# Using Macmillan McGraw-Hill *Treasures,* Reading Triumphs, and Treasure Chest: An Up-Close Look at Program Implementation and Impacts

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### **Background of the Study**

School district C adopted new reading curricula from Macmillan/McGraw-Hill for the 2006–07 school year. All schools adopted the core reading program, *Treasures*. Additional schools also began to use *Reading Triumphs*, a program for struggling readers, and *Treasure Chest*, a program for English language learners. At the same time, Westat, a social science research firm in Rockville, Maryland, was asked by Macmillan/McGraw-Hill to undertake an evaluation of the programs, looking at both implementation and student outcomes.

The 2006–07 study addressed the following questions:

- Are teachers using the curricula and its various components?
- Do teachers feel adequately prepared to use the curricula?
- Do teachers feel the curricula meet the needs of their students?
- How well do the core and supplemental curricula work together?
- What factors at the school level/district level affect program implementation?
- How do students perform?

This report presents results from the first year of this evaluation. The focus of the first year's work was to closely examine program implementation and to begin to gather data on student performance. In the evaluation's second year, we will add a comparison site in order to more fully determine the value added of the MM-H curricula.

In this report we provide an in-depth analysis of program implementation using data gathered from mid-year site visits to the schools, logs kept by teachers across several months, and end of year surveys. These data provide a rich picture of program start-up, program use, and program evolution as teachers and principals adopt and adapt the three curricula. We also present information on student performance, using data from the DIBELS assessment system.

#### **Description of the Curricula**

Treasures, the core curriculum. is comprehensive, research-based reading curriculum designed to engage students and enhance reading proficiency. This curriculum is designed to be administered five days a week during a 90- to 120-minute reading/language arts It provides instruction in the five essential elements of early literacy (phonemic awareness, phonics, reading fluency, vocabulary development, and reading comprehension strategies) and offers differentiated instruction for students who are approaching, on, or beyond grade-level reading skills. The curriculum includes both small and large group instruction, leveled readers, and supplemental materials and activities such as theme projects, crosscurricular activities, and workstation flip charts. To gauge student understanding and monitor progress, the program offers such techniques as daily quick check observations, weekly assessments, running records, and unit and benchmark assessments.

Reading Triumphs is a supplemental program for struggling readers, that is, students who are working below grade level. It is designed to be delivered in 45-minute sessions five times per Students can participate in Reading week. Triumphs for a summer, an entire year, or a limited amount of time during the school year, depending on their needs and how the curriculum is used in a particular school or Reading Triumphs is a stand-alone system. program that presents direct instruction for decoding skills, high-frequency words, vocabulary words and strategies, fluency, and reading comprehension skills. Reading Triumphs can be used as an intervention

program in conjunction with *Treasures* or any other core curriculum.

Treasure Chest is a program developed to support students who are considered English language learners (ELL). It expands on the material available in Treasures and can be implemented within the reading/language arts block for small group instruction, pull-out instruction, before- or after-school tutorial instruction, and during summer school. Like Treasures, Treasure Chest is taught five days per week and provides differentiated instruction to address ELL students who are at beginning, intermediate, and advanced language-acquisition levels. The instructional focus of the program is on oral language development, vocabulary acquisition, phonemic awareness and phonics, language structure, comprehension strategies and skills, writing, and language objectives that are aligned with the teachers of English to speakers of other languages (TESOL) standards.

#### Sample and Methodology

District C has 18 regular elementary schools. Our initial sampling design was based on the expectation that while all schools in District C would be using the *Treasures* program, use of Reading Triumphs and Treasure Chest would be more limited.<sup>2</sup> Thus, we divided our sample into two levels: a case study set consisting of 11 schools-schools expected to be using the programs more intensely (and receiving a more complete set of materials)—and an overall sample, expected to be only using the Treasures curriculum. A total of 533 teachers participated in the study and approximately 7,000 K-6 students. All schools received principal and teacher surveys at the end of the year, and all schools assessed their students using DIBELS, a widely used set of short assessments addressing a variety of early reading skills. The case study schools, in addition, were asked to keep logs

<sup>1</sup> There was one exception to this universal usage. In the district's Reading First school, a different curriculum was used in grades K-3.

(twice during the year) of their use of the curricula and were observed in site visits early in the second semester.

#### **Background on District C**

Adopting the MMH curricula was a bold step for District C, as teachers in the upper grades had not participated in direct reading instruction for many years, relying on teacher-created, whole-group novel studies. Test scores had taken a nose-dive and there was a general feeling that something new had to be done. The literacy challenges in District C centered upon two key factors: the lack of family resources to support literacy before children enroll in school, and the mobility of students during the school year.

#### A Look at Early Implementation: Site Visit Data

Westat staff visited the schools in February 2007. The Westat researchers observed 33 classroom teachers in 11 schools over a two-week period.

By the time of the Westat site visits, principals, literacy specialists, and teachers were increasingly accepting the program and finding the consistency brought to reading instruction to be of value.

