

# A Report on the Effects of SRA/McGraw-Hill's *Reading Mastery, Signature Edition*: A Response to Intervention Solution

## Introduction

### *The Problem*

Although reading achievement in the United States has been inching upward for the past few years, Americans are far from being able to declare “mission accomplished” with respect to the *No Child Left Behind* goal of having all children reading on grade level by the 2013-2014 school year. In fact, student performance on the 2007 National Assessment of Education Progress (NAEP) clearly suggests that if reading achievement continues on its current trajectory, there is no way we will reach this goal in just four more years.

As seen in Exhibit 1, one-third (34%) of American fourth-graders performed below the *Basic* level of reading achievement on the NAEP in 2007; this means these students were not able to demonstrate an understanding of the text they read. In contrast, nearly one-fourth (24%) of these students performed at the *Proficient* level, which indicates they were able to make inferences, draw conclusions, and connect the text to their own experiences, while 7 percent were able to judge texts critically. Put another way, that's a mere 31 percent of American fourth graders who are functioning on or above grade level in reading.

Exhibit 1 also shows that many of our children continue to struggle with reading as they progress through school. That is, only 27 percent of the nation's eighth graders were able to make inferences, draw conclusions, and connect the text to their own experiences. As alarming as this statistic may sound, it pales in comparison to the fact that only 2 percent of these students demonstrated the ability to think critically about the test they read. Thus, to say that American educators need a different strategy for teaching children to read is a gross understatement. So, the only question remaining is how can we fix this problem?

**Exhibit 1**

2007 NAEP Reading Results		
Performance Level	4 <sup>th</sup> Grade	
Basic	34%	43%
Proficient	24%	27%
Advanced	07%	02%

### ***One Proposed Solution***

SRA/McGraw-Hill's *Reading Mastery, Signature Edition* is a reading intervention program developed by Direct Instruction (DI) author and founder Siegfried Engelmann. *Reading Mastery*, like all DI programs, has key instructional features that are not built into most non-DI programs. For example, all DI classrooms use quick pacing and group responses, planned correction procedures, and frequent cumulative review. The Reading Strand of the *Reading Mastery, Signature Edition*, which was the focus of this study, addresses the five essential components of reading as identified by The National Reading Panel—phonemic awareness, phonics and word analysis, fluency, vocabulary, and comprehension. In addition to providing spelling instruction, *Reading Mastery* also helps students develop decoding, word recognition, and comprehension skills that they can transfer to other subject areas.

### ***Description of the Research Site and Purpose of the Study***

PS 396 is a PreK–4 school located in the Bronx, New York. The school's 80 staff members serve an ethnically diverse and economically disadvantaged population of roughly 280 students, 77 percent of whom are Hispanic and 21 percent African American. About one-fourth of the students speak English as a second language, and the vast majority (92%) qualifies for free or reduced-priced meals. Considering the fact that the research has consistently shown that income increases with educational attainment, few readers would be surprised to learn that since only about 10 percent of the adults in the community have a college education, the median annual household income in this neighborhood is a little less than \$24,000. Likewise, readers may not be startled to hear that in 2008, only 24 percent of the students at PS 396 met or exceeded the state standards for English Language Arts (ELA)—the average for the state of New York was 70 percent.

In spite of these apparent challenges, the students at PS 396 have made considerable gains in math performance for the past several years. Encouraged by this success, the principal,

## **Methodology**

### ***Research Design***

Initially, Mr. Wright and the researchers decided that the best research design to employ would be a group randomized-controlled trial, with half the students in PS 396 randomly assigned to use the Reading Strand of *Reading Mastery*, and the other half randomly assigned to continue using the reading intervention programs and strategies that were already in place at the school. However, as word of an impending reading intervention study spread throughout the school, an overwhelming majority of the teachers asked the principal if they could participate in the study. Being all too familiar with role that teacher buy-in plays in the success of any new instructional initiative, Mr. Wright asked the researchers to modify the research design to accommodate the additional teachers.

