes after adjusting for learning differences associated with race/ethnicity, poverty status, fall achievement level, sex, class size, relative amount of time for subject area instruction, and the presence of an instructional aide."¹⁹



- Children attending full-day kindergarten programs not only had "higher scores on math and reading achievement tests" but also had "greater language abilities."²⁰
- Beyond these differences in literacy and math learning and in language development, children attending full-day kindergarten spend more instructional time in math, science, social studies, art, and music than children attending half-day kindergarten.²¹
- While earlier findings indicated that full-day kindergarten was most beneficial for low income children, recent findings confirm that full-day kindergarten is "equally effective" and "advantageous academically" for children from all socioeconomic backgrounds.²²
- Moreover, participation in full-day kindergarten produces the **largest academic effects** (i.e., mean gain scores from the beginning the kindergarten year to the end) when class sizes are under 17 and the **smallest academic effects** when class sizes are over 24.²³

Full-day kindergarten programs may also have longer-term, more distal effects. They can:

- reduce long-term costs for grade retention, remedial education, and special education;
- increase graduation rates;
- reduce rates of child abuse and neglect;
- benefit children more socially, especially children from low income backgrounds, than half day kindergarten programs;
- lead to fewer criminal acts and lower incarceration rates for both juveniles and adults; and
- produce adults who earn more money, pay more taxes, and depend less on welfare.²⁴

The period from birth to age five is crucial to children's development. As The Final Report of the NGA Task Force on School Readiness states: "Children are born learning. The first years of life are a period of extraordinary growth and development. During this time, the brain undergoes its most rapid development as neural connections are made at incredible rates that are reinforced and solidified or lost through attrition over time." The "environmental inputs" that children experience during these years help develop and strengthen the "neural pathways" that impact both cognitive, emotional, and social development and hearing, vision, and motor skill development.



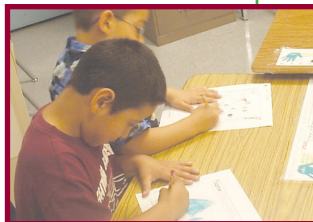
Unless children have quality relationships with parents and caregivers, quality health care, proper nutrition, and quality opportunities to explore their environment with supportive adults, they may fail to develop the "critical neural pathways that are the building blocks of learning."

Children whose development is obstructed by the lack of such formative experiences, including . . . attending full-day kindergarten programs with small class sizes taught by qualified teachers, are "at higher risk for developmental delays that, absent early intervention, can result [not only] in long-term deficits in school achievement [but also] in incarceration, teen pregnancy, welfare dependency, or other socially undesirable outcomes."²⁵

Section II: *Standards for Evaluating Early Childhood Programs*

The assessment of early childhood education programs, whether pre-kindergarten or kindergarten, requires “a coordinated [monitoring] system” that incorporates “appropriate learning goals, multiple measures of learning, administrative leadership, and ongoing professional development for teachers.”²⁶ The components of this system should be designed to produce credible evidence that can be used not only to “inform instructional practice and meet accountability needs” for schools and districts but also to support research-based policy-making at local and state levels.²⁷

Several organizations have issued position statements on early childhood assessment. One statement recommends that early



childhood programs be evaluated “in light of program goals, using varied, appropriate, conceptually and technically sound evidence to determine the extent to which programs meet the expected standards of quality.” The “indicators of effectiveness” are:

1. Comprehensive goals are used.
2. Goals become guides for evaluation.
3. Evaluations use valid designs.
4. Multiple sources of data are available.
5. Children’s gains over time are emphasized.
6. Well trained individuals conduct evaluations.²⁸

This study meets these criteria with one exception: the report is based on standardized test data only, though the instruments used are “age appropriate in both content and method of data collection” and are “linguistically appropriate.”²⁹

Section III: *The Background, Goals, Design, and Management of the Study*

In March 2004, the Clark County School District decided to provide full-day kindergarten classes for children in the lowest income elementary schools for the 2004-2005 school year. The District also decided to implement tuition-based, extended-day classes in twelve schools. Two months later, the schools funded for full-day kindergarten either selected one of two core literacy programs – *Program A* or *Program B* – for use in their full-day kindergarten classes or continued to use their previous basal reader program. Of the 249 full-day kindergarten classrooms funded in the lowest income schools, 97 used *Program A*, 149 used *Program B*, and 3 used *Program C* as their core literacy program. The 13 tuition-based, extended-day classrooms used *Program C*.

The Study (FEDS) Team:

The goals, design, and timeline for the study were developed by

administrators from the Department of Research and Accountability, the Literacy Services Department, the Grants Development and Administration Department, and the Title I Program, plus a faculty member from the Department of Educational Psychology at the University of Nevada, Las Vegas (See Appendix A). The FEDS Team provided ongoing project oversight, and daily project management was provided by the Department of Research and Accountability.

FEDS Study Goals

Goal 1: To determine the effects of instruction in *Program A* and in *Program B* on full-day kindergarten students’ literacy development, and

Goal 2: To compare the effects of participation in full-day kindergarten and half-day kindergarten on students’ literacy development.

FEDS Study Design/Timeline:

TREATMENT GROUPS: 1, 2, & 3 Lowest Socio-Economic Schools [Funded for Full-Day Kindergarten] N = 3,300 (approx.)	COMPARISON GROUP #1 Socio-Economically Similar Schools [Not Funded for FDK] N = 300 (approx.)	MEASURES DIBELS/Observations N = 3,600 (approx.)
T1 = PROGRAM A [50 Classes] [n = 1,500 approx.] T2 = PROGRAM B [50 Classes] [n = 1,500 approx.] T3 = PROGRAM C [10 Classes] [n = 300 approx.]	C1 = 10 half-day kindergarten classrooms (selected from schools in the 55-61% FRL range that fall just below the funding range for full-day kindergarten classes.)	Oct '04: DIBELS; Observations Jan '05: DIBELS; Observations April '05: Observations May '05: DIBELS July '05: DIBELS
TREATMENT GROUP: 4 Fee-Based Classrooms N = 365 (approx.)	COMPARISON GROUP #2 Fee-Based Classroom Schools N = 375 (approx.)	MEASURES DIBELS N = 740
T4 = TROPHIES [13 Classes] [n = 365 approx.]	C2 = 13 half-day classrooms (one selected at random from <u>each</u> tuition-based school).	Oct '04: DIBELS Jan '05: DIBELS May '05: DIBELS July '05: DIBELS

Classroom Selection: Treatment Group

Because it was not possible to conduct either literacy assessments of all 7,500 students or classroom observations in all 249 classrooms, the FEDS Team drew a random sample of 100 classrooms: 50 classrooms using *Program A* and 50 classrooms using *Program B*. To select the 100 classrooms, the Team first drew a random sample of schools from the population of schools using the two programs and then randomly selected 50 classrooms from each of these two groups of schools. The 3,000 students in these 100 classrooms formed the cohort of students whose literacy growth was measured (Treatment Group); their teachers formed the observation group.

Classroom Selection: Comparison Group

Funding was provided for a total of 249 full-day kindergarten classrooms enrolling more than 7,500 students in the 52 schools with Free and Reduced Lunch (FRL) student enrollments above the 60% level. These schools have the lowest income, highest minority

populations in the District. Because all of these schools elected to implement either *Program A* or *Program B* in their newly-funded full-day classrooms, and because there were no half-day classrooms in these 52 schools (or anywhere in the District, for that matter) using these two programs, there was no available, demographically equivalent pool of schools from which to select a comparison group of half-day classrooms for these full-day classrooms.

At the same time, a few schools in this socio-economic range elected to continue using their prior core literacy program (*Program C*) in their newly-funded full-day classrooms. Consequently, the Team decided to select 10 of these classrooms randomly and to match them with 10 half-day classrooms also using *Program C*. In order to select half-day comparison group classrooms that were as closely matched as possible demographically to the 10 randomly selected full-day classrooms, 10 half-day classrooms were randomly selected from the total population of half-day kindergarten classrooms in the schools whose FRL enrollments fell in the 51 - 60% level. The SPSS random selection generator was applied to this pool to select the comparison classrooms.

Section IV: *The Methods Used*

The Literacy Assessment Measure

The FEDS Team used *DIBELS (Dynamic Indicators of Basic Early Literacy Skills)* as the instrument for measuring students' growth in literacy: the primary outcome measure. *DIBELS* was selected because it is:

- an effective, scientifically research-based screening instrument,
- a good predictor of the level of literacy growth that students will attain by third grade, and
- a source of valid and reliable data for use in determining the degree to which there are significant literacy growth outcomes in relation to the two broad project goals.

DIBELS includes four standardized, individually administered measures of early literacy development. Each individual measure is designed to be a short (one minute) fluency measure that can be used regularly to monitor children's development of pre-reading and early reading skills. The four *DIBELS* sub-measures were designed to assess three of the five "Big Ideas" of early literacy addressed in reports by both the National Reading Panel and the National Research Council.³⁰ These three ideas are Phonological Awareness, Alphabetic Principle, and Fluency.

The four *DIBELS* measures are:

1. Initial Sounds Fluency (ISF),
2. Letter Name Fluency (LNF),
3. Phonemic Segmentation Fluency (PSF), and
4. Nonsense Word Fluency (NWF).

Both the Initial Sounds Fluency (ISF) and Phonemic Segmentation Fluency (PSF) tests are designed to measure children's developing **phonological awareness** ability and their **fluency**. The Nonsense Word Fluency (NSF) test is constructed to measure the **alphabetic principle**. The Letter Name Fluency (LNF) test is not designed to assess a "Big Idea," but instead to serve as an indicator of risk.

Each sub-measure has been thoroughly researched and demonstrated to be not only a reliable and valid indicator of early literacy development but also a reliable predictor of later reading proficiency (Note: Technical adequacy citations for the sub-measures are available from the *DIBELS* website: dibels.uoregon.edu). All four measures are linked together theoretically and psychometrically. When *DIBELS* is administered as recommended, teachers can use the results to evaluate individual student development, and school districts can use the results to provide grade-level feedback toward validated instructional objectives.

Each *DIBELS* subtest has a benchmark goal (cutpoint) that serves as an indicator of risk. The benchmarks are set to identify students with **low risk** of not meeting the next benchmark, students with **some risk** of not meeting the next benchmark, and students with **high risk** of not meeting the next benchmark. Students who achieve *DIBELS* scores in the **low risk** category have met benchmark goals.