Teachers were extremely complimentary of the alignment of the three programs—*Reading* 

Treasure Triumphs, Chest, and Treasures. They liked the effectiveness of the intervention curriculum. Reading Triumphs, and wav complemented the core curriculum, Treasures. They were pleased with coordination of

They were enthusiastic about the fact that students who succeeded with *Reading Triumphs* could go directly into the *Treasures* approaching group with confidence....

skills and vocabulary in the two programs. They were enthusiastic about the fact that students who succeeded with *Reading Triumphs* could go directly into the *Treasures* approaching group

<sup>&</sup>lt;sup>2</sup> This distinction blurred over time as schools adopted additional programs and obtained new materials.

with confidence and without experiencing "a gap" in their reading skill instruction.

Because the program was mandated by the district, all teachers used it as their core basal approach to reading instruction. In accordance with the District Pacing Guide, teachers

Principals and vice principals completely supported the adoption and implementation of the Macmillan/McGraw-Hill curricula. These individuals were committed to core literacy and felt that teacher fidelity to the program was essential.

typically taught reading for 90 minutes each day.

Teachers used the three curricula and their components to varying degrees of implementation as prescribed in the TE; however, they all made modifications as they saw fit. Most

Treasures

modifications were made to the structure of Macmillan/ McGraw-Hill suggested lesson plan. When the press of time dictated, teachers extended, condensed, or reorganized the lessons to suit student needs or the weekly class schedule. On the other hand, most teachers said that they "made no modifications" to the *Reading Triumphs* or *Treasure Chest* curricula.

Few teachers in this district used the Macmillan/ McGraw-Hill language arts activities, such as grammar and writing, because they were not mandated by the district. According to teacher reports, the district instructed them to fit grammar and writing into their daily instruction on their own time. Very few formal assessments were observed due to the scheduling of the observations. Most assessments are scheduled for the fifth day of weekly instruction; therefore, only five teachers were observed administering an assessment.

When asked about perceived impacts on student achievement, most principals felt that students at their school were "off to a good start," but that it was too soon to tell how much progress had been made. Teachers and literacy coaches also agreed that gains would be measurable and more obvious after another year of implementation.

Teachers offered a variety of comments about the curricula's efficacy for different populations.

Most respondents felt that below-grade-level students and ELL students in Leveled Reading had made much more progress than they did previously.

Teachers agreed that the *Reading Triumphs* program worked well for students reading two or more years below grade level. The intervention students had higher self-esteem because they felt a part of the whole group since the two programs were compatible and aligned with each other.

## Program Implementation at Mid-Year: Teacher Logs

Teacher Analysis Log data provide a detailed account of program use over a 12-week period during the spring semester of the 2006–07 school year. These data document the frequency and perceived value of program components used to implement the *Treasures*, *Reading Triumphs*, and *Treasure Chest* literacy programs.

#### **Treasures**

A total of 372 *Treasures* logs were completed during the 12-week time period. These logs consisted of a substantial representation of data from all grade levels: 31 for kindergarten, 56 for grade 1, and 285 for grades 2–6. In these grade levels, the majority (80.6 percent) of teachers used the *Treasures* program for 61 to 120 minutes a day. Among these teachers, *Treasures* is most typically used within the reading/language arts block.

**Kindergarten.** Overall, kindergarten teachers adhere closely to the Teacher's Edition when it comes to many reading activities and use more discretion in other areas. In particular, these teachers were less likely to use Unit Opener/Closer, Language Arts, and Monitoring Progress activities frequently or almost always.

On an item-by-item (or activity) basis, the Big Books and High-Frequency Word Cards were the *Treasures* component used on a regular basis by 100 percent of teachers. Regarding perceived value, the Photo Cards were considered high in value by more teachers than any other material or activity (89 percent).

**Grade 1.** Among all the lesson areas, grade 1 teachers implemented Oral Language, Vocabulary, and Leveled Reading groups the most consistently.

The majority of the activities in these areas were conducted almost every time they were offered in the Teacher's Edition. Because of the high

"The Leveled Readers are the best part of the program. They are all on similar topics or similar text for four different levels."

level of implementation fidelity, many items and activities were used by a high percentage of teachers.

Leveled Readers were used by 100 percent of teachers almost every time.

The Phonics activities were used by 95 percent of teachers almost every time, and the Read Main Selection was used as frequently by 93 percent of teachers. In addition, the Teaching Chart, Leveled Readers, and Phonemic Awareness activities were thought to be high in value by the greatest number of teachers across all program components and materials.

Grades 2–6. The overall picture for implementation of *Treasures* for grade 2-6 teachers is slightly different than what is seen among kindergarten and grade 1 teachers. In the lower grades, a higher percentage of teacher used materials and activities almost every time they appeared in the Teacher's Edition. What is seen among grade 2-6 teachers is a greater proportion of teachers using materials and activities frequently as opposed to almost every time. In addition, Language Arts activities are used more frequently in the upper grades. Despite these slight differences, grade 2-6 teacher responses are quite similar to those of the lower grade level teachers.

Across all possible activities and materials a teacher could use in a grade 2–6 *Treasures* lesson, the use of Vocabulary Cards and the Read Main Selection activities were the most frequently used by teachers. For the most valuable, the greatest number of teachers rallied around the Vocabulary Cards, Vocabulary routine, and the Read the Main Selection activity. All three were thought to be high in value by between 81 and 83 percent of teachers.