In the end, they agreed to employ a non-randomized comparison group research design, using four of PS 396's peer schools as the comparison group. (Each New York City public school is assigned to a peer group based on key demographics such as racial composition, Title I

## ***Fidelity of Program Implementation***

In August of 2008, about ten days prior to the beginning of classes, all teachers selected to teach *Reading Mastery* were trained by an SRA cons

**Interviews**

Mr. Wright agreed to let researchers from SRA interview him and the *Reading Mastery* teachers at the end of the school year to get a sense of their overall opinion of program. The teacher interviews would also be used to validate the data teachers entered on their weekly lesson logs. The principal also agreed to let researchers interview a small sample of students at the end of the school year to learn their feelings about the new reading program. The principal- and teacher-interview protocols consisted of fourteen open-ended questions, while the student protocol consisted of nine open-ended questions. McGraw-Hill researchers tried out all interview protocols for clarity, flow, and timing prior to using them in the study.

**Lesson Logs**

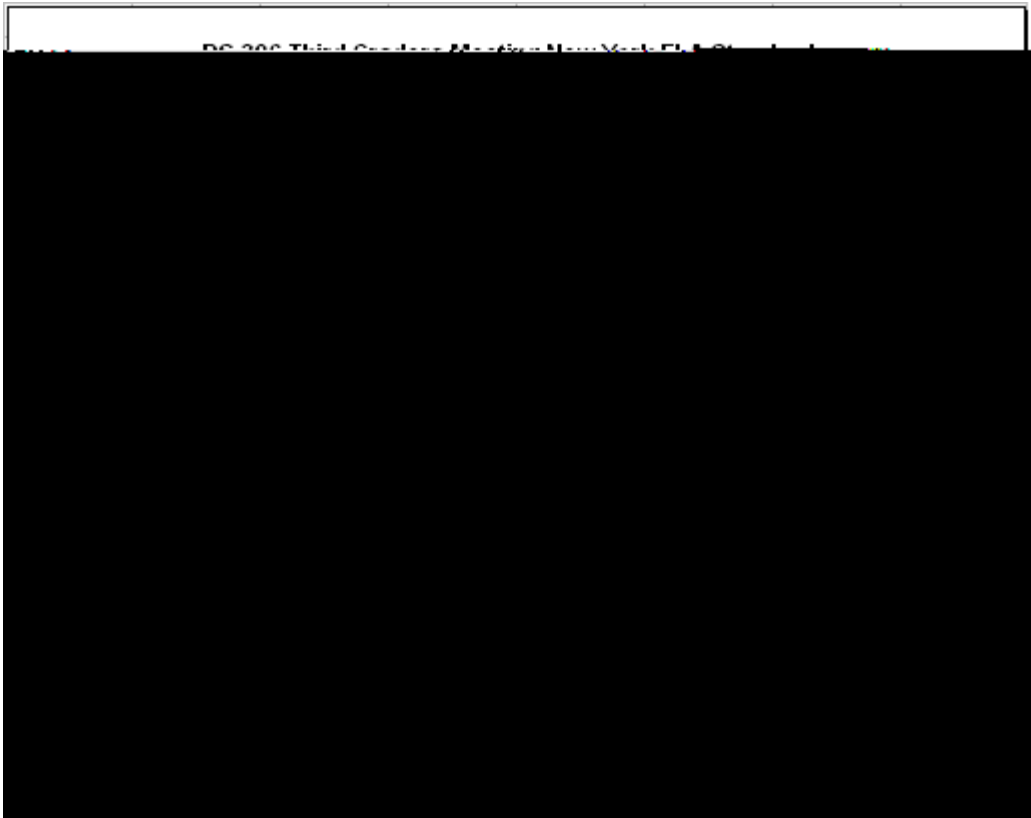
The Direct Instruction consultant created an online multi-item lesson log for teachers to complete weekly. The log was designed to capture the number of days teachers actually taught *Reading Mastery*, the number of lessons completed, the number of students passing fluency check-outs, and any teacher notes related to students' progress.