In addition, *DIBELS* is aligned with both the goals and benchmarks of the District's kindergarten literacy program and with the two curricula that were evaluated. There was no mismatch between program goals, curricular goals, and evaluation design and instruments that could have led "to erroneous conclusions about the effectiveness of particular interventions."³¹

Three rounds of assessments were conducted between early October 2004 and mid-May 2005. The Literacy Services Department provided training and administrative oversight for the assessment process. Four training sessions were held for Literacy Specialists, who then trained a team of teachers at their school sites to administer *DIBELS* to students in the randomly selected study classrooms. In addition, field training was held on three consecutive dates at three elementary school sites so that the *DIBELS*-trained Literacy Specialists could practice administering the test. Each team administered all four subtests to each student during each of the three rounds of assessments in order to provide complete information on every student.

- Round 1 of the *DIBELS* assessment took place between October 4th and 15th.
- Round 2 of the *DIBELS* assessment took place between January 10th and January 21st.
- Round 3 of the *DIBELS* assessment took place between May 2nd and May 31st.
- Round 4 of the *DIBELS* assessment took place between July 11th and July 27th.

Documenting Fidelity of Program Implementation: The Rationale

Establishing fidelity of program implementation is a crucial element in evaluation research.³² The purpose of “fidelity assessments” is “to determine how adequately a program model has been implemented.”³³ For this reason, the FEDS Team **decided to determine the degree to which teachers implemented with fidelity the two core literacy programs — Program A and Program B. Having those results would increase the likelihood that any growth in students’ reading achievement could be attributed to effects of these programs.** Consequently, the fidelity of program implementation in the 100 study classrooms was documented through systematic observations conducted by trained observers using purpose-developed observation protocols. The results of the observations were used to determine the degree to which teachers implemented the programs with fidelity.

Documenting Fidelity of Program Implementation: Developing the Observation Protocols

Because there were no available instruments to use in observing classrooms to document the fidelity of teachers’ implementation of either program, the FEDS Team developed an original observation protocol for each program (see Appendix B).³⁴ The protocols were designed in a checklist format with space for observer comments. The checklist items were designed to produce sound evidence of degree of fidelity of implementation and were based on the actual lesson plans from each program.

In developing the two protocols, the Team identified “critical components” of the two program models “based on an expert consensus process” among members. The Team then developed “operational definitions for the indicators or critical components” for observers to use while observing classrooms.³⁵ Some Team members were experts on the literacy programs; some members were experts on observation protocol development; and some were expert trainers.

Based on the checklist format, both protocols include sections for **General Elements** and for specific **Content Elements**. The items in these sections reflect the focus and structure of Programs A and B and were designed to produce data that could be used to determine the degree of fidelity of implementation of each program by teachers. The General Elements sections of the observation protocols are more program-focused. The Content Elements sections, which represent the bulk of both protocols, are more literacy-focused. These items reflect the basic early literacy skills that the programs purport to address. Regardless of the program observed, observers were instructed to check the boxes for those General and Content Elements that they saw a given teacher implementing, and they were instructed to leave the boxes unchecked for those elements that they

did not directly see that teacher implementing. Space was provided on the protocol for observers to write comments detailing aspects of a teacher’s implementation of particular program elements.

Documenting Fidelity of Program Implementation: Training the Observers

Twenty-two people were recruited to serve as observers, including graduate students and experienced educators. The FEDS Team trained the observers in the use of the Observation Protocols during two sessions on October 15, 2004. A four-hour session was presented for each program. Nine (9) observers were trained in the use of the *Program B* protocol; seven (7) observers were trained in the use of the *Program A* protocol; and six (6) observers were trained in the use of both protocols. These sessions emphasized the observers’ roles and responsibilities during the actual observations. Observers were provided with a glossary developed by the Literacy Services Department that defined the key literacy terms for each program, and they were instructed to use the comments section of the protocols to record their observations of specific activities engaged in by students and/or teachers that they saw as being directly related to either set of elements.

Documenting Fidelity of Program Implementation: Conducting the Observations

Following Executive Council approval of the observations, the Region offices were notified that these observations would occur. Next, study teachers were contacted individually to schedule observations. Observers were assigned to schools by the program for which they had been trained. Observers were instructed to watch the entire 90-minute literacy block. In cases in which the teachers chose to split the 90-minute block, observers were instructed to ask teachers when, and for how long, they offered the second segment of the block. In cases in which the teacher extended the literacy block beyond the program-recommended 90 minutes, the observers were given the option of extending their observation if they chose to do so. Observers asked teachers to complete a brief form listing all other literacy programs and materials in their classrooms and recorded other program-related comments made by teachers. On average, each observer visited five classrooms during each round of observations.

The quantitative data produced by the checklist portion of the protocols was entered into a database for analysis. The FEDS Team developed a coding system for the qualitative data (i.e., the observer and teacher comments recorded on the protocols) that included five categories: Teacher Actions; Student Actions; Program Artifacts; Teacher Comments; and Non-Program Related Comments. All comments were color-coded by category for entry into a parallel database.

Documenting Fidelity of Program Implementation: Developing the Implementation Indices

The quantitative and qualitative data were analyzed separately. To analyze the quantitative data, an Implementation Index was created for each program so that a high, medium or low degree of fidelity of program implementation could be determined for each observation. Using the original observation protocols, the FEDS Team analyzed 18

randomly selected lessons from each program. Team members with substantial literacy knowledge determined which literacy skills were being taught in each lesson and checked the skills on the observation protocol. This allowed the Team accurately to picture what each program was supposed to look like in the classroom, as evidenced by the lesson plans teachers were intended to use in implementing the program.

When the 18 lessons had been analyzed, the skills were summed and averaged to determine the average number of times each skill was taught in each lesson. These averages were used to create a rubric, and the rubric was used, in turn, to categorize teachers as evidencing high, medium, or low degree of fidelity of implementation of their program. Teachers meeting the criteria for high fidelity were given a score of 3; teachers meeting the criteria for medium fidelity were

given a score of 2; and teachers not meeting the criteria for either high or medium fidelity were given a score of 1 = low fidelity. The results from all three rounds of observations were analyzed to produce a score of 1, 2, or 3 for each teacher for each round. These scores were then summed to form an overall index for fidelity of implementation.

- Teachers with a cumulative score of 3-4 were labeled as low fidelity;
- Teachers with a cumulative score of 5-7 were labeled as medium fidelity; and
- Teachers with a cumulative score of 8-9 were labeled as high fidelity.

The number of teachers in each category by round by program are shown in Table 1 below.

Table 1

	Program A		
	High Fidelity	Medium Fidelity	Low Fidelity
Round 1	16	13	21
Round 2	10	3	37
Round 3	10	4	36

	Program B		
	High Fidelity	Medium Fidelity	Low Fidelity
Round 1	6	1	41
Round 2	6	2	40
Round 3	12	3	35

Designing and Conducting the Teacher Survey

The FEDS Team developed a Teacher Survey that was designed (1) to provide information about teachers' preparation for and experience with full-day kindergarten and (2) to elicit their perspectives on four important issues (See Appendix C for a copy of the Teacher Survey):

5. which components of their particular core literacy program they felt that they had implemented with fidelity,
6. whether the training they received in implementing their designated program had been helpful,
7. whether the support they had received from program coaches, literacy specialists, and site administrators had been helpful in implementing the program, and
8. which components of the program they felt had been most useful in fostering their students' literacy development.

Though the Teacher Survey was voluntary, participants were asked to provide their last names so responses could be linked to classrooms and, thus, to specific student achievement results. Survey administration occurred online using MRInterview, with 63 of the 100 study teachers completing the survey (33 from *Program A*; 30 from *Program B*).³⁶ The results portray what happened and why from the teachers' perspectives (see Appendix C for the Teacher Survey).

Assessing the Growth in Oral English Proficiency of English Language Learners (ELL)

In the summer of 2004, all incoming kindergarten students were individually assessed to determine their level of oral English proficiency. The Pre-LAS Oral test was used for the screening. Based on this assessment, the incoming students were given a rating: from Non-English Proficient (NEP) through Limited English Proficient (LEP: Levels 1-4) to Full English Proficient (FEP). All students rated as NEP or as LEP are designated by the District as English Language Learners. The ratings for all ELL students in the original combined sample of 3,600 students were included in the project database.

To further track the growth in oral English proficiency of ELL students, a random sample of 350 full-day kindergarten students with an initial rating of NEP or LEP was drawn from the total population of ELL students in the combined sample population. A group of UNLV graduate students and retired teachers were trained in administering the Pre-LAS Oral, and this group of trained assessors administered the assessment to all 350 students in May 2005. The purpose of this post-assessment was to determine whether at least 75% of the ELL students had gained at least one level of oral English proficiency during the course of their participation in full-day kindergarten.

Section V: *The Results Produced*

The Literacy Growth Results

DIBELS (Dynamic Indicators of Basis Early Literacy Skills) was used to measure students' literacy growth from the beginning of the school year to the end. *DIBELS* was administered to all study students three times during the year: (1) Round 1 in early October; (2) Round 2 in early January; and (3) Round 3 in mid-May. Literacy growth was thus measured across the dimension of time for all students.

The first set of results presented below are for students in 10 full-day classrooms compared with students in 10 half-day classrooms randomly drawn from demographically equivalent schools. Both groups used *Program C*. The second set of results is for students in 50 full-day classrooms using *Program A*. The third set of results is for students in 50 full-day classrooms using *Program B*. The fourth set of results is for students in 13 tuition-based, extended-day classrooms compared with students in 13 half-day classrooms drawn from the same schools (both sets used *Program C*).



Program C: Students in Full-Day Classrooms vs. Students in Half-Day Classrooms

These findings are based on the comparative analysis of the literacy growth of two closely matched groups of students:

1. those in 10 full-day classrooms randomly selected from the population of classrooms in schools that continued to use *Program C* (n=208), and
2. those in 10 half-day classrooms randomly selected from schools also using *Program C* that fell just below the cut-off point used to determine eligibility (n=174).