## Reading Triumphs

For the *Reading Triumphs* program, 81 logs were completed during the 12-week time period, 29 logs for the lower level grades (i.e., kindergarten–grade 2) and 52 for the upper level grades (i.e., grades 3–6). Since there were slight variation in program design between the lower and upper level grades, log data will be presented in grade-level groupings.

Across both grade-level groupings, *Reading Triumphs* was taught for 60 minutes or less each day for an individual targeted class. Among kindergarten–grade 2 teachers, 69 percent taught *Reading Triumphs* within the regular reading/language arts block and 21 percent used this program as a pull-out intervention instruction in a special class. In the upper grade levels, 60 percent of teachers taught *Reading Triumphs* in the regular reading/language arts block and 37 percent used it as a pull-out intervention.

**Grades K–2.** Overall, the most popular and regularly used activities come from the vocabulary and reading/comprehension lesson areas. High-Frequency Word activities were the most valued and used among all lesson components. Choral Reading was also quite popular, and Retelling, Predict, Compare/Contrast and Retell the Story were also highly valued.

**Grades 3–6.** Phonics, vocabulary, and comprehension activities received some of the highest amount of teacher support. The Vocabulary Word Routine was used most consistently by the greatest number of

teachers—73 percent. Phonics activity, Vocabulary Word Routine, and Monitor Comprehension received the highest value ratings from the most teachers (75 percent).

#### Treasure Chest

For *Treasure Chest*, 18 teacher logs were completed throughout the semester. The majority of implementation data came from upper grade-level teachers. Although no kindergarten or grade 1 teachers submitted a log, implementation information is provided through one of the multigrade teachers. Since the organization of the *Treasure Chest* program is consistent across each grade level, grade-level log data are presented together in this section.

As suggested in the Teacher's Edition, *Treasure Chest* is taught by the majority of teachers for 60 minutes each day for an individual targeted class. For 24 percent of teachers, this time occurs within the reading/language arts block, but for a larger percentage (65 percent) *Treasure Chest* is used as a pull-out intervention program.

In looking at the program as a whole, a couple of lesson activities and components stand out. For instance, *Treasure Chest* teachers most consistently adhered to the Comprehension activities in this program more than any other program lesson area. All of the Comprehension activities were highly valued and used almost every time by the teachers. Furthermore, across all lesson components, the oral language activity Build Background was rated high in value by the greatest percentage of teachers—95 percent. Finally, *Preview and Predict* was the one activity throughout the program that every teacher used almost every time.

#### Program Implementation at the End of the Year: Principal and Teacher Survey Data

At the end of the school year, principals and teachers were surveyed to obtain their reflections on the use of the reading programs and how well they were working. The data reflect many of the same themes noted in the site visits and teaching logs, providing a well-substantiated picture of program implementation.

Surveys were sent to principals and teachers in all regular District C elementary schools. The response rate was high—responses were received from 17 out of the 18 principals (95 percent) and 344 out of 396 teachers (87 percent). The surveys asked a series of similar questions about each of the three programs *Treasures*, *Reading Triumphs*, and *Treasure Chest*. Since usage of the curricula differed across schools, different numbers of principals and teachers were able to respond to each question set.

## Principals' Assessments of the Three Programs

Overall, principals have a positive assessment of program implementation across the three programs and, despite some start-up issues, were pleased with the first year of implementation.

A series of questions were asked about some general features of the school and the population its serves. Principal responses indicate that the schools in the sample served many students considered "high needs". Principals reported seven schools to be Title I or Reading First, one in comprehensive school reform, and four in other literacy efforts.

Next we asked about the challenges faced by the school with regard to the needs of its students. The biggest challenge cited was lack of full-time kindergarten (14 of 17) (Eleven of the 17 principals also mentioned minimal pre-reading and reading readiness outside the schools.) Taken together, these responses suggest that principals see early literacy preparation as a weakness in the school community. Additionally, 12 principals said that they had too many students below grade level, while nine

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<sup>&</sup>lt;sup>3</sup> For the schools included in the site visits, our "case study" schools, the response rate for principals was 100 percent and for teachers 87.8 percent; in the non-case-study schools the response rate for principals was 86 percent and for teachers 85.4 percent.

also mentioned that meeting the needs of high performing students was also a challenge. About half cited that multiple languages spoken at home presents a challenge.

In addition, we asked a series of questions about whether there were any impediments to implementation of the programs. For *Treasures*, lack of teacher buy-in was cited by eight of the 12 responding principals as an impediment. The fact that lack of buy-in was mentioned for *Treasures* is not at all surprising as use of this curriculum required teachers to take a very different approach to teaching than they had in the past.

Next we asked a general question about whether or not they would recommend each of the curricula to other principals (Table 1). The overwhelming response was yes. Only one principal said that s/he would not recommend *Reading Triumphs* to another principal. In all the rest of the cases, the program was very well received.

Table 1. Number of principals reporting that they would and would not recommend the curricula to other principals

_	Curriculum						
Recommendations	Treasures	Reading Triumphs	Treasure Chest				
Would recommend	17	13	11				
Would not recommend	0	1	0				

The last series of questions asked about the effectiveness of the programs for different populations of students. Generally, principals reported that *Treasures* was effective for Approaching, On Level, Beyond Level, ELL, and special education students (Table 2).