## Results

### *New York State English Language Arts Test*

As mentioned earlier, students at PS 396 have struggled with reading for quite some time; however, after experiencing *Reading Mastery* for just one school year, their ELA scores improved quite significantly. While Exhibit 3 shows that none of the students met the state's ELA standards *with distinction*, it also clearly demonstrates that the number of PS 396 third graders meeting the state's ELA standards increased rather significantly from about 30 percent in 2008 to roughly 88 percent in 2009.

### Exhibit 3



Like Exhibit 3, Exhibit 4 also shows that none of the PS 396 students who were in the third grade during the 2007-08 school year met the state's ELA standards *with distinction* as fourth graders; however, it does demonstrate that there was a positive shift in reading performance this year. For instance, the overall percentage of students failing to meet standards fell from nearly 18 to 10 percent, while the percentage of students fully meeting standards increased by nearly 11 percentage points—from about 30 to 41 percent.

**Exhibit 4**

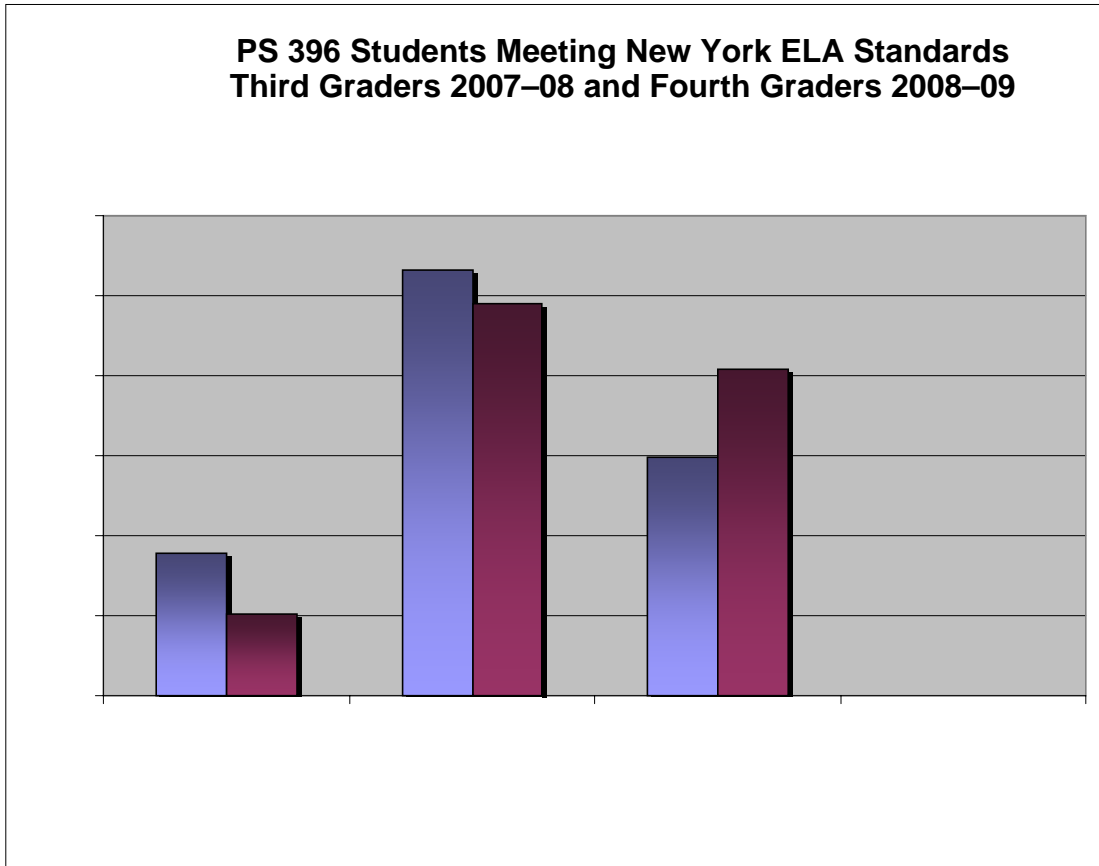


Exhibit 5 illustrates the change in percentile ranking PS 396 and its peer schools experienced on their ELA test from the spring of 2008 to the spring of 2009. PS 396 made the largest gain (18 percentile points), moving from the 24<sup>th</sup> to the 42<sup>nd</sup> percentile. The largest gain posted by a peer school, six percentile points, was seen at Peer School 2.