Multilevel longitudinal growth models were used to estimate students' literacy growth-over-time on each of the four *DIBELS* subtests (Figures 2 – 5 below). *DIBELS* subtest scores are based on the number of correct answers produced by students within the allotted time period. Each subtest has a different number of possible correct answers, and the number of possible correct answers varies across subtests. Therefore, the findings are presented for each subtest and reflect the mean growth for each program group over time. In the Figures below, the vertical axis reflects the mean number of correct answers for the subtest, and the horizontal axis reflects the assessment time period. The *growth trajectories* in the interior of each Figure thus reflect the **mean growth of each group over time on each subtest**.

Figure 2: Mean Initial Sounds Fluency (ISF) Score As A Function of Time and Kindergarten Type (*Program C*)

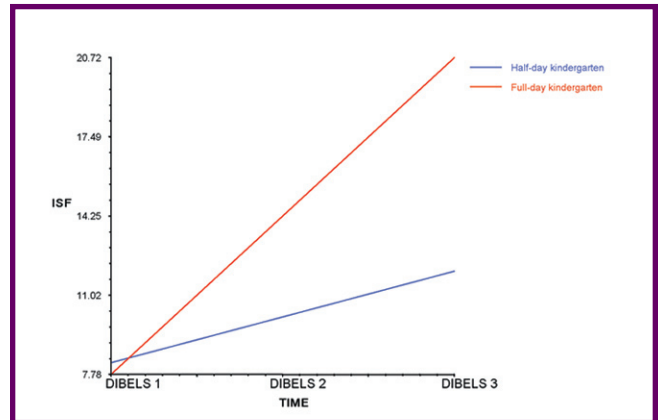


Figure 2 demonstrates that on the Initial Sounds Fluency subtest:

- The full-day students gained 13.00 points from the first *DIBELS* assessment to the third *DIBELS* assessment.
- Across the same time period, the half-day students gained 3.74 points.
- Thus, by the end of the third assessment, the half-day students gained 9.26 points less than the full-day students.
- At the second assessment, both full and half-day students failed to meet the *DIBELS* benchmark goal of 25, although full-day students were on track to meet this benchmark sooner than half-day students (*DIBELS* has no end-of-the-year benchmark goal).

Figure 3: Mean Letter Naming Fluency (LNF) Score As A Function of Time and Kindergarten Type (*Program C*)

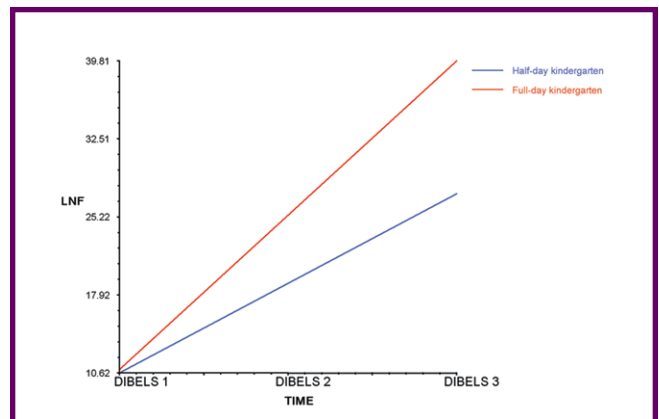


Figure 3 demonstrates that on the Letter Naming Fluency subtest:

- The full-day students gained 28.84 points from the first *DIBELS* assessment to the third *DIBELS* assessment.
- Across the same time period, the half-day students gained 16.74 points.
- Thus, by the end of the third assessment, the half-day students gained 12.10 points less than the full-day students.
- At the second assessment, full-day students met the *DIBELS* benchmark goal of 40, while half-day students did not.

Figure 4: Mean Phonemic Segmentation Fluency (PSF) Score As A Function of Time and Kindergarten Type (Program C)

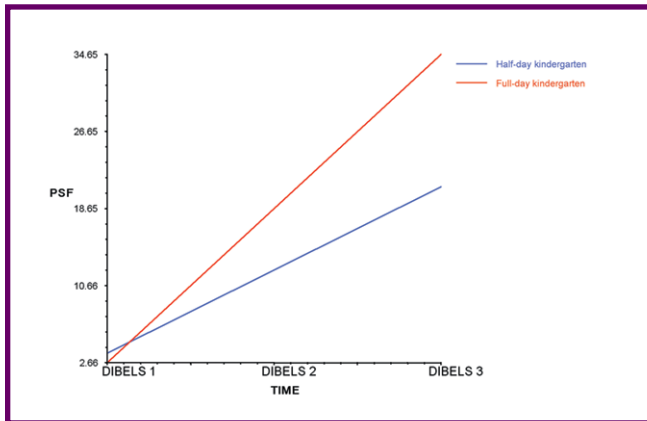


Figure 4 demonstrates that on the Phonemic Segmentation Fluency subtest:

- The full-day students gained 31.98 points from the first *DIBELS* assessment to the third *DIBELS* assessment.
- Across the same time period, half-day students gained 17.24 points.
- Thus, by the end of the third assessment, the half-day students gained 14.74 points less than the full-day students.
- At the second assessment, full-day students met the *DIBELS* benchmark goal of 35, while half-day students did not.

Figure 5: Mean Nonsense Word Fluency (NWF) Score As A Function of Time and Kindergarten Type (Program C)

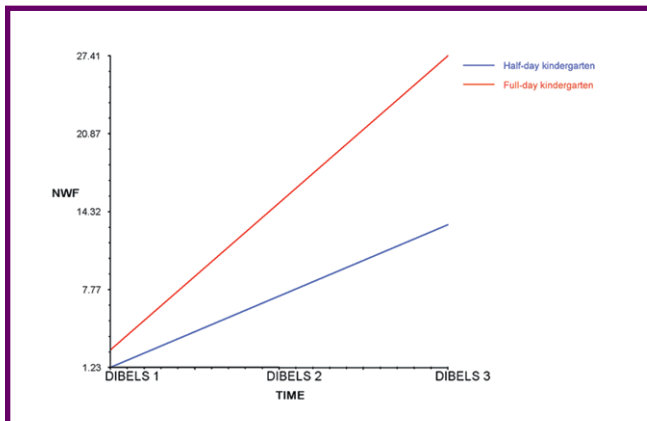


Figure 5 demonstrates that on the *Nonsense Word Fluency* subtest:

- The full-day students gained 24.70 points from the first *DIBELS* assessment to the third *DIBELS* assessment.
- Across the same time period, the half-day students gained 12.00 points.
- Thus, by the end of the third assessment, the half-day students gained 12.70 points less than the full-day students.
- At the second assessment, full-day students met the *DIBELS* benchmark goal of 25, while half-day students did not.

Summary of Results for Full Versus Half-Day Kindergarten

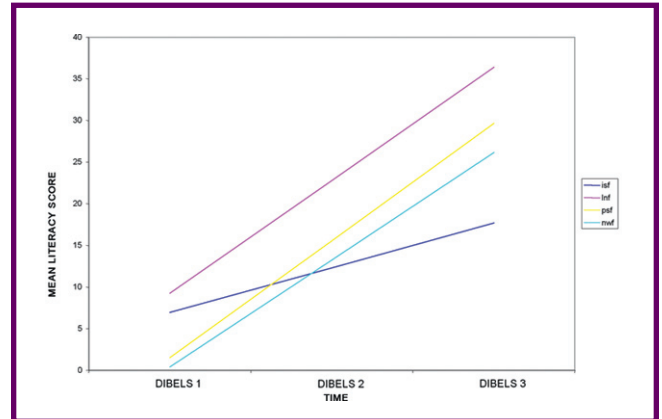
On the initial assessment (Time 0), the full-day students scored higher than the half-day students on the LNF (Figure 3) and NWF (Figure 5) subtests and lower than the half-day students on the other the ISF

and PSF subtests. **Nonetheless, the full-day students grew more – and at a faster rate – than the half-day students on all four subtests, including the two on which they scored lower initially.** Also, on 3 of the 4 subtests, the full-day students met the *DIBELS* benchmark goals, while half-day students were well below the set benchmarks.

Program A: Full-Day Classrooms

The literacy assessment data for *Program A* were analyzed first to produce growth estimates for each of the four *DIBELS* subtests. These growth estimates are portrayed in Table 6 as growth trajectories, with the trajectory for each subtest portrayed in a different color.

Figure 6: Mean Literacy Score By Subtest (*Program A*)

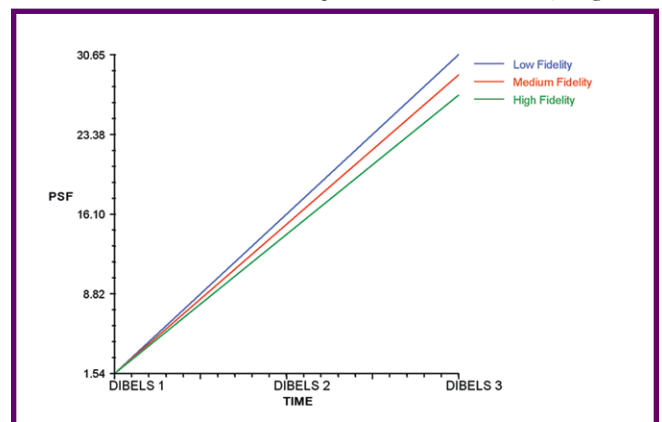


Overall, as Figure 6 portrays, students who experienced *Program A* showed growth over time. On average, from the first assessment to the final assessment, these students grew:

- 10.76 points on the *Initial Sounds Fluency* subtest;
- 27.10 points on the *Letter Naming Fluency* subtest;
- 28.14 points on the *Phonemic Segmentation Fluency* subtest;
- and
- 25.76 points on the *Nonsense Word Fluency* subtest.

The literacy assessment results were then analyzed comparatively with the fidelity of implementation results. This analysis produced trajectories that display literacy growth for two *DIBELS* subtests as a function of time and of fidelity of implementation status. Figures 7 and 8 present these findings for the *Phonemic Segmentation Fluency* and *Nonsense Word Fluency* subtests.

