# FCRR Technical Report #3

Improving the Effectiveness of Reading Instruction in One Elementary

School: A Description of the Process

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We wish to thank all the school personnel at Hartsfield Elementary School who have contributed so importantly to the changes described in this article. We also wish to thank the parents and members of the community who have served on the School Advisory Boards that have provided both vision and focus for this effort. January, 2000.

This article provides a partial description of a whole school change project that has taken place over the last four years at Hartsfield Elementary School in Tallahassee, Florida. The primary focus of the article is on reading instruction and achievement. This is a partial report in that many variables contributed to the success of the reading program, and only a few of them are described here. Some of the variables that will not be considered in detail are: a) changes in teacher and parent attitudes contributing to significant changes in school culture; b) increased parent and teacher expectations for behavior and academic performance; c) substantive changes in personnel and the roles of certain staff; d) expansion of pre-kindergarten programs; and, e) the district's commitment to site-based decision making at the school level.

The six key elements that will be addressed in this article, and that we consider critical to the gains in reading achievement we have experienced over the past four years, are:

- commitment to meeting individual student needs at all levels;
- adopting and implementing a research-based reading curriculum;
- objective assessment to evaluate student progress and the effectiveness of reading programs;
- designing and implementing an effective instructional delivery system;
- maximizing available instructional time and
- administrative monitoring of student progress and program implementation;

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## Description of School Before Change Process Began

## **Demographics**

Hartsfield has evolved over the last 10 years from a school that was predominantly white and middle-class to a school with an almost 60% free/reduced lunch enrollment and a 60% minority (predominantly African-American) student body. Five years ago the free-reduced lunch rate was 46%. The middle-class neighborhoods in our zone were aging and fewer families were moving into these areas. At the same time, the size and number of families in the public housing neighborhoods located in the zone continued to increase. Teachers accustomed to teaching middle-class children were not prepared for the increasing instructional demands associated with the changing characteristics of our students.

#### School Culture Regarding Reading

The overall attitude among staff was one of providing the content and letting students who could learn do so while others continued to fall academically further behind. There was a wide range of academic abilities in the classrooms. For example, some kindergarten students entered school able to read many familiar words and also able to "sound out" simple unknown words, while others did not know one letter of the alphabet and could not distinguish letters from numbers. Our situation precisely reflected the difficulties noted in Olson's (1998) recent observation that a central problem in reading instruction arises, not from the <u>absolute</u> level of children's preparation for learning to read, but from the diversity in their levels of preparation.

In our school at this time, there was little variation in the curriculum to address the varied reading needs of students. Students academically behind did not receive the focused, intensive instruction necessary for their success. Instead, teachers developed a culture of acceptance of failure for these students, blaming the home and lack of parental support.

Students falling behind were referred to special education or Chapter I programs and sent to

"pull-out" resource classrooms. The resource teachers in these classrooms were expected to address the needs of these students. As a result, there was no sense of ownership by the regular classroom teachers for these students' achievement. Little was done, except in a few classrooms, to address reading deficits within the regular classroom reading curriculum. In addition, more academically able students were not challenged in the regular classroom since teachers taught "to the middle". As a result, both the middle-class and less advantaged students did not receive effective instruction geared to their reading levels.

#### Curriculum Organization

At this point in time, curriculum and textbooks in reading were adopted at the district level. Schools generally went along with the adoption with some degree of flexibility at the school level. Kindergarten through fifth grades were expected to teach the traditional curriculum areas of language arts, math, social studies, science, art, music and physical education. Although the district had adopted texts, their use varied within a school and even within grade levels at a school. Hartsfield Elementary was an excellent example of curriculum variability within a school and among teachers at a grade level.

There was little curriculum coordination among teachers at a grade level except in a few instances where teachers adopted a common "theme". These instructional themes could involve dinosaurs, sea life, or some other topic. This same theme could appear the next year with the next grade level's teacher. In some instances, students received the same theme for three consecutive years. Also, some teachers used the adopted language arts text to teach reading while others used no textbook at all and simply pulled instruction from "a variety of resources". Hence, there was no reading program except the adopted reading series which was sporadically used in the school. Students at a certain grade level were exposed to whatever skills or content a teacher chose to use in her/his class. At the end of the year, with the exception of district wide achievement testing, there was no assessment of reading skills to provide information to next year's teacher. Additionally, there was no on-going reading assessment in the classrooms.

## Instructional Delivery

Instructional delivery was very "departmentalized" at the school. The "departments" consisted of learning disabilities, speech/language, and Chapter I services. Coordination was rare among the teachers in grade levels, Chapter I, and special education.