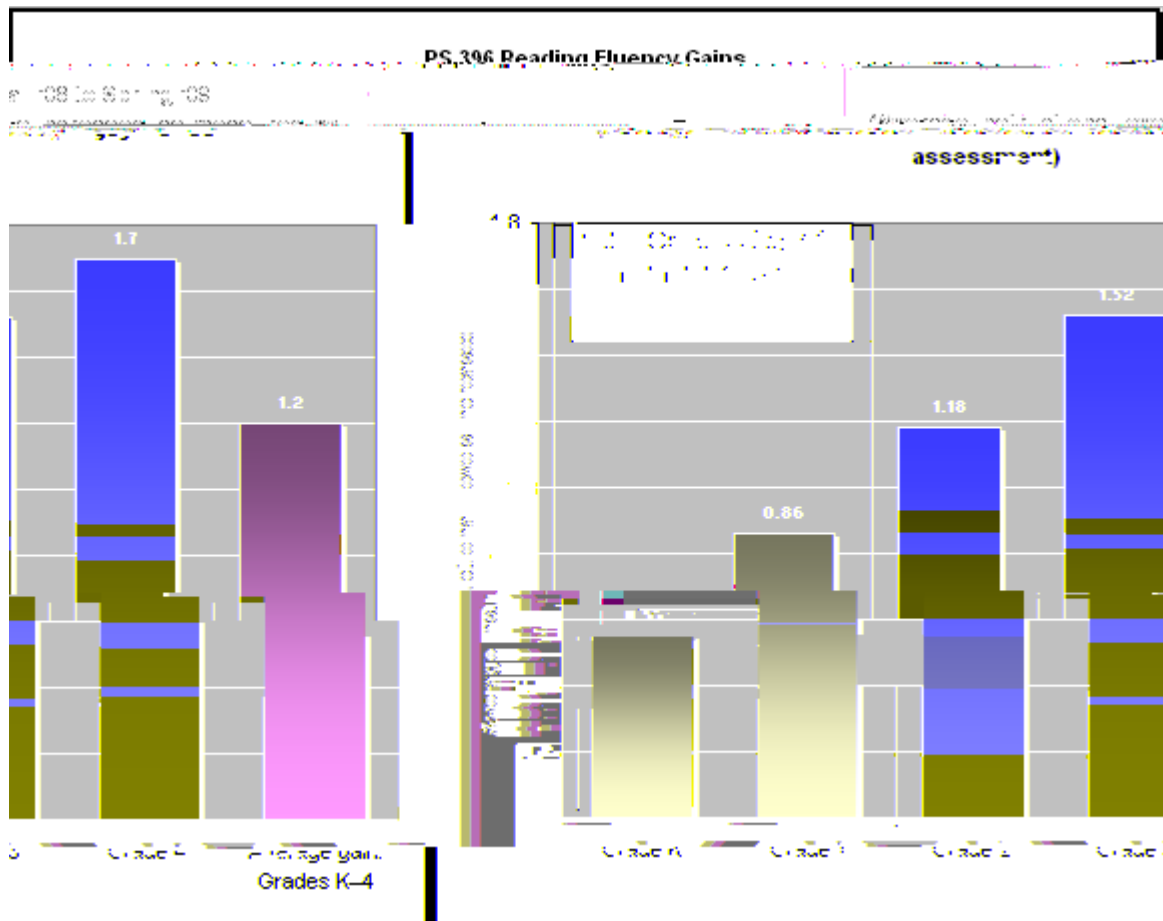


## Rigby Reading Assessment and Diagnostic System (READS)

### Kindergarten and First Grade

Although one combination kindergarten and first grade class did pilot the *Reading Mastery* program, researchers only received spring '09 Rigby test results for three of those students; therefore, those results were included in this report. That said, however, it is worth noting that the progress of the other kindergarten and first grade students at PS 396—those who did not use *Reading Mastery*—was not as extensive as that of the second, third, and fourth graders who did use the program. Exhibit 6 illustrates this point.