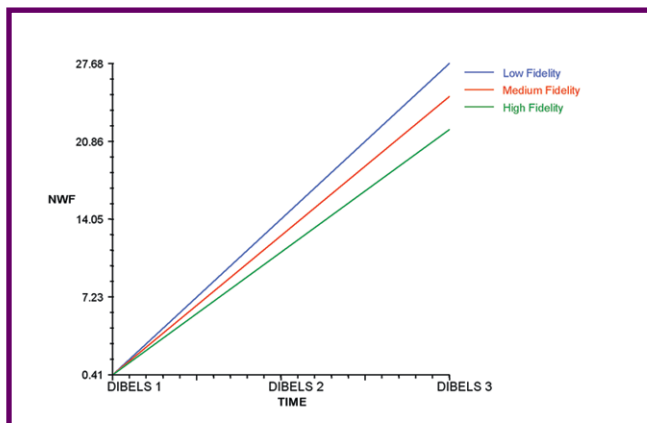
Figure 7: Mean Phonemic Segmentation Fluency (PSF) Score As A Function of Time and Implementation Status (*Program A*)



On the *Phonemic Segmentation Fluency* subtest:

- The baseline mean score for students was 1.54.
- Overall, students grew 28.14 points from the first (Time 0) to the third (Time 2) assessment.
- However, students in classrooms with a high degree of fidelity of implementation grew 1.84 points less than students in classrooms with a medium degree of fidelity of implementation, while students in classrooms with a medium degree of fidelity of implementation grew 1.84 points less than students in classrooms with a low degree of fidelity of implementation.
- Thus, the results for the *PSF* subtest indicate a consistent inverse relationship between degree of fidelity of program implementation by teachers and students' literacy growth over time. For every unit change in fidelity of program implementation – low fidelity to medium fidelity to high fidelity – students rate of literacy growth decreased by 1.84 points over the course of the year on this subtest.

Figure 8: Mean Nonsense Word Fluency (NWF) Score As A Function of Time and Implementation Status (Program A)



On the *Nonsense Word Fluency* subtest:

- The baseline mean score for students was 0.41.
- Overall, students grew 25.74 points from the first (Time 0) to the third (Time 2) assessment.
- However, students in classrooms with a high degree of fidelity of implementation grew 2.88 points less than students in classrooms with a medium degree of fidelity of implementation, while students in classrooms with a medium degree of fidelity of implementation grew 2.88 points less than students in classrooms with a low degree of fidelity of implementation.
- Thus, the results for the *NWF* subtest indicate a consistent inverse relationship between degree of fidelity of program implementation by teachers and students' literacy growth over time. For every unit change in fidelity of program implementation – low fidelity to medium fidelity to high fidelity – students rate of literacy growth decreased by 2.88 points over the course of the year on this subtest.

Summary of Results for Program A

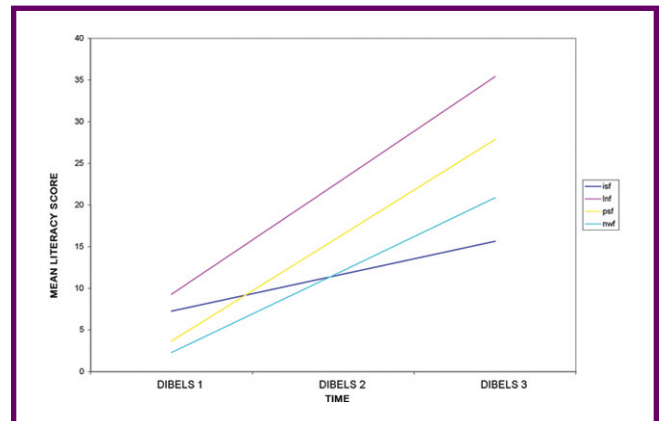
Students in full-day classrooms who experienced Program A showed literacy growth on all four *DIBELS* subtests over the course of the year. The rate of growth was least pronounced on the *ISF* subtest and most pronounced on the *PSF* and *NWF* subtests.

Across all four subtests, students' rates of literacy growth were inversely related to the degree to which their teachers implemented the program with fidelity. That is, students in the classrooms with the lowest degrees of fidelity of implementation by their teachers achieved the highest rates of literacy growth, and students in the classrooms with the highest degrees of fidelity of program implementation by their teachers achieved the lowest rates of literacy growth.

Program B: Full-Day Classrooms

The growth estimates resulting from the first analysis of the literacy assessment data are portrayed in Table 9 as growth trajectories, with the trajectory for each subtest portrayed in a different color.

Figure 9: Mean Literacy Score By Subtest (Program B)

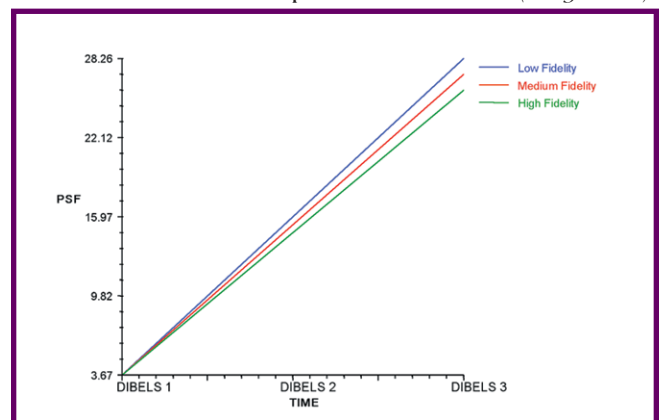


Overall, as Figure 9 portrays, students who experienced *Program B* showed growth over time. On average, from the first assessment to the final assessment, these students grew:

- 8.38 points on the *Initial Sounds Fluency* subtest;
- 26.12 points on the *Letter Naming Fluency* subtest;
- 24.20 points on the *Phonemic Segmentation Fluency* subtest; and
- 18.58 points on the *Nonsense Word Fluency* subtest.

The literacy assessment results were then analyzed comparatively with the fidelity of implementation results. This analysis produced trajectories that display literacy growth for two *DIBELS* subtests as a function of time and of fidelity of implementation status (Figures 10 and 11).

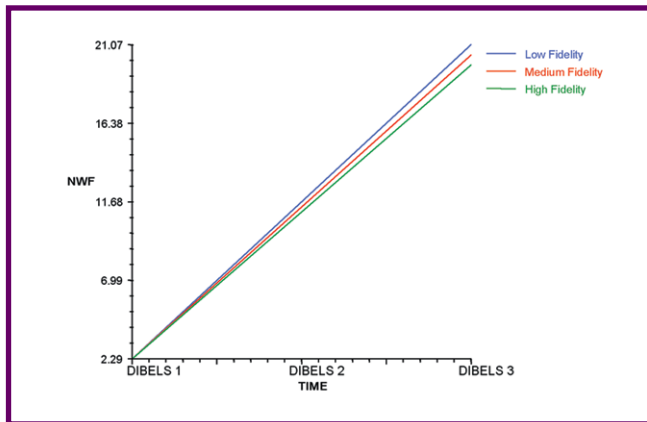
Figure 10: Mean *Phonemic Segmentation Fluency* (PSF) As A Function of Time and Implementation Status (Program B)



As Figure 10 demonstrates, on the *Phonemic Segmentation Fluency* subtest:

- The baseline mean score for students was 3.67.
- Overall, students grew 25.82 points from the first (Time 0) to the third (Time 2) assessment.
- However, students in classrooms with a high degree of fidelity of implementation grew 1.24 points less than students in classrooms with a medium degree of fidelity of implementation, while students in classrooms with a medium degree of fidelity of implementation grew 1.24 points less than students in classrooms with a low degree of fidelity of implementation.
- Thus, the results for the *PSF* subtest indicate a consistent inverse relationship between degree of fidelity of program implementation by teachers and students' literacy growth over time. For every unit change in fidelity of program implementation – low fidelity to medium fidelity to high fidelity – students rate of literacy growth decreased by 1.24 points over the course of the year on this subtest.

Figure 11: Mean *Nonsense Word Fluency (NWF)* Score As A Function of Time and Implementation Status (*Program B*)



As Figure 11 demonstrates, on the *Nonsense Word Fluency* subtest:

- The baseline mean score for students was 2.29.
- Overall, students grew 19.38 points from the first (Time 0) to the third (Time 2) assessment.
- However, students in classrooms with a high degree of fidelity of implementation grew 0.60 points less than students in classrooms with a medium degree of fidelity of implementation, while students in classrooms with a medium degree of fidelity of implementation grew 0.60 points less than students in classrooms with a low degree of fidelity of implementation.
- Thus, the results for the *NWF* subtest indicate a consistent inverse relationship between degree of fidelity of program implementation by teachers and students' literacy growth over time. For every unit change in fidelity of program implementation – low fidelity to medium fidelity to high fidelity – students rate of literacy growth decreased by 0.60 points over the course of the year on this subtest.



Summary of Results for Program B

Students in full-day classrooms who experienced *Program B* showed literacy growth on all four *DIBELS* subtests over the course of the year. The rate of growth was least pronounced on the *ISF* subtest and most pronounced on the *PSF* and *NWF* subtests.

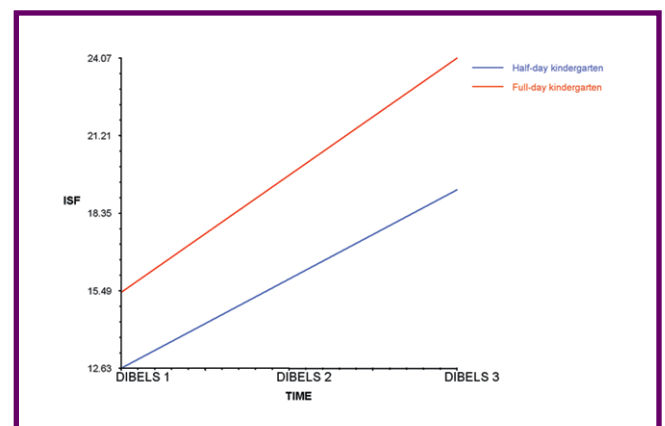


Across all four subtests, students' rates of literacy growth were inversely related to the degree to which their teachers implemented the program with fidelity. That is, students in the classrooms with the lowest degrees of fidelity of program implementation by their teachers achieved the highest rates of literacy growth, and students in the classrooms with the highest degrees of fidelity of implementation by their teachers achieved the lowest rates of literacy growth.

Tuition-Based, Extended-Day Kindergarten Program: Full-Day Versus Half-Day

In this part of the study, the literacy growth of two groups of students was analyzed comparatively: (1) those students enrolled in thirteen tuition-based, extended day kindergarten classes in twelve high income schools (Treatment Group) were compared with (2) those students enrolled in thirteen traditional half-day classes selected randomly from the same twelve schools (Comparison Group). Both sets of classrooms used *Program C*. The literacy growth estimates for both groups (N = 538) on all four *DIBELS* subtests are reported in Tables 12-15 below.