Table 2. Principals' assessments of the effectiveness of *Treasures* for various student populations

Student level	Effective	Moderately effective
Approaching	16	1
On Level	. 17	0
Beyond Level	. 12	4
ELL students	16	0
Special education.	. 15	2

Some of the open-ended responses offered by principals help to understand their high ratings of the *Treasures* program.

- *Treasures* offers a wide variety of highinterest stories. It attempts to meet the needs of all learners.
- Exposure to good literature practice/reteaching is embedded in the program.
- I like having science and social studies incorporated in reading.
- Provides skill building on the "Big 5."
- Clear skills; skills spiral; many materials for various levels.
- The program is research-based and designed sequentially. I like the clear targets, the structure, small group work, and focus on phonemic awareness, vocabulary, fluency, and comprehension.
- Stories and applications are relevant to the real world for today. The nonfiction is very strong.

Reading Triumphs was judged to be effective by all principals for both ELL and special education students (Table 3).

Table 3.
Principals' assessments of the effectiveness of *Reading Triumphs* for various student populations

Student level		Moderately
Student level	Very Effective	effective
Approaching	15	0
Special education.	15	0

Principals' comments included the following:

- Special education needs this link with what is happening in regular education. Children benefit from knowing they are part of the classroom community. The stories target their interests.
- This program gives you an option to use with approaching readers. It is high interest and motivating to students.
- It provides a program that is set up in a similar manner to the core program. Students can move seamlessly from one program to the next. The program is best used for students who are reading one to two years below grade level.

Comments about *Treasure Chest* were more limited, and some felt that it was too soon to comment since implementation did not begin until rather late in the year. However, one principal commented that he would recommend the program because "small group work with ELL students benefits them in the area of reading. Having materials just at their level is key to their success."

# **Teachers' Assessments of the Three Programs**

End-of-year surveys were gathered on teachers, their classes, their use of the programs, and their perceptions of the programs' effectiveness for different groups of students. Data were examined in two ways: first, we looked at the responses of the overall population; second, we examined the responses by subgroup—grade level, whether or not the school was a Title I school, and whether or not the school was part of the case study sample.

The vast majority of the teachers are female, hold a bachelor's or master's degree, and have a standard teaching credential. Only 9 percent have a certificate or endorsement for teaching reading. On average they have taught for 12 years, with 7 years in their current school.

Eighty-five percent of teachers report teaching reading five days a week, with 84 percent

indicating that they teach reading at least 61 minutes a day (42 percent indicating that they teach between 61 and 90 minutes; 41 percent indicate that they teach reading more than 90 minutes a day). On average there are 17 students in a class, with eight classified as approaching, 10 as On Level, and seven Beyond Level. The average number of ELL students per class is five.

Use and Assessment of *Treasures*. Several survey questions asked teachers about the extent to which the prescribed aspects of the *Treasures* program were used. Approximately 46 percent indicated that they usually finished the prescribed lessons described in the Teacher's Edition. However, 78 percent also said that there was a part of the prescribed lesson that they frequently left out (Table 4).

Table 4.

Prescribed components most frequently left out of lessons

Component	Percent
Writing	75
Grammar	

The fact that writing was left out by so many teachers is not surprising, given the data from our site visits and the fact that use of this component was not required. Teachers most frequently indicated that they left components out because they were not a high priority in the district.

Teachers were also asked a series of open-ended questions about the parts of the program that they found most useful. Teachers responded as follows:

	Response
Leveled Readers	133
Word Study/Vocabulary	103
Basal/Main Selection	102
Phonemic Awareness/Phonics	43
Overheads/Graphic Organizers	43
Comprehension/Re-Tell	41

When a new program is introduced, it is important that teachers receive training to familiarize themselves with the program and how it can be used. Survey questions addressed training and how well it was received.

- Ninety-one percent of the teachers indicated that they received training to teach Treasures.
- The average amount of training was 12 hours. However, teachers in Title I schools report receiving significantly less training than those in non-Title I schools—10.6 vs. 13.2 hours. Sources of training included a Macmillan/McGraw-Hill trainer (37 percent), a district trainer (95 percent), and other (4 percent).
- Approximately 60 percent of the teachers rated their training as adequately preparing them to teach the program.

When asked what kinds of additional training would be of benefit, the most frequent suggestions were "training or video by a teacher who has used the program," and "short initial training with follow-up".

Additional questions addressed perceptions of the Treasures program with regard to its use with students. First we asked about the pace of the program, i.e., whether it was on target, too slow, or too fast. The majority of teachers said that the pace was just about right.

Second, we asked about the effectiveness of the program for students at different levels of reading skill. Ninety percent of the teachers rated Treasures as effective for On Level students.

A similar set of questions was asked about the effectiveness of *Treasures* for ELL and special education students. Respondents were also positive with regard to the effectiveness of *Treasures* for these special populations. Sixty-four percent of the teachers felt that the program was effective for ELL students, while 49 percent felt that the program was effective for special education students.

Finally teachers were asked if they would continue to teach the *Treasures* program if given the choice and what advice they would give to a new teacher about to use *Treasures*. Teachers'

Teachers endorsed the *Treasures* program and said that if given a choice they would continue to use the program.

responses indicated strong overall support for the program, as 83 percent indicated that they would choose to continue using the program.