"Pull-out" programs were the sole instructional delivery system for students with learning disabilities, speech and language deficits, and those qualified for Chapter I (now Title I) services. There was little communication about reading strategies and curriculum approaches since there was not a school-wide curriculum for reading at Hartsfield. This meant a classroom teacher might use a phonics approach while a resource teacher used whole language strategies. Since there was no assessment or coordination of instruction, accountability for student learning was non-existent. Students receiving these pull-out services experienced what Slavin and Madden (1989) term "cognitive confusion" created by multiple instructional approaches to reading.

The problem was made worse by the fact that students needing additional learning time spent much of their day in "transition", walking the corridors from their classrooms to speech, to Chapter I, finally returning to their classrooms. A great deal of instructional time was lost in travel as well as at transitional points among classrooms. Regular classroom teachers were

concerned that they rarely had the whole class intact, due to constant "pull-out" time for certain students. Also, due to the "departmentalized" approach, there was not a focus on the most pressing needs of an individual student. Instead, each classroom teacher and resource teacher was operating independently and not considering individual student priorities. The primary need for most of these students was learning to read. Despite this need, many spent extra instructional time in mathematics and continued to fall further behind in reading.

Special area services for art, music and physical education were scheduled so they did not occur at the same time every day for all teachers at the same grade level. This meant that one first grade teacher would receive physical education on Tuesday at 9:00 while another received music at 9:30. The blocks of time for special area services were also varied during the week from 30 to 60 minutes per day. Although there were some days with common special area times for a specific grade level, it did not occur on a daily basis. This scheduling arrangement created frequent noise in the corridors and no constant planning times for grade level teachers.

#### Student Achievement

The California Achievement Test (CATV) is the group administered, standardized assessment used in our district to assess student progress. The CATV was administered to third through fifth grades in the spring of 1993 and 1994. The average median percentile score for children in 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup>, grades for the 1993 and 1994 school years was 50, 52, and 48. Although these figures placed our children close to the national average in terms of overall performance, far too many of our students were performing from 1.5 to 2 grade levels below their current grade placement. Poor reading skills were interfering with many children's progress through the curriculum in third, fourth, and fifth grades, and these children were also not prepared to move into the middle school curriculum after leaving Hartsfield.

#### Preparation for Change - Deciding the Direction

During the 1993-94 school year, there were a series of meetings among parents, teachers and the administration. The School Advisory Council comprised of parents and teachers and the Parent Teacher Organization (PTO) met together to discuss concerns regarding student discipline and academic achievement. We worked collaboratively on a series of belief statements and a school vision which emphasized student responsibility and student achievement. It was unanimously adopted by parents. The faculty and administration met together, sometimes with parents sometimes without, to discuss the vision and belief statements and identify strategies to begin moving in a desired direction. The faculty, after much discussion and two inservice sessions discussing reading research, identified our two primary problems. First, students were not prepared to enter kindergarten, and second, we had no consistent reading program at Hartsfield. The first problem was addressed by expanding the pre-kindergarten program through constructing an infant-toddler wing on the school (supported by a \$470,000 grant) and doubling the size of our early childhood program. The second area, lack of a consistent reading program, was our core problem. We had now, as a faculty, admitted we had the problem, which was the first step to solving it.

The Change Process: School Year 1993-94

In 1993-94, teachers expressed the concern that they needed more time to plan together to insure more consistent content and instructional strategies at the grade levels. Also, they expressed frustration at our "helter skelter" schedule of pulling students out of their classes for resource assistance. Some teachers had their entire class together for less than one hour per day. One part of the solution to these problems involved block scheduling for special area (art, music, physical education, and media) programs.

This allowed, for instance, all of the second grade classes to attend a special area for the same 45 minute period every day, enabling teachers to share common planning times. In addition, we moved all of our primary classes special area times to after lunch. This allowed these classes large blocks of instructional time during the mornings, a prime learning time for younger children. Third through fifth grades had 75-90 minutes of uninterrupted periods in the morning and the same in the afternoons, while primary had 180 uninterrupted instructional minutes in the mornings and 45 in the afternoons.

In order to address the concern regarding the constant pulling of students from their regular classrooms, we began a team-teaching approach piloted the year before in a fifth and fourth grade classroom. The team-teaching approach meant the resource teacher came to the classroom instead of pulling groups of students from the class. While the rest of the children were receiving reading instruction in groups from the classroom teacher or working at centers, the children with learning disabilities received small group instruction from the resource teacher. We adopted this service delivery system for students with learning disabilities (LD) in grades one through five in our school.