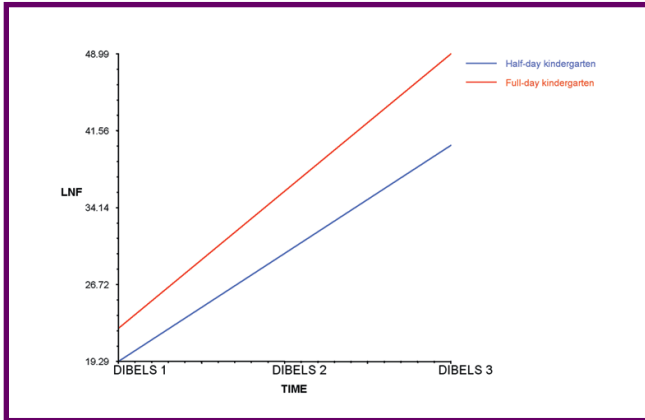
Figure 12: Mean *Initial Sounds Fluency (ISF)* Score As A Function of Time and Kindergarten Type (*Program C*)



As Figure 12 demonstrates on the *Initial Sounds Fluency* subtest:

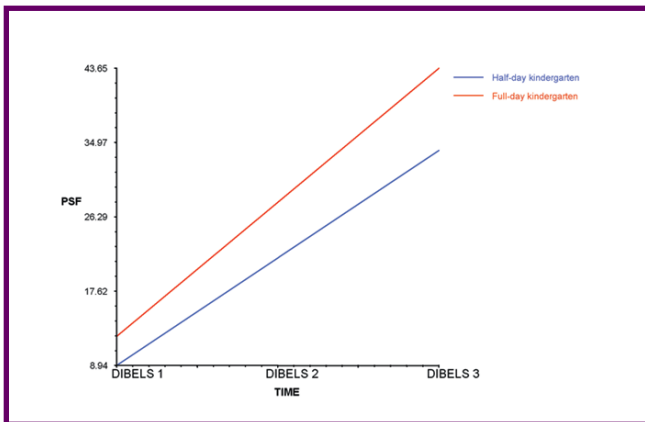
- The full-day students gained 8.64 points from the first *DIBELS* assessment to the third *DIBELS* assessment.
- Across the same time period, the half-day students gained 6.58 points.
- Thus, by the end of the third assessment, the half-day students had gained 2.06 points less than the full-day students.
- At the second assessment, both full and half-day students failed to meet the *DIBELS* benchmark goal of 25, though the full-day students were on track to meet this goal sooner than half-day students.

Figure 13: Mean Letter Naming Fluency (LNF) Score As A Function of Time and Kindergarten Type (Program C)



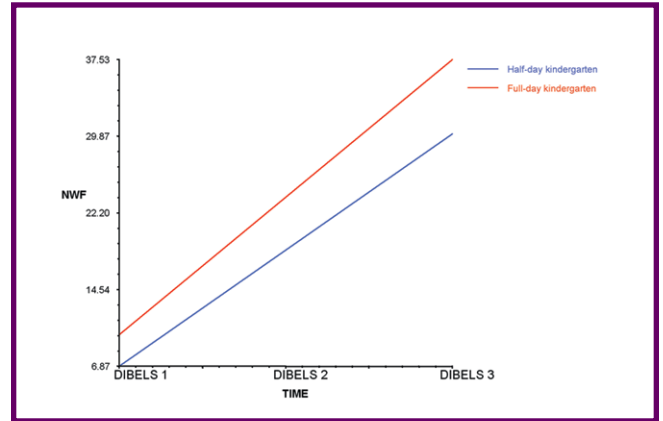
- Figure 13 demonstrates that on the *Letter Naming Fluency* subtest:
- the full-day students gained 26.48 points from the first *DIBELS* assessment to the third *DIBELS* assessment.
 - Across the same time period, the half-day students gained 20.86 points.
 - Thus, by the end of the third assessment, the half-day students gained 5.62 points less than the full-day students.
 - At the second assessment, both full and half-day students met the *DIBELS* benchmark goal of 40.

Figure 14: Mean Phonemic Segmentation Fluency (PSF) Score As A Function of Time and Kindergarten Type (Program C)



- Figure 14 demonstrates that on the *Phonemic Segmentation Fluency* subtest:
- The full-day students gained 31.30 points from the first *DIBELS* assessment to the third *DIBELS* assessment.
 - Across the same time period, the half-day students gained 25.10 points.
 - Thus, by the end of the third assessment, the half-day students gained 6.20 points less than the full-day students.
 - At the second assessment, full-day students reached the *DIBELS* benchmark goal of 35, while half-day students did not.

Figure 15: Mean Nonsense Word Fluency (NWF) Score As A Function of Time and Kindergarten Type (Program C)



- Figure 15 demonstrates that on the *Nonsense Word Fluency* subtest:
- The full-day students gained 27.48 points from the first *DIBELS* assessment to the third *DIBELS* assessment.
 - Across the same time period, the half-day students gained 23.22 points.
 - Thus, by the end of the third assessment, the half-day students gained 4.26 points less than the full-day students.
 - At the second assessment, both full and half-day students met the *DIBELS* benchmark goal of 25.

Summary of Results for Tuition-Based, Extended-Day Versus Half-Day Programs

Students enrolled in both tuition-based, extended-day classrooms (Treatment) and in equivalent half-day classrooms (Comparison) showed growth on all four *DIBELS* subtests over the course of the year. At the same time, the rates of growth were significantly greater for the extended-day students than for the half-day students, with the initial achievement gap between the extended-day and the half-day students widening slightly over the course of the year.



Teacher Survey Results

Of the total of 110 full-day kindergarten teachers in the study, 69 completed the Teacher Survey:

- 33 of the 50 teachers from classrooms using Program A,
- 30 of the 50 teachers from classrooms using Program B, and
- 6 of the 10 teachers from classrooms using Program C.

Of these teachers, 20 reported having a degree in Early Childhood Education; 16, an endorsement in Early Childhood Education; and 33, neither a degree nor an endorsement.

Respondents reported the following results for teaching experience by program (Table 2):

Table 2

Program	Years of Teaching Experience (Aver.)	Average Years of Half-Day K Experience	Average Years of Full-Day K Experience	Average Years at Current School
A	10.42	4.58	2.24	4.79
B	8.47	3.80	1.53	3.50
C	11.50	1.00	1.00	3.00

In response to questions about the training provided for the two new literacy programs under study, teachers in Program A classrooms reported attending an average of 5.2 training sessions, and teachers in Program B classrooms reported attending an average of 4.5 training sessions. Teachers were then asked to respond to two statements about these training sessions:

- "The training helped me understand the program."
- "The training helped me implement the program."

They were asked whether they "Strongly Agreed, Agreed, Somewhat Agree, Somewhat Disagreed, Disagreed, or Strongly Disagreed" with these statements. The responses were weighted from 6 (Strongly Agreed) to 1 (Strongly Disagreed). The averaged results are presented below by program (Table 3).

Table 3

Program	The training helped me <u>understand</u> the program. [Strongly Agree + Agree]	The training helped me <u>implement</u> the program. [Strongly Agree + Agree]
A	42.4% (14 of 30)	30.3% (10 of 33)
B	53.3% (16 of 33)	56.6% (17 of 30)
C	100% (6 of 6)	100% (6 of 6)

The teachers were also asked to identify who had "helped [them] in implementing the core literacy program": Literacy Specialists; Instructional Strategists; Program B Literacy Coaches; Program A Coaches; Site Administrators. The respondents identified the following people as having helped them (Table 4).

Table 4

Program	Literacy Specialists	Instructional Strategists	Program A Literacy Coaches	Program B Coaches	Site Administrators
A	16	0	N/A	15	2
B	5	1	27	N/A	1
C	4	1	N/A	N/A	1

To the statement, "Overall, I feel supported in implementing the program," teachers gave the following responses based on a scale of 6 = Strongly Agree to 1 = Strongly Disagree (Table 5):

Table 5

Program	Overall, I feel supported in implementing the program
A	42.4% (14 of 33)
B	73.3% (22 of 30)
C	83.3% (5 of 6)

The next section of the Teacher Survey was a “drop-down” depending on which core literacy programs teachers were using. This section, entitled “My implementation of the program,” asked them questions regarding their implementation of specific elements of their particular program.

For example, each program recommended a 90-minute daily program-based lesson. When asked to define the amount of time spent implementing their program each day,

- 23 of the 33 *Program A* teachers (69.7%) checked “more than 90 minutes,” while
- only 6 of the 30 *Program B* teachers (20%) checked more than 90 minutes (In contrast, 17 *Program A* teachers checked “61-90 minutes.”)

Program A and B teachers were asked to rate specific content elements of their respective programs as being Extremely Beneficial to Students, Somewhat Beneficial to Students, or Not Beneficial to Students.

Table 6 presents the results of the *Program A* teacher ratings. It presents the ratings of the elements by numbers and percentages of teachers per rating.

Table 6

Program A (33 teachers)			
Content Element	Extremely Beneficial	Somewhat Beneficial	Not Beneficial
Daily Message	27.3% (9)	51.5% (17)	21.2% (7)
Read & Respond	39.4% (13)	42.4% (14)	18.2% (6)
Skill Development	63.6% (21)	27.3% (9)	10.0% (3)
Teacher Station	63.6% (21)	27.3% (9)	10.0% (3)
Explicit Language in Manual	15.2% (5)	52.5% (17)	33.3% (11)
De-briefer	12.1% (4)	54.5% (18)	33.3% (11)
E-Voyages	9.0% (3)	60.1% (20)	30.3% (10)
Writing Connection	21.2% (7)	51.5% (17)	27.3% (9)
Intervention	42.4% (14)	33.3% (11)	24.2% (8)

Program A teachers reported the following percent of time use for three program features:

- 29 of the 33 *Program A* teachers (87.9%) either Strongly Agreed (6), Agreed (14), or Somewhat Agreed (9 that they “used the Vital Indicators of Progress (VIP) to guide [their] instructional groups during the Teacher Station,”);
- 29 of the 33 teachers indicated that they spent either 61-89% of the time (12 teachers) or more than 90% of the time (17 teachers) “following the explicit dialogue and correction procedures”;
- 25 of the 33 teachers (75.8%) either Strongly Agreed (7), Agreed (13), or Somewhat Agreed (5) that the time they “spent implementing Program A improved student achievement”;
- 24.2% of the teachers Somewhat Disagreed (4), Disagreed (3), or Strongly Disagreed (1) that “implementing *Program A* improved student achievement.”