As for advice offered to new teachers, by far the most frequent suggestion was "don't try to do it all at once; gradually add as you become familiar with the program."

Use and Assessment of *Reading Triumphs*. Similar to *Treasures*, 43 percent of the teachers indicated that they usually finished the lessons as described in the Teacher's Edition. Fifty-two percent indicated that there was a part of the lesson that they frequently left out. Teachers in Title I schools and in the case study sample were significantly more likely to finish the lessons than teachers in non-Title I and non-case-study schools.

When asked which components were judged to be most useful, the teachers identified the following:

	Response
Basal/Main Selection	48
Phonemic Awareness/Phonics	33
Word Study/Vocabulary	30
High Frequency Word/Cards	20
Mini Books	17
Practice Books	16

Training for *Reading Triumphs* was more limited than that offered for *Treasures*. Nonetheless, ratings of adequacy of preparation were quite similar to those of Treasures.

The next series of questions addressed use of the program with students.

Taken together responses provide a quite positive picture. Most teachers said that the pace of the program was just about right. Further, when asked about its effectiveness, 87 percent said the program was very/ moderately effective for Approaching students,

"I like the rhymes and chimes in small groups. I think that it is a useful strategy for developing phonemic awareness. I also think the *Reading Triumphs* books are a positive experience for the kids."

and 75 percent gave these ratings for special education students. Seventy-eight percent said they would continue to teach the program, if given a choice.

The advice they would offer to new teachers echoes that reported for *Treasures*, i.e., "don' t try to do it all at once; gradually add as you become familiar with the program."

Use and Assessment of *Treasure Chest*. Only 17 teachers responded that they used *Treasure Chest*. Responses to the open-ended questions were also quite limited. In this section, therefore, we present a topline summary of their responses.

Seventy-one percent of the teachers said that the pace was "just about right".

The program was rated as effective for 94% of the advanced and intermediate ELL students.

Fifty-seven percent of the teachers judged that the training provided them was adequate preparation to teach the curriculum.

Eighty-two percent said they would continue to teach the curriculum, if given a choice.

#### **Program Outcomes: DIBELS Data**

Since 2001–02, the district has been using the Dynamic Indicators of Basic Early Literacy Skills to regularly monitor the development of early literacy and early reading skills. DIBELS tests are a set of standardized, individually

administered measures to test fluency in the following areas: Initial Sounds, Letter Naming, Phoneme Segmentation, Nonsense Words, and Oral Reading.

We examined student-level DIBELS records from 2001–02 to 2006–07. Essentially, data before 2006 can be regarded as before program and those after 2006 as after program. However, while data exist for K–3 from 2001 to 2007, the district did not collect grades 4–6 data until 2004–05. Furthermore, DIBELS had not been used on a wide basis until the last two years, and therefore the majority of the 18 schools do not have data from the earlier years.

In light of these data constraints, we decided to create two samples:

- Sample 1 comprised students from all 18 schools and years available, i.e., 7,672 students in 2001–06 and 8,741 students in 2006–07. The sample is broad-based, but some schools are overrepresented.
- Sample 2 included only students from 12 schools with data from both 2005–06 and 2006–07, i.e., 4,221 students in 2005–06 and 4,403 students in 2006–07. Although the sample does not cover earlier years or all the schools, the before and after groups are more comparable because the same schools were present in both years.

Given the incomplete data described previously, we used independent *t*-tests to compare whether the before and after differences are statistically significant. In addition, we compared whether the rates of growth are statistically significant. We also present the percentage of students achieving different DIBELS benchmarks.

Table 5 presents comparisons for students from all schools between the 2001–06 (before) and 2006–07 (after) cohorts for grades K–3, and between 2004–06 (before) and 2006–07 (after) for grades 4–6. The results are in raw scores, which indicate the number of correct answers in each test.

Of the 34 DIBELS assessments from K-6, we found statistically significant higher achievement for the after cohort in 30 measures

at the 0.05 level. The results show that students in the 2006-07 cohort outperformed their counterparts from previous years.

Table 5. Comparison of assessment results for students in all schools between 2001–06 and 2006–07, by grade and assessment in raw score