This practice required us to "cluster" our LD and language impaired students in certain classrooms, but it had several important benefits. It eliminated student travel time to resource rooms, reduced the number of transitions between classrooms, and saved instructional time. This increased the total amount of instructional time during the day for our academically needy students. We also noticed another significant benefit associated with this service delivery system. It created interaction between the regular and resource teachers and fostered consistent instructional approaches for all students. Also, students who did not quite qualify for special programs and who traditionally "fell through the cracks", began receiving the individualized small group instruction necessary for their academic progress. They were frequently included with the special needs students since their curricular needs were similar. This resulted in regular and special education students receiving instruction at their academic level.

#### The reading curriculum

After reviewing research on reading and reading instruction with Dr. Joseph Torgesen, and our faculty, we focused on two commercially available reading programs. One was Open Court Publishing's *Collections for Young Scholars* (Open Court Reading, 1995) and the other was Science Research Associates' *Reading Mastery* (Englemann & Bruner, 1995)) program. At this time, our special education resource and Chapter I teachers were using the SRA Reading Mastery program with our students with learning disabilities and some Chapter I students at all grade levels, and they strongly supported this approach. Our K-2 teachers were sent to observe these programs and we reviewed research and materials and invited representatives from the two publishers as well as teachers who had used these programs to speak with us about their success.

The Open Court curriculum presents a balance of phonemic awareness, phonics (with

blending as a key strategy), and literature activities. The program teaches phonetic elements using sound-spelling cards, alliterative stories, and controlled vocabulary texts that practice the rule just taught. A parallel strand uses Big Books story sharing activities to promote oral language comprehension and love of literature. We had studied the summary of *Beginning to Read: Thinking and Learning about Print* (Stahl, Osborn, & Lehr, 1990) and were pleased to note that Marilyn Adams, the author of the work from which this summary was made (Adams, 1990), was a senior author on the Open Court reading curriculum.

The Change Process: School Year 1994-1995

Changes to the basic reading curriculum

For the 1994-95 school year, we included the adoption of Open Court's *Collections for Young Scholars* in our school improvement plan for kindergarten through second grades. We also decided to continue the SRA *Reading Mastery* curriculum with our third, fourth and fifth grade students with learning disabilities and some Chapter I students in second grade.

Kindergarten through second grade and resource teachers attended a three day inservice for Open Court during the summer and the consultant came to the school to assist with beginning the program in our kindergarten through second grade classrooms. The consultant returned every three to four weeks during the first semester and met with the grade level teachers. One problem with the initial inservice was that it should have been more explicit regarding the importance of addressing the key components of the Open Court lesson on a daily basis. Teachers thought, and justifiably so, they could select some components of the lesson and not use others. In addition, there was some resistance among several teachers on the basis that they were being "forced" to teach in a way that was inconsistent with their "philosophy" of reading while others simply were not able to provide adequate instruction. For these reasons, the implementation was "uneven" within grade levels with some teachers fully implementing the program and others inconsistently using parts of the program.

#### The Change Process: 1995-96

For the 1995-96 year, we continued our special area block scheduling and committed ourselves to significant changes through the school improvement plan process. These included:

- 1) requiring by written expectation and discussion in team meetings as well as frequent administrative observations in the classroom the use of the Open Court curriculum in kindergarten through second grades;
- 2) eliminating all "pull-out" resource times except speech articulation;
- 3) completing the adoption of the SRA *Reading Mastery* Program in third, fourth and fifth grades for all students;
- 4) initiating small group reading instruction for all students in all grades;
- 5) suspending the social studies and some math curriculum in first and second grade.
- 6) using reading subtests from the Woodcock-Johnson Psycho-Educational Battery-Revised (Woodcock & Johnson, 1989) to individually evaluate the reading level of all first and second grade students.

All of these changes were addressed directly or indirectly in our school improvement plan for

1995-96. We used a small writing team and frequent meetings among teachers and administration in grade level groups to discuss the research and proposed curriculum changes. A parent from our School Advisory Council was on the school improvement plan writing team.

#### Administrative support actions and curriculum changes

Once discussed and written in the plan, all staff understood it was the administration's responsibility to insure the plan was effectively implemented at the school. There was a faculty meeting and a series of grade level team meetings which continued throughout the year. The expectation regarding curriculum and instructional delivery changes were outlined in detail and the teachers were involved at every step in the scheduling, assessment, and implementation of programs. It was also clear that the implementation was a major consideration in the administration's evaluation of teacher performance.

The adoption of the SRA Reading Mastery Program for all third through fifth grade students meant a commitment to teacher inservice and expenditure of school dollars to purchase materials and supplies to run the program. This step insured extra help for students below grade level and advanced instruction for more academically able students. Once begun, there was a need for periodic monitoring of the program to insure students were instructed at the correct reading levels. There was also some resistance in terms of teacher's philosophical differences regarding the grouping of students for instruction. This was similar to what occurred when Open Court began in the lower grades. These inconsistencies throughout the first year of SRA in all of the upper grades made the program less effective.