Table 7 presents the results of the *Program B* teacher ratings of the elements by numbers and percentages of teachers per rating.

Table 7

Program B (30 teachers)			
Content Element	Extremely Beneficial	Somewhat Beneficial	Not Beneficial
Home Conversation	16.7% (5)	70.0% (21)	13.3% (4)
Graphic Organizers	76.7% (23)	23.3% (7)	0
Writing	70.0% (21)	26.6% (8)	3.3% (1)
Individualized Software Instruction	63.3% (19)	33.0% (10)	3.3% (1)
Small Group Instruction	73.3% (22)	20.0% (6)	6.6% (2)
Whole Group Book-of-the-Week Oral Comprehension Strategies	86.7% (26)	10.0% (3)	3.3% (1)

Program B teachers reported the following percent of time use for three program features:

1. 70% of the teachers (21) reported that they “followed the Book-of-the-Week Teacher’s Guide” 90% or more of the time, and an additional 23.3% of the teachers reported that they followed this guide 61-89% of the time;
2. 19 teachers (63.3%) reported using “the student data report to inform [their] instruction” more than 41% of the time, with only 2 reporting that they used this program feature more than 90% of the time; and
3. 13 teachers (43.3%) reported that they used “the lessons in the Explicit Instructions for Phonemic Awareness to Phonics Teacher Guide” between 41% and 89% of the time.

Comparing the Teacher Survey and Fidelity of Implementation Results



For this analysis, teacher survey results were compared with observed levels of teacher fidelity of implementation. For each program, specific elements were identified as mandatory daily instructional components. The program experts defined these elements as “non-negotiable.” All these items were included on the observation protocols used by observers for the observations.

In order to avoid a possibly inflated self-report measure that might not accurately depict instructional events in the classroom, the Team decided not to ask the teachers whether they were using their assigned core literacy program with fidelity. Instead, teachers were asked to what extent they were using a particular critical element in their classroom. Because the main component of *Program A* is explicit instruction, teachers were asked to what extent they used explicit dialogue in each lesson. On this item, 29 out of 33 teachers reported that they used this element more than 61% of the time. This self-report total matched closely with the observers’ reporting of teachers’ use of explicit dialogue. Observers noted 79% of

the teachers using explicit dialogue in the *Program A* sessions they observed (Table 8).

A critical component of *Program B* is individualized software instruction. This is a necessary part of program implementation because the phonics and phonemic awareness skills are taught only through software instruction - and may or may not be taught through teacher instruction. On this item, 30 out of 30 teachers reported that their students engaged in individualized software instruction more than 61% of the time. The observation results reflect 24 out of 30 teachers observed using individualized software instruction during the observations (Table 22).

Table 8

Program A			
	N	Total Teachers who Took Online Survey	% of Total
Reported	29	33	88%
Observed	26	33	79%
Program B			
	N	Total Teachers Who Took Online Survey	% of Total
Reported	30	30	100%
Observed	24	30	80%

This analysis revealed a consistently close correspondence between teachers’ self-reported implementation of particular program elements and the incidence of teachers’ implementation of these elements recorded by observers on the observation protocols.

ELL Assessment Results

The oral English proficiency of all 3,600 students in the original study population was assessed during the summer of 2004, prior to their entry into kindergarten, by trained assessors using the Pre-LAS Oral screening instrument. As a result, English Language Learner classifications were available, and included in the database, for all study students. In addition to developing findings that addressed the issue of success in achieving the two broad study goals, as reported above, the study design also called for developing findings that addressed the following objective: 75% of LEP/ELL kindergarten students will increase their oral proficiency by at least one proficiency level. The pre-kindergarten screening was treated as a pre-test.

In order to collect the data needed to determine if this objective had been reached, the Pre-LAS Oral was administered as a post-test to 350 designated LEP/ELL students randomly selected from the overall study sample. This assessment was conducted by trained assessors between mid-May (May 16th) and early June (June 3rd) of 2005.

The resulting analysis revealed that:

- 28.1% of the students remained at the same level;
- 71.9% of the LEP/ELL students gained at least one level; and
- 40.7% of the students gained from 2-4 levels on the post-test administration of the Pre-LAS Oral.



Section 6: *Discussion of Results*

Literacy Growth for Full-Day Versus Half-Day Students (Program C)

In order to match the half-day Comparison Group students as closely as possible with the full-day students in the ten (10) Treatment Group classrooms (61-90% FRL), ten (10) half-day classrooms were selected randomly from the available pool of schools with the most similar demographic characteristics (55-60% FRL) to form the Comparison Group. Both groups of students experienced the same core literacy program: *Program C*.

Despite the closeness of the match between these two low income groups, their scores on the initial assessment (the baseline) revealed initial status differences on all four *DIBELS* subtests. On the first assessment, the full-day students scored higher than the half-day students on two subtests (*Letter Naming Fluency* and *Nonsense Word Fluency*) and lower than the half-day students on the other two subtests (*Initial Sounds Fluency* and *Phonemic Segmentation Fluency*). Despite these initial status differences, the full-day students demonstrated greater literacy growth than the half-day students on all four *DIBELS* subtests, including the two on which they scored lower initially. Given that both groups used the same core literacy program and groups were closely matched demographically, the greater rate of literacy growth for the full-day students as compared with the half-day students suggests that these outcomes may be attributable in part to the length of the kindergarten day.

Literacy Growth for Program A and B

The growth model analysis, using the results of the four *DIBELS* subtests across the three rounds of assessments, showed that students in full-day classrooms who experienced *Program A* or *Program B* demonstrated literacy growth over the course of the year. The rate of growth was least pronounced on the *ISF* subtest and most pronounced on the *PSF* and *NWF* subtests.

Program Conceptual Frameworks

Students experiencing either program – A or B - achieved literacy growth over the year. However, because the two programs are conceptually different, it is possible that students' literacy growth was attributable in part to at least somewhat different factors in the case of each program.

One program:

1. is highly scripted;
2. focuses on assessment-driven accountability; and
3. uses a *DIBELS*-type instrument to monitor the progress of students scoring below established *DIBELS* benchmarks, which means that these students had more experience with this instrument.

In the other program:

1. teachers choose the Book of The Week;
2. the program includes a daily software component; and
3. the program includes an emphasis on writing.

Literacy Growth By Fidelity of Implementation

Not only is it unclear exactly what caused the literacy growth demonstrated by students experiencing both programs, given the major conceptual differences between programs, but also it is unclear why so few teachers implementing either program met the criteria for high fidelity of implementation. Attributing causal effects to the programs or to other factors individually or in combination is complicated by several key findings.

Though students in both programs demonstrated substantial literacy growth,

- *Program A* teachers reported spending **more daily time** on literacy lessons and were observed implementing the program with a **decreasing degree of fidelity**, while
- *Program B* teachers reported spending **less daily time** on literacy lessons and were observed implementing the program with an **increasing degree of fidelity**.

Also, the teachers whose students achieved the highest rates of literacy growth, who reported attending the most program-specific training sessions (on average), who reported spending the most daily time on literacy instruction, and who reported receiving the highest level of support from site-based literacy specialists, also reported feeling less supported overall in implementing their particular core literacy program. They are also the group of teachers for whom fidelity of program implementation decreased over the course of the study, and they are the teachers whose students had more practice experience with the literacy instrument.

And finally, the teachers whose students achieved substantial though slightly lower rates of literacy growth, who reported attending slightly fewer program-specific training sessions (on average), who reported spending the least daily time on literacy instruction, who reported receiving higher levels of support from program-related coaches, and who reported receiving less support from site-based literacy specialists, also reported feeling more supported overall in implementing the program. They are also the group of teachers for whom fidelity of program implementation increased over the course of the study, and they are the group of teachers whose students had less practice experience with the literacy instrument.

In the light of these apparent contradictions, many factors or combinations of factors may be responsible for the observed literacy growth:

- The program(s) per se.
- The professional development teachers received in implementing the program(s).
- The amount of time teachers spent on daily literacy instruction.
- The teachers' degrees and endorsements.
- The teachers' prior experience in early childhood education.
- The quality of teachers' a priori knowledgeable-skill in early literacy teaching and learning.
- The support they received from coaches, literacy specialists, and/or site administrators.

There following are possible explanations for the results.

1. Because the study took place during the first year of program implementation, the teachers may have not met the fidelity criteria because they were still learning how to implement the program correctly. The results for *Program B* support this hypothesis: more teachers met the high fidelity criteria in Rounds 2 and 3 of the observations than in Round 1. However, the results for *Program A* do not support this hypothesis: more teachers met the criteria for high fidelity criteria in Round 1 than in Rounds 2 or 3. It may be that, as teachers using *Program A* understood the program better, they increasingly implemented the program with a lower degree of fidelity. In contrast, it may be that, as teachers using *Program B* understood the program better, they increasingly implemented the program with a higher degree of fidelity.
2. The low number of teachers meeting high fidelity of implementation criteria may have occurred because the rubric resulting from the analysis of the observation protocols is too rigorous. Throughout, the process of developing the rubric and applying it to the observation results was guided collaboratively by literacy experts and members of the evaluation team, without the input of teachers skilled in implementing the program.
3. Perhaps teachers were not observed teaching critical elements because they were unaware of which program elements were considered critical. To test this hypothesis, an analysis comparing teacher survey data with observation data was performed. The results of this analysis revealed a consistently close correspondence between teachers' self-reported implementation of particular program elements and the incidence of teachers' implementation of these elements recorded by observers on the observation protocols.
4. Perhaps the majority of the teachers using each program relied more on their own professional knowledge of their students' literacy needs combined with the techniques or practices that they knew would be most effective in fostering their students' literacy growth. If this was the case, then they may have used

the programs more as resources – as supplements to their own “best literacy teaching practices” - than as step-by-step guides to be followed explicitly in their daily literacy instruction.