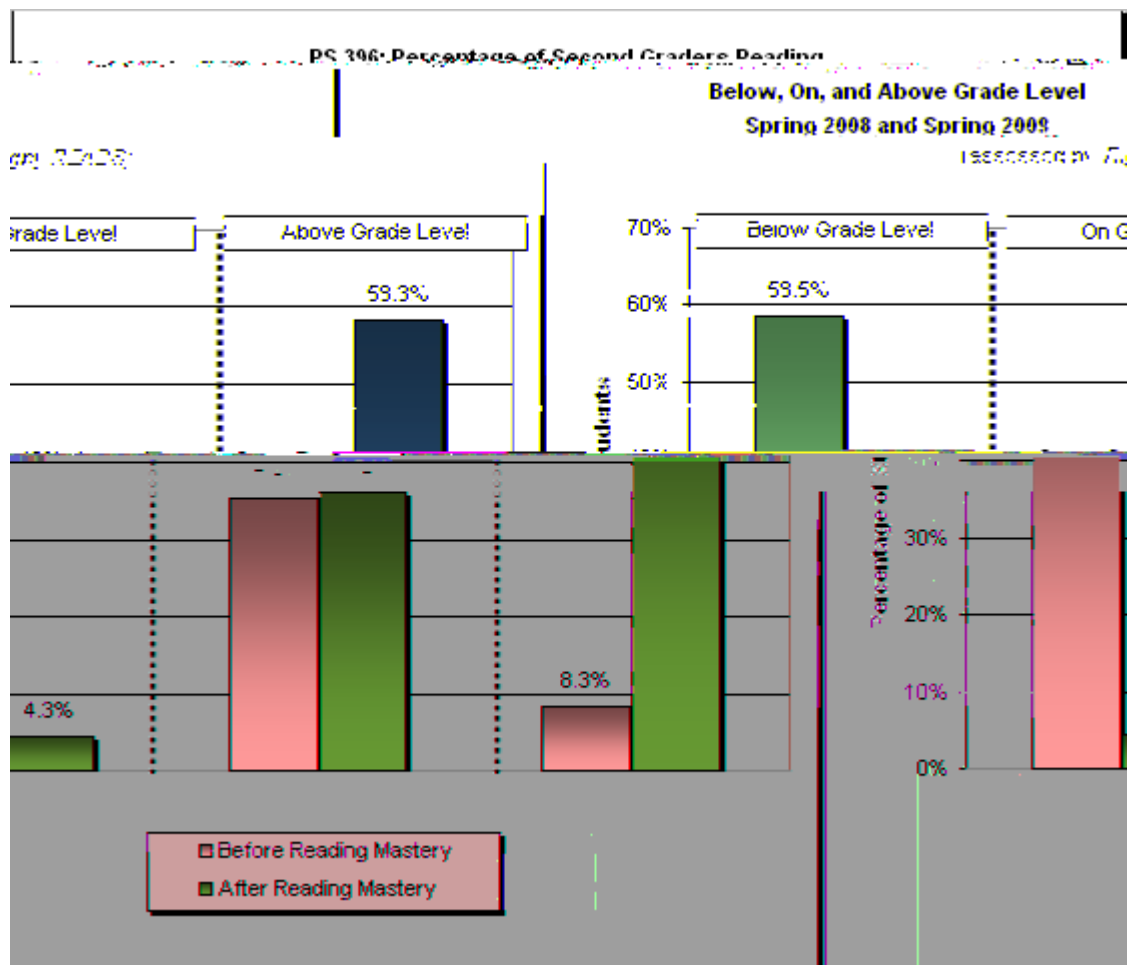
Exhibit 6



## Second Grade

In the spring of 2008, forty-eight second graders at PS 396 took the *Rigby READS* assessment. The test showed that 15 students (36%) were reading on grade level, and only 4 were reading above grade level before being exposed to *Reading Mastery*. Over half (56%) were reading below grade level. When the students who were in the second grade in the spring of 2009 took the test—after experiencing *Reading Mastery*—the results were significantly higher than those of the previous school year. As shown in Exhibit 7, nearly all (94%) of the students were reading on or above grade level. More specifically, 36 percent of the students were reading on grade level and 58 percent were reading above level.