by grade and assessment in raw	2001–06			2006–07			2001–06	
Assessment	Number	Mean	Std. err.	Number	Mean	Std. err.	to 2006–07	sig.
Kindergarten fall	<u>ı                                      </u>		1	1		ı	,	
Initial Sound Fluency	1,104	9.6	9.0	985	11.0	9.7	+	0.00
Letter Naming Fluency	1,104	11.7	13.6	986	14.0	14.7	+	0.00
Kindergarten winter								
Initial Sound Fluency	1,053	22.9	17.5	938	23.0	17.5	+	0.97
Letter Naming Fluency	1,054	24.7	16.4	948	29.2	18.1	+	0.00
Phoneme Segmentation Fluency	1,053	22.3	16.9	941	22.2	16.7	-	0.81
Nonsense Word Fluency	1,052	12.8	15.2	938	18.1	19.3	+	0.00
Kindergarten spring								
Letter Naming Fluency	1,219	34.5	17.1	964	37.2	17.9	+	0.00
Phoneme Segmentation Fluency	1,218	33.4	17.5	962	37.0	19.5	+	0.00
Nonsense Word Fluency	1,218	22.9	18.2	961	26.6	20.8	+	0.00
Grade 1 fall								
Letter Naming Fluency	1,261	29.2	16.7	1,168	36.0	18.2	+	0.00
Phoneme Segmentation Fluency	1,258	23.6	16.3	1,167	29.1	17.6	+	0.00
Nonsense Word Fluency	1,258	18.3	19.6	1,166	27.0	24.7	+	0.00
Grade 1 winter								
Phoneme Segmentation Fluency	1,272	42.0	16.7	1,144	43.9	16.6	+	0.01
Nonsense Word Fluency	1,266	44.0	24.3	1,145	49.9	27.4	+	0.00
Oral Reading Fluency	1,258	24.0	27.9	1,143	30.7	32.6	+	0.00
Grade 1 spring								
Phoneme Segmentation Fluency	1,229	48.4	14.1	1,122	48.3	13.6	-	0.87
Nonsense Word Fluency	1,251	61.3	30.8	1,128	63.8	31.8	+	0.05
Oral Reading Fluency	1,251	43.7	32.2	1,128	50.2	36.2	+	0.00
Grade 2 fall								
Nonsense Word Fluency	1,094	53.2	32.5	1,144	59.1	32.1	+	0.00
Oral Reading Fluency	1,329	43.5	34.2	1,149	49.8	35.7	+	0.00
Grade 2 winter								
Oral Reading Fluency	1,156	67.7	40.4	1,113	76.2	40.4	+	0.00
Grade 2 spring								
Oral Reading Fluency	1,312	82.74	40.3	1,075	89.4	39.9	+	0.00

Table 6. Comparison of assessment results for students in all schools between 2001–06 and 2006–07, by grade and assessment in raw score—continued

by grade and assessment in raw		2004–06			2006–07		2004–06	
Assessment	Number	Mean	Std. err.	Number	Mean	Std. err.	to 2006–07	Sig.
Grade 3 fall Oral Reading Fluency	1,242	71.0	37.0	1,202	80.2	36.8	+	0.00
Grade 3 winter Oral Reading Fluency	1,174	82.4	39.3	1,179	95.1	39.9	+	0.00
Grade 4 fall Oral Reading Fluency	223	81.1	34.3	1,220	90.3	35.0	+	0.00
Grade 4 winter Oral Reading Fluency	359	101.2	34.9	1,198	105.0	36.3	+	0.07
Grade 4 spring Oral Reading Fluency	412	112.1	39.3	1,135	117.8	40.2	+	0.01
Grade 5 fall Oral Reading Fluency	277	98.3	39.6	1,163	112.1	39.3	+	0.00
Grade 5 winter Oral Reading Fluency	370	111.3	40.1	1,158	119.3	39.3	+	0.00
Grade 5 spring Oral Reading Fluency	447	119.8	37.9	1,146	128.6	35.3	+	0.00
Grade 6 fall Oral Reading Fluency	210	111.8	38.6	1,288	121.2	37.0	+	0.00
Grade 6 winter Oral Reading Fluency	279	117.1	40.3	1,267	125.4	40.4	+	0.00
Grade 6 spring Oral Reading Fluency	215	106.0	36.7	1,248	121.5	37.5	+	0.00

Table 7 and 8 presents the comparison for 12 selected schools between the 2005–06 and 2006–07 cohorts. Of the 34 DIBELS assessments from K–6, we found statistically significant higher

achievement for the after cohort in 23 measures at 0.05 level. The results for sample 2 are similar to those of sample 1.

Table 7. Comparison of assessment results between 2005–06 and 2006–07 cohort students, by grade and assessment in raw score

assessment in raw score		2005–06			2006-07	2005–06		
Assessment	Number	Mean	Std. err.	Number	Mean	Std. err.	to 2006–07	Sig.
Kindergarten fall			I.	I I		ı	2000 07	
Initial Sound Fluency	419	7.7	7.5	571	10.4	9.7	+	0.00
Letter Naming Fluency	419	9.2	11.5	572	12.0	14.1	+	0.00
Kindergarten winter								
Initial Sound Fluency	467	20.8	16.3	559	25.0	19.6	+	0.00
Letter Naming Fluency	468	23.7	16.3	559	27.7	17.9	+	0.00
Phoneme Segmentation Fluency	467	18.8	15.6	556	23.8	16.5	+	0.00
Nonsense Word Fluency	466	12.7	16.5	557	17.7	16.6	+	0.00
Kindergarten spring								
Letter Naming Fluency	546	34.7	17.2	568	36.6	17.6	+	0.06
Phoneme Segmentation Fluency	545	31.7	17.4	567	39.3	18.9	+	0.00
Nonsense Word Fluency	546	23.0	19.3	566	27.7	18.8	+	0.00
Grade 1 fall								
Letter Naming Fluency	542	29.6	16.9	611	34.5	18.4	+	0.00
Phoneme Segmentation Fluency	539	23.5	16.6	611	32.9	17.6	+	0.00
Nonsense Word Fluency	539	17.8	18.6	610	26.2	22.6	+	0.00
Grade 1 winter								
Phoneme Segmentation Fluency	560	41.4	17.2	595	46.0	14.5	+	0.00
Nonsense Word Fluency	562	44.3	22.0	596	50.9	25.7	+	0.00
Oral Reading Fluency	559	24.3	27.5	594	26.6	28.2	+	0.16
Grade 1 spring								
Phoneme Segmentation Fluency	581	46.1	13.4	573	50.4	12.6	+	0.00
Nonsense Word Fluency	581	59.5	29.2	579	66.1	30.6	+	0.00
Oral Reading Fluency	581	43.4	31.1	579	46.7	32.2	+	0.07
Grade 2 fall								
Nonsense Word Fluency	600	54.5	32.4	601	60.6	30.8	+	0.00
Oral Reading Fluency	599	42.6	33.4	603	44.4	31.7	+	0.34
Grade 2 winter								
Oral Reading Fluency	532	68.7	40.7	583	70.1	36.6	+	0.54
Grade 2 spring								
Oral Reading Fluency	616	81.03	38.5	566	83.2	35.8	+	0.32