Literacy Growth for Tuition-Based/ Extended-Day Versus Half-Day Students (Program C)

The Comparison Group of students for this component of the study was constituted from thirteen (13) randomly selected half-day classrooms in the same twelve schools offering the thirteen (13) tuition-based, extended-day classrooms (Treatment). This selection process resulted in virtually identically matched Treatment and Comparison groups. However, despite the demographic match between the groups, the initial assessment revealed initial achievement differences between the two groups on all four *DIBELS* subtests. The Treatment students scored higher initially on all four subtests than the Comparison students. This initial status difference, consistent across subtests, is difficult to explain other than to hypothesize that, perhaps, the students from families with the means and the interest to enroll their students in the tuition-based, extended-day classrooms represented an additionally advantaged group within the larger group of students attending these already socio-economically advantaged schools.

Although the Treatment and Comparison group students showed substantial rates of literacy growth on all four *DIBELS* subtests over the course of the year, the rates of growth were greater for the extended-day students than for the half-day students. With the greater literacy growth for extended-day students, the initial achievement gap between the extended-day and the half-day students widening slightly over the course of the year. Thus, one unintended effect of offering tuition-based, extended-day classrooms as an option to families with the means and the interest to enroll their students in them may be not only to reveal a previously unidentified – and unanticipated - achievement gap between these students and the rest of their peers but also, over the course of the year, to increase this gap slightly.

Section VII: *Conclusions*

The Full/Extended-Day Kindergarten (FEDS) Study sought to achieve two overarching goals:

Goal 1: To determine the effects of instruction in *Program A* and in *Program B* on full-day kindergarten students' literacy development, and

Goal 2: To compare the effects of participation in full-day kindergarten and half-day kindergarten on students' literacy development.

In regard to *Goal 1*, the study succeeded in developing findings indicating that students who experienced both core literacy programs – *Program A* and *Program B* - demonstrated literacy growth over the course of the year. Research findings reported by the National Institute of Child Health and Human Development (NICHD) suggest that effective literacy programs for young children must include not only a multitude of language and print-rich activities but also explicit,

systematic instruction in specific decoding, word-recognition, and comprehension skills.³⁷ The literacy growth results reported here suggest that all full-day kindergarten students, regardless of the core literacy program being implemented in their classrooms, experienced the kind of literacy instruction they needed to grow in these fundamental reading skills.

In regard to *Goal 2*, the study succeeded in developing findings indicating that students enrolled in full-day kindergarten programs demonstrated greater literacy growth over the course of the year than students enrolled in half-day kindergarten programs. This conclusion reflects findings from comparison group studies of two sets of students:

1. a group of full-day students from classrooms in lower income schools compared with a group of half-day students randomly selected from classrooms in demographically similar schools; and

2. a group of full-day students from classrooms in higher income schools compared with a group of half-day students randomly selected from classrooms in the same schools.

In regard to the sub-objective of 75% of LEP/ELL kindergarten students increasing their oral proficiency by at least one proficiency level, the study succeeded in developing findings indicating that 71.9% of a randomly selected subset of 350 ELL students increased their oral English proficiency by at least one level. While this finding indicated that the objective was nearly, though not exactly, achieved, it is important to note that, at the same time, 40.7% of the students gained from 2-4 levels on the post-test administration of the Pre-LAS Oral.

The findings of this study align closely with the results of studies cited earlier in this report comparing the learning and growth effects

for children attending full-day kindergarten versus attending half-day kindergarten. Full-day kindergarten leads to markedly higher academic performance than does half-day kindergarten.

The policy implication of these findings is clear: **School districts enrolling large numbers of children from low income families would be advised to provide access to full-day kindergarten programs that are designed to reduce – or eliminate - wide, socially stratified achievement gaps in literacy and in other curricular areas by the time children enter first grade. If these gaps are not closed by the end of first grade, these districts not only will find it increasing difficult to close the gaps in later grades but also will face increasingly higher costs in attempting to do so.**

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APPENDIX A

FEDS Team	Title
CCSD: Research, Accountability and Innovation Division	
Arlene Lewis	Director, Research and Accountability
Robert Parker	Coordinator, Research and Evaluation
Marilyn Jordan	Coordinator, School Improvement
Sharon Heyman	Project Facilitator, School Improvement
CCSD: Curriculum and Professional Development Division	
Diane Reitz	Director, Literacy Services Department
Jennifer Varrato	Coordinator, K-12 Literacy
Alice Roybal-Benson	Project Facilitator for Early Literacy
Jodi Huff	Project Facilitator for Early Literacy
Annie Amoia	Coordinator of Innovative Literacy Programs
CCSD: Student Support Services Division	
Susan Wright	Director, Title I Program
Mark Lange	Director, Title I Grants and Compliance
Lisa Pitch	Program Evaluator, Grants Development and Administration Department
Alison Williams	Program Evaluator, Grants Development and Administration Department
University of Nevada, Las Vegas	
Keith Zvoch	Assistant Professor, Educational Psychology Department
LeAnn Putney	Associate Professor, Educational Psychology Department
Ralph Reynolds	Professor and Chair, Educational Psychology Department



APPENDIX B

IMPLEMENTATION OBSERVATION PROTOCOL: PROGRAM B

GENERAL ELEMENTS	
ELEMENT	COMMENTS
Day 1 <input type="checkbox"/> Display and discuss items from Book-of-the-Week Bag (teacher) <input type="checkbox"/> Introduce and preview Book-of-the-Week (teacher) <input type="checkbox"/> Make predictions about book (students) <input type="checkbox"/> Read book aloud (teacher) <input type="checkbox"/> Use graphic organizers (teacher) <input type="checkbox"/> Distribute Take-Me-Home books <input type="checkbox"/> Introduce Home Conversation #1	
Day 2 <input type="checkbox"/> Display and discuss items from Book-of-the-Week Bag (teacher) <input type="checkbox"/> Discuss Home Conversation #1 <input type="checkbox"/> Review Book-of-the-Week <input type="checkbox"/> Read aloud Book-of-the-Week (teacher) <input type="checkbox"/> Use graphic organizers (teacher) <input type="checkbox"/> Clarify important details (teacher) <input type="checkbox"/> Interpret information (teacher)	
Day 3 <input type="checkbox"/> Display and discuss items from Book-of-the-Week Bag (teacher) <input type="checkbox"/> Read aloud Book-of-the-Week (teacher) <input type="checkbox"/> Apply personal experiences to Book-of-the-Week (teacher) <input type="checkbox"/> Use graphic organizers (teacher) <input type="checkbox"/> Share personal stories related to book-of-the-week (students) <input type="checkbox"/> Introduce Home Conversation #2	
Day 4 <input type="checkbox"/> Display and discuss items from Book-of-the-Week Bag (teacher) <input type="checkbox"/> Discuss Home Conversation #2 <input type="checkbox"/> Read aloud Book-of-the-Week (teacher) <input type="checkbox"/> Discuss Book-of-the-Week <input type="checkbox"/> Use graphic organizers (teacher) <input type="checkbox"/> Extend students thinking (teacher) <input type="checkbox"/> Synthesize or construct and innovation (teacher)	
Day 5 <input type="checkbox"/> Display and discuss items from Book-of-the-Week Bag (teacher) <input type="checkbox"/> Share innovations (students) <input type="checkbox"/> Read aloud Book-of-the-Week (teacher) <input type="checkbox"/> Make further predictions or alternative outcomes (students) <input type="checkbox"/> Make generalizations, apply and retell book (students) <input type="checkbox"/> Use graphic organizers (teacher) <input type="checkbox"/> Share thoughts about the book (students) <input type="checkbox"/> Celebrate	
Every Day <input type="checkbox"/> Modeled reading (teacher) <input type="checkbox"/> Modeled and shared reading (teacher, students) <input type="checkbox"/> Teacher-directed, small group instruction <input type="checkbox"/> Language and literacy centers <input type="checkbox"/> Developmental centers <input type="checkbox"/> Whole group writing <input type="checkbox"/> Small group writing <input type="checkbox"/> Individual writing <input type="checkbox"/> Individualized software instruction <input type="checkbox"/> Teacher assessment <input type="checkbox"/> Computerized assessment	

CONTENT ELEMENTS	
ELEMENT	COMMENTS
<p><u>Book and Print Concepts</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Print conveys meaning <input type="checkbox"/> Awareness of book parts and features <input type="checkbox"/> Distinguish among letters, words, and sentences <input type="checkbox"/> Directionality in print <p><u>Phonemic Awareness and Phonics</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Addition, deletion, segmentation, and blending of phonemes in spoken words <input type="checkbox"/> Identification and application of letter to sound correspondences <input type="checkbox"/> Identification of the onsets (initial consonants) and rimes (vowel patterns) in words <input type="checkbox"/> Identification and naming of uppercase and lowercase letters of the alphabet <input type="checkbox"/> Identification of beginning, medial, and ending sounds in words <input type="checkbox"/> Identification of rhyming words <input type="checkbox"/> Recognition that words can have one or more syllables and different structures <input type="checkbox"/> Recognition of similarities and differences in spoken words <p><u>Reading Comprehension</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Prior experiences and background knowledge <input type="checkbox"/> Questioning strategies <input type="checkbox"/> Comparison and/or contrast <input type="checkbox"/> Word meanings <input type="checkbox"/> Inferences, predictions, and/or conclusions <input type="checkbox"/> Evaluation and judgment <input type="checkbox"/> Main ideas and details <input type="checkbox"/> Preview books <input type="checkbox"/> Literary elements and genre <input type="checkbox"/> Story structure and events <input type="checkbox"/> Set purposes for reading <input type="checkbox"/> Use of graphic organizers to categorize story information <input type="checkbox"/> Visualization and imagery <p><u>Writing</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Encourage use of conventional spelling <input type="checkbox"/> Encourages use of writing conventions <input type="checkbox"/> Sets purpose(s) for writing <input type="checkbox"/> Encourages use of the writing process <input type="checkbox"/> Encourages use of emergent forms of writing <input type="checkbox"/> Encourages use of personal experiences and imagination to create stories <input type="checkbox"/> Encourages use of a variety of forms for a variety of purposes <input type="checkbox"/> Encourages recognition of the function of sentences <p><u>Listening and Speaking</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Oral directions <input type="checkbox"/> Stories read aloud <input type="checkbox"/> Encourages participation in classroom discussions <input type="checkbox"/> Models language patterns and syntax <input type="checkbox"/> Relationships between spoken and written language 	