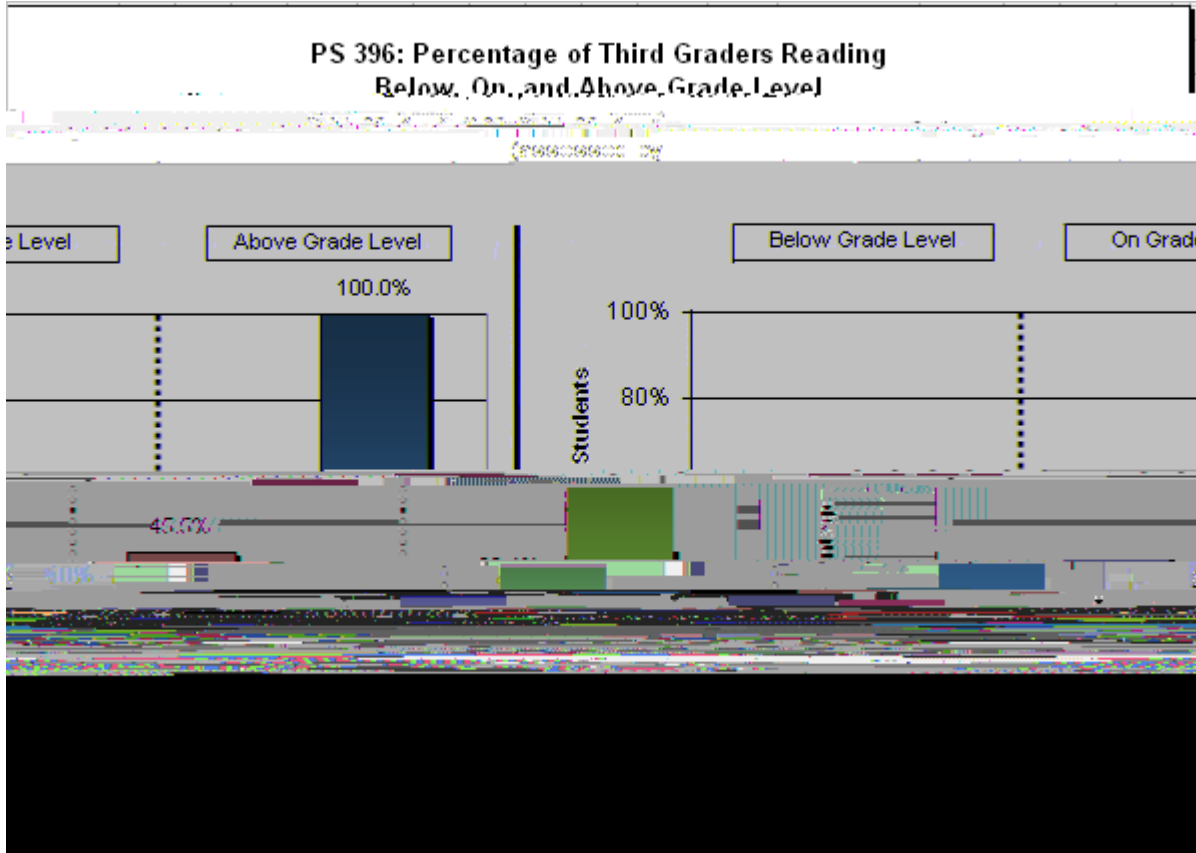
### Exhibit 7



### Third Grade

In the spring of 2008, thirty-three third graders at PS 396 took the *Rigby READS* assessment. Eighteen percent of these students scored below grade level, 45 percent scored on grade level, and 36 percent scored above grade level. In the spring of 2009, as seen in Exhibit 8, all third graders at PS 396 scored above grade level, after being exposed to *Reading Mastery* for just one academic year.

Exhibit 8



**Fourth Grade**

When the 55 fourth graders at PS 396 took the *Rigby READS* assessment in the spring of 2008, the majority (57%) of them scored below grade level, 40 percent scored on grade level, and just 4 percent scored above grade level. The following year, however, as seen in Exhibit 9, the percentage of students scoring below gr

## *Interviews*

### **Lesson Logs**

Because of the time required to log on to the database and enter new data, many teachers did not regularly complete the lesson logs as intended. As a result, the researchers were not able to use the lesson logs to verify that the program was implemented with complete fidelity.

### **Principal Interview**

Mr. Wright stated that he is an overall proponent of balanced literacy, however, he also believes that “in the end, you have to use what works.” Thus, he agreed to pilot *Reading Master, Signature Edition* as an intervention program thinking that doing so would not require a complete abandonment of the balanced literacy philosophy, and it seems he may have been right. In fact, one specific comment he made might explain why this program worked so well with his students:

*“Reading Mastery worked here because the teachers were volunteers and because we allowed certain implementation flexibility. This particular year, with the need to help students read better quickly, I appreciated the fact that Reading Mastery is one literacy component that is not subject to interpretation. You don’t necessarily want a bunch of robots for teachers, but it’s good to have a program where you can input one thing and expect exactly a certain output. Working with smaller groups on intervention, paraprofessionals can effectively teach this and make quite an impact!”*