Table 8. Comparison of assessment results between 2005–06 and 2006–07 cohort students, by grade and assessment in raw score—continued

assessment in raw score—continue		2005-06			2006-07	2005–06		
Assessment	Number	Mean	Std. err.	Number	Mean	Std. err.	to 2006–07	Sig.
Grade 3 fall			•			•		
Oral Reading Fluency	533	65.1	34.5	598	74.3	35.9	+	0.00
Grade 3 winter								
Oral Reading Fluency	499	80.4	38.4	590	88.0	39.0	+	0.00
Grade 3 spring								
Oral Reading Fluency	544	95.2	37.7	577	101.4	36.7	+	0.01
Grade 4 fall								
Oral Reading Fluency	222	81.2	34.3	594	82.5	34.6	+	0.63
Grade 4 winter								
Oral Reading Fluency	309	100.4	35.3	581	96.7	34.6	-	0.13
Grade 4 spring								
Oral Reading Fluency	367	112.3	39.8	545	106.9	37.7	-	0.04
Grade 5 fall								
Oral Reading Fluency	277	98.3	39.6	463	107.2	39.9	+	0.00
Grade 5 winter								
Oral Reading Fluency	316	110.0	41.0	463	115.2	39.7	+	0.08
Grade 5 spring								
Oral Reading Fluency	394	118.7	38.3	451	123.9	35.7	+	0.04
Grade 6 fall								
Oral Reading Fluency	209	112.2	38.3	613	115.2	36.2	+	0.30
Grade 6 winter								
Oral Reading Fluency	230	115.6	41.5	593	118.8	39.7	+	0.32
Grade 6 spring								
Oral Reading Fluency	167	103.0	37.4	579	116.2	36.7	+	0.00

While Tables 7 and 8 reveal that students in the after-program cohort performed at a higher level than those in the before-program cohort, it is not clear whether the after cohort had a higher rate of growth than the before cohort. Both tables show that the students in after cohort started at a higher performance level, based on the fall assessment results.<sup>4</sup>

The analyses so far have not addressed how students fared relative to the benchmarks on these tests. We recoded the raw data scores in terms of student proficiency for students, using the DIBELS categories at risk/deficit, some risk/emerging, and low risk/established.

Table 9 displays the distribution by grade level and proficiency benchmark category for the before and after cohort. Over half of the students in 20 assessments were rated as low risk in 2006–07. Most notable were grade 1 Phoneme Segmentation Fluency in winter and spring, in which 75 and 86 percent of students, respectively, were low risk.

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<sup>&</sup>lt;sup>4</sup>For Initial Sound Fluency (kindergarten), we used the winter assessment as end results because it is not assessed in spring.

Table 9. Comparison of assessment results between 2001–06 and 2006–07 cohort students, by grade and assessment in proficiency level

assessment in proficiency lev	V C1			Grade	s K-3			
		200	1–06			200	6–07	
Assessment	N	At risk/ deficit	Some risk/ emerging	Low risk/ estab- lished	N	At risk/ deficit	Some risk/ emerging	Low risk/ estab- lished
Kindergarten fall								
Initial Sound Fluency	1,104	28.0%	22.0%	50.0%	985	20.5%	21.4%	58.1%
Letter Naming Fluency	1,104	29.6	24.5	45.8	986	25.9	19.8	54.4
Kindergarten winter								
Initial Sound Fluency	1,053	19.7	42.7	37.6	938	17.8	47.0	35.2
Letter Naming Fluency	1,054	33.6	22.8	43.6	948	25.7	20.0	54.2
Phoneme Segmentation Fluency	1,053	21.7	24.6	53.8	941	20.9	25.5	53.6
Nonsense Word Fluency	1,052	35.8	24.3	39.8	938	26.7	19.1	54.3
Kindergarten spring								
Letter Naming Fluency	1,219	36.8	25.3	38.0	964	32.2	22.8	45.0
Phoneme Segmentation Fluency.	1,218	13.3	31.7	55.0	962	12.6	26.5	60.9
Nonsense Word Fluency	1,218	35.8	24.1	40.1	961	29.4	21.4	49.1
Grade 1 fall								
Letter Naming Fluency	1,261	42.0	26.6	31.5	1,168	27.7	24.5	47.9
Phoneme Segmentation Fluency.	1,258	26.4	45.1	28.5	1,167	19.3	38.4	42.3
Nonsense Word Fluency	1,258	48.2	24.2	27.7	1,166	29.5	24.4	46.1
Grade 1 winter								
Phoneme Segmentation Fluency.	1,272	4.3	25.0	70.7	1,144	3.9	21.5	74.6
Nonsense Word Fluency	1,266	27.6	39.1	33.3	1,145	20.6	35.8	43.6
Oral Reading Fluency	1,258	29.4	33.1	37.4	1,143	20.8	29.9	49.3
Grade 1 spring								
Phoneme Segmentation Fluency.	1,229	0.7	13.3	85.9	1,122	1.7	11.9	86.4
Nonsense Word Fluency	1,251	10.7	32.9	56.4	1,128	11.1	27.4	61.5
Oral Reading Fluency	1,251	26.9	27.4	45.6	1,128	22.9	24.0	53.1
Grade 2 fall								
Nonsense Word Fluency	1,094	24.4	30.1	45.5	1,144	16.5	29.2	54.3
Oral Reading Fluency	1,329	37.4	19.9	42.7	1,149	29.2	22.5	48.4
Grade 2 winter								
Oral Reading Fluency	1,156	37.5	13.7	48.8	1,113	28.8	14.1	57.1
Grade 2 spring								
Oral Reading Fluency	1,312	35.9	20.3	43.8	1,075	30.2	17.3	52.5
Grade 3 fall								
Oral Reading Fluency	1,242	32.7	26.9	40.4	1,202	24.0	24.0	52.1