IMPLEMENTATION OBSERVATION PROTOCOL: PROGRAM A

GENERAL ELEMENTS	
ELEMENT	COMMENTS
<ul style="list-style-type: none"> <input type="checkbox"/> Daily message written on board <input type="checkbox"/> Discussion of daily message <input type="checkbox"/> Read and Respond (with Chart) <input type="checkbox"/> Skill development <input type="checkbox"/> Explicit Dialogue <input type="checkbox"/> Teacher-directed station (all 3 small groups receive the same instruction) <input type="checkbox"/> Debriefer (whole group) <input type="checkbox"/> Writing connection (optional) <input type="checkbox"/> Home study (discussion) <input type="checkbox"/> E-voyages 	



CONTENT ELEMENTS	
ELEMENT	COMMENTS
Concepts of print	
Phonological awareness <ul style="list-style-type: none"> <input type="checkbox"/> Rhyming words <input type="checkbox"/> blending syllables <input type="checkbox"/> segmenting syllables <input type="checkbox"/> onset/rhyme <input type="checkbox"/> blending phonemes <input type="checkbox"/> segmenting phonemes <input type="checkbox"/> isolation tasks 	
Alphabetic knowledge <ul style="list-style-type: none"> <input type="checkbox"/> letter identification <input type="checkbox"/> letter discrimination 	
Word study/phonics <ul style="list-style-type: none"> <input type="checkbox"/> letter/sound relationships <input type="checkbox"/> application of letter/sound knowledge to reading <input type="checkbox"/> application of letter/sound to writing <input type="checkbox"/> application of letter/sound to spelling <input type="checkbox"/> read words (decoding) <input type="checkbox"/> irregular words (sight words) <input type="checkbox"/> integration of word study (in writing) 	
<input type="checkbox"/> Spelling	
Oral language development <ul style="list-style-type: none"> <input type="checkbox"/> structured opportunities to talk with teacher & peers <input type="checkbox"/> expansion of student-initiated language 	
Fluency <ul style="list-style-type: none"> <input type="checkbox"/> letter naming fluency <input type="checkbox"/> sound fluency <input type="checkbox"/> word fluency <input type="checkbox"/> repeated reading of text <input type="checkbox"/> books read aloud for modeling 	
Text reading <ul style="list-style-type: none"> <input type="checkbox"/> supported oral reading <input type="checkbox"/> choral reading <input type="checkbox"/> independent silent reading <input type="checkbox"/> independent oral reading <input type="checkbox"/> teacher reads aloud, students listen <input type="checkbox"/> teacher reads aloud with students reading along 	
Vocabulary <ul style="list-style-type: none"> <input type="checkbox"/> direct vocabulary instruction <input type="checkbox"/> embedded vocabulary acquisition <input type="checkbox"/> word categorizations 	
Comprehension <ul style="list-style-type: none"> <input type="checkbox"/> activating prior knowledge <input type="checkbox"/> predicting outcomes <input type="checkbox"/> reading comprehension monitoring <input type="checkbox"/> listening comprehension monitoring 	
Writing/language arts <ul style="list-style-type: none"> <input type="checkbox"/> Handwriting <input type="checkbox"/> Process writing <input type="checkbox"/> Shared writing <input type="checkbox"/> Dictation <input type="checkbox"/> Independent writing 	

APPENDIX C

TEACHER SURVEY: FEDS STUDY

Thank you for taking the time to complete this survey. We estimate that it will take you approximately 10 minutes to complete it. The information you are providing is crucial to the success of our Full/Extended Day Kindergarten (FEDS) Study. The information you provide will be used as part of our assessment of the degree of fidelity of implementation of the core literacy programs. Your responses will be kept strictly confidential.

School Name: _____

Your Last Name: _____

The core literacy program I am using is:

Breakthrough to Literacy _____

Voyager Universal Literacy System _____

Harcourt Trophies _____

Success For All _____

Other (Please specify) _____

Section I: My Background and Experience

I have a degree in Early Childhood Education. Yes _____ No _____

I have an endorsement in Early Childhood Education. Yes _____ No _____

I have _____ years of teaching experience.

I have _____ years of half-day kindergarten teaching experience.

I have _____ years of full-day kindergarten teaching experience.

I have been teaching at my current school for _____ years.

Section II: My Training For Implementing the Program

I attended _____ training sessions for the core literacy program I am implementing.

The training sessions helped me understand the program.

Strongly Disagree _____ Disagree _____ Somewhat Disagree _____

Somewhat Agree _____ Agree _____ Strongly Agree _____

The training sessions helped me implement the program.

Strongly Disagree _____ Disagree _____ Somewhat Disagree _____

Somewhat Agree _____ Agree _____ Strongly Agree _____

I was helped in implementing the core literacy program by (please check all that apply):

Literacy Specialists _____

Instructional Strategists _____

Breakthrough Literacy Coaches/personnel _____

Voyager UL Coaches _____

Site Administrator _____

Overall, I feel supported in implementing the program.

Strongly Disagree _____ Disagree _____ Somewhat Disagree _____

Somewhat Agree _____ Agree _____ Strongly Agree _____

Section III: My Implementation of the Program

Voyager Universal Literacy System (VUL)

I spent this amount of time implementing VUL each day.

Less than 20 minutes _____ 21-30 minutes _____ 31-45 minutes _____

46-60 minutes _____ 61-90 minutes _____ More than 90 minutes _____

I used the Vital Indicators of Progress (VIP) data to guide my instructional groups during the Teacher Station.

Strongly Disagree _____ Disagree _____ Somewhat Disagree _____

Somewhat Agree _____ Agree _____ Strongly Agree _____

I followed the explicit dialogue and correction procedures.

None of the time _____ 1-20% of the time _____ 21-40% of the time _____

41-60% of the time _____ 61-89% of the time _____ 90% or more of the time _____

The time I spent implementing *VUL* improved student achievement.

Strongly Disagree _____ Disagree _____ Somewhat Disagree _____

Somewhat Agree _____ Agree _____ Strongly Agree _____

Please rate each component of instruction in *VUL* (1=Extremely beneficial to students; 2-Somewhat beneficial to students; 3=Not beneficial to students)

Daily Message _____ Read and Respond _____ Skill Development _____

Teacher Station _____ Explicit Language in Manual _____ Debriefing _____

e-Voyages _____ Writing Connection _____ Intervention _____

Breakthrough to Literacy (BTL)

I spent this amount of time implementing *BTL* each day.

Less than 20 minutes _____ 21-30 minutes _____ 31-45 minutes _____

46-60 minutes _____ 61-90 minutes _____ More than 90 minutes _____

Students received 15 minutes a day of *BTL* Individualized Software Instruction.

None of the time _____ 1-20% of the time _____ 21-40% of the time _____

41-60% of the time _____ 61-89% of the time _____ 90% or more of the time _____

I followed the Book-of-the-Week Teacher's Guide.

0% of the time _____ 1-20% of the time _____ 21-40% of the time _____

41-60% of the time _____ 61-89% of the time _____ 90% or more of the time _____

I used the student data reports to inform my instruction:

None of the time _____ 1-20% of the time _____ 21-40% of the time _____

41-60% of the time _____ 61-89% of the time _____ 90% or more of the time _____

I used the lessons in the Explicit Instruction for Phonemic Awareness to Phonics Teacher Guide:

None of the time _____ 1-20% of the time _____ 21-40% of the time _____

41-60% of the time _____ 61-89% of the time _____ 90% or more of the time _____

Please rate each component of instruction in *Breakthrough to Literacy* (1=Extremely beneficial to students; 2=Somewhat beneficial to students; 3=Not beneficial to students):

Home Conversation _____ Graphic Organizers _____ Writing _____

Individualized Software Instruction _____ Small-Group Instruction _____

Whole Group Book-of-the-Week Oral Comprehension Strategies _____

What was your main consideration in selecting the Book-Of-The-Week?

Breakthrough Theme _____ Skills covered _____ Reading Level _____

Student Interest _____ Teacher Selected Theme _____ Other _____

Trophies (Tr)

I used the Oral Language and Learning to Read sections:

Less than 20 minutes daily _____ 20-30 minutes daily _____

35-45 minutes daily _____ 50-60 minutes daily _____

60-90 minutes daily _____ More than 90 minutes daily _____

I use the Reaching All Learners - Additional Support Activities to meet the needs of all students:

Not at all _____ Somewhat _____ Frequently _____

I followed the Harcourt Trophies Teachers Edition with fidelity.

Yes _____ No _____

The time spent implementing Harcourt *Trophies* improved student achievement.

Strongly Disagree _____ Disagree _____ Somewhat Disagree _____

Somewhat Agree _____ Agree _____ Strongly Agree _____

Please rate each component of instruction in Harcourt *Trophies* (1=Extremely beneficial to students; 2=somewhat beneficial to students; 3=Not beneficial to students)

Morning Message _____ Phonemic Awareness _____

Shared Reading _____ Phonics Skill _____

Pre-Decodable and Decodable Books _____

Small-Group Instruction _____

Section IV: My Satisfaction With the Program

I am satisfied with the core literacy program that I am using.

Strongly Disagree _____ Disagree _____ Somewhat Disagree _____

Somewhat Agree _____ Agree _____ Strongly Agree _____

My students like the core literacy program that I am using.

Strongly Disagree _____ Disagree _____ Somewhat Disagree _____

Somewhat Agree _____ Agree _____ Strongly Agree _____

I am satisfied with my students' literacy growth this year.

Strongly Disagree _____ Disagree _____ Somewhat Disagree _____

Somewhat Agree _____ Agree _____ Strongly Agree _____

Section V: Use of Other Programs

I am using other programs or literacy materials with my students.

Yes _____ No _____

If you answered yes, please check which program(s) and/or materials that you are using.

Waterford Early Reading Program _____

Leapfrog _____

Success For All _____

Leveled Books _____

Big Books _____

Harcourt *Trophies* (Basal) _____

Scott Foresman Reading (Basal) _____

Other (Please specify) _____

I use one or more of these programs or materials during my 90 minute literacy instruction.

Yes _____ No _____

My Additional Comments

CCSD

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SCHOOL DISTRICT

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