When asked what effect if any *Reading Mastery* had on his overall philosophy of reading instruction, Mr. Wright said that, not coming from a background of scripted reading, he does and has always had a positive view of balanced literacy, but depending on the specific needs of students in the community an administrator might want to consider a program that stresses the basic skills. He went on to say that *appreciated the don of stu Tdpoaprbessai so ut. nsider choold (of stski) @*



Three of the four students said they consider themselves to be good readers. The one who thought he was not a good reader did say that, "Reading is getting easier because I read at home...not every day, but sometimes." When asked if they would like to have a job that requires them to read every day, all of the students said yes. A third grader even said she wanted to be a first-grade teacher when she grows up. Possibly not to be outdone, her male counterpart indicated that he wanted to be an actor who "reads a lot of books."

None of the students expressed discomfort with reading aloud in class. In fact, they all seemed perfectly comfortable with the short read-alouds that the program prescribes and one student even said she wished that the stories would last longer. Moreover, they all expressed a great deal of excitement when relating their favorite stories from the *Reading Mastery* selections. One child, in particular, was so enthralled with the retelling of a story about a goose named Henry that she couldn't be interrupted for further questioning until she had related the entire plot to the interviewers.

## **Discussion**

Based on its demography, PS 396 seems like any other economically disadvantaged elementary school in a large urban district, but a closer look inside reveals a school that debunks most inner-city stereotypes. For example, the physical and psychological climate at

As a result of the success with the Reading Strand of the *Reading Mastery, Signature Edition*, all teachers who participated in the pilot this year have agreed to expand the program next year to include the Language Arts and Writing strands. Also, the kindergarten and first grade classes, who did not participate this year, will be implementing the reading strand next year in an attempt to replicate the reading improvement seen in Grades 2, 3, and 4 this past year.