Table 10. Comparison of assessment results between 2001–06 and 2006–07 cohort students, by grade and assessment in proficiency level—continued

assessment in proficiency ic	, 02 0022			Grade	s K-3					
	1	200	1–06			25.4 21.4  20.3 31.2  2006–07  At risk/ Some risk/emerging  32.1 20.5  26.7 23.6  26.9 25.8  23.0 19.7  23.7 18.7  20.4 20.8  16.0 19.6	6–07			
Assessment	N	At risk/ deficit	Some risk/ emerging	Low risk/ estab- lished	N			Low risk/ estab- lished		
Grade 3 winter Oral Reading Fluency	1,174	35.8	24.8	39.4	1,179	25.4	21.4	53.2		
Grade 3 spring Oral Reading Fluency	1,237	28.2	32.3	39.5	1,157	20.3	31.2	48.5		
		Grades 4–6								
		200	4–06			200	6–07			
Assessment	N	At risk/ deficit	Some risk/ emerging	Low risk/ estab- lished	N			Low risk/ estab- lished		
Grade 4 fall Oral Reading Fluency	223	46.2	15.2	38.6	1,220	32.1	20.5	47.4		
Grade 4 winter										
Oral Reading Fluency	359	29.2	26.7	44.0	1,198	26.7	23.6	49.7		
Grade 4 spring Oral Reading Fluency	412	35.2	23.1	41.7	1,135	26.9	25.8	47.3		
Grade 5 fall Oral Reading Fluency	277	37.9	17.0	45.1	1,163	23.0	19.7	57.3		
Grade 5 winter Oral Reading Fluency	370	33.5	18.6	47.8	1,158	23.7	18.7	57.6		
Grade 5 spring Oral Reading Fluency	447	32.0	20.8	47.2	1,146	20.4	20.8	58.8		
Grade 6 fall Oral Reading Fluency	210	21.9	21.9	56.2	1,288	16.0	19.6	64.4		
Grade 6 winter Oral Reading Fluency	279	34.4	20.1	45.5	1,267	27.9	19.8	52.2		
Grade 6 spring Oral Reading Fluency	215	46.0	20.5	33.5	1,248	30.4	20.6	49.0		

NOTE: Percents may not add to 100 because of rounding.

#### **Summary**

This Year 1 implementation report provides encouraging data with regard to the districts' implementation of the new *Treasures, Reading Triumphs*, and *Treasure Chest* programs, as well as the impact of these programs on student learning. Specifically, analyses of implementation data show the following:

- Teachers reported that after having been overwhelmed with all of the new program components in the beginning, they became increasingly more comfortable with the *Treasures* program over time.
- Reading Triumphs was also judged to be working well. While moving from a flexible system to a more structured instructional system was a challenge for some teachers, over time the value of the more structured and systematic approach is being recognized.
- Principals uniformly report being pleased with the instructional program, especially Treasures, as experience with Reading Triumphs and Treasure Chest was more limited.

- By and large, teachers were implementing the program as designed and using the components that the district had mandated.
- Administrators, literacy coachers, and teachers reported that they felt students were making good progress in reading. What they had seen in the past was described as a "flat-lining effect." What they were seeing at the time of the site visits was steady growth, with students making slow progress from benchmark to benchmark. For these reasons, most teachers said that they would use the program in the future even if it were not mandated.
- Analyses of the DIBELS data present positive results. The data show that after only 1 year of use, students in the after-program-use cohort performed at a higher level than those in the before-program-use cohort in 30 out of 34 areas in early literacy and reading skills.

In addition, over half of the students in 20 of the 34 assessments were rated as proficient according to DIBELS benchmarks.

#### APPENDIX 1

## **Graphs of Reading Achievement On DIBELS Comparing before and After Using Treasures**