At the mid-year point, we noticed that a substantial number of our second graders were still struggling with beginning reading skills in the area of phonetic decoding (being able to "sound out" novel words in text). For these children, we began using SRA Fast Cycle (a combination of Reading Mastery I and II) in their small group instruction. By the end of the year, we noticed a marked change in their word attack skills, although some students learned at a much slower rate and required more repetition.

## Further changes in instructional delivery

Eliminating all "pull-out" programs except speech articulation required a great deal of preparation and teacher cooperation. We began the previous Spring by loading classes with approximately the same number of students at each academic level. In other words, in every class we attempted to have equal numbers of students with high, average and below average reading skills. We did not at this point have reliable assessment results and were using the CATV for grades 3-5, Marie Clay's (1995) *Concepts of Print* test for kindergarten, and teacher judgments to make these decisions. Our purpose in using the assessment information for class loading was to insure enough students at a given academic level were assigned to each class to form an instructional group for that class. We did assign all of our language impaired and LD students in two classes per grade level. The other class or classes received "border line" students with similar academic needs who did not quite qualify for a special program. We continued to form self-contained classes for students with moderate to severe mental handicaps and behavioral disabilities.

In order to initiate small group instruction, we clustered small groups of three to six students according to reading levels in each first through fifth grade class. We then scheduled

each resource teacher to be in a classroom for 75 to 90 minutes per day. This meant the resource teachers were seeing three to four classrooms per day and teaching two to three reading groups per class. Some classes received a trained paraprofessional to run reading groups. Paraprofessionals, as long as they received periodic inservice and were monitored, were as effective as teachers using the SRA program. Decisions on when to move students among reading groups resided with the resource and classroom teachers. The resource positions were funded from special education and Chapter I funds.

The regular teacher saw two to three reading groups while the resource teacher was in the room. The other students not in a group were assigned seat work and rotated into a reading group during the resource teacher's time in their class. This captured a great deal of instructional time since it eliminated student movement outside the classrooms.

Teachers were concerned about the large amount of instructional time used in kindergarten through second grades to implement the Open Court Program. We agreed to eliminate classroom science and social studies and some math for the year. This enabled our primary teachers to focus on the reading and writing curriculum for their students.

## Assessment of Reading Skill

At the beginning of the 1995-96 school year, we began assessing reading levels using the Word Attack and Word Identification subtests from the Woodcock-Johnson Psycho-Educational Battery-Revised. These assessments were administered to all first and second grade students within the first three weeks of school. We had trained our resource teachers and guidance counselor to administer the assessment. We also decided that the resource teachers would not administer the test to students they would be teaching during the year. The classroom teachers were not involved in the test administration other than providing blocks of times for the resource teachers to test students. This testing arrangement increased the reliability of our results. The resource teachers and guidance teacher used this same procedure at the end of the year. We used the results to assess individual student progress for the year and the aggregate data to evaluate the effectiveness of our reading program in first and second grades. We continued the individual assessment of kindergarten students but changed from the *Concepts of Print* assessment to the *Bracken Basic Concept Scale (Bracken, 1984)*.

The usefulness of our individual reading assessments for documenting the effectiveness of the changes we made to our reading curriculum is illustrated in Figure 1. In this graph, we have plotted the number of children in first and second grade who had word reading skills below the

Insert Figure 1 about here

25th percentile at different points in time. Among children in first grade, the percent of children with word reading skills below the 25<sup>th</sup> percentile dropped from 31.8 at the end of the 1994-95 school year to 3.7 at the end of the 1998-1999 year. During the same period, the average percentile of first grade children rose from 48.9 to 82. Children in second grade were not tested at the end of the 1994-95 school year,, but achievement has generally been stronger as children have been in the program longer. During this same period of time, the median percentile in reading achievement for our third grade children on the California Achievement Test jumped from 49 at the end of 1994 to 73 at the end of 1999.

## The Change Process: 1996-97

We continued to use the school improvement plan process to plot our course of action. For the 1996-97 school year we focused on the following:

- 1) continuing our direction begun the previous year clear expectations regarding implementation of curriculum; scheduling to increase instructional time, team-teaching approach in all classrooms, small group instruction and objective assessment of student progress;
- 2) emphasizing changes at the kindergarten level to include assessment and programmatic changes for language and phonemic awareness to intervene with our youngest students;
- 3) initiating a six week summer program for our "at risk" four year olds preparing to enter kindergarten;
- (4) initiating a pre/post test (Bracken Basic Concept Scale) for pre-k students;
- 5) implementing *Accelerated Reader* (1994) a reading and computer assisted instruction and assessment program as a supplement to our basic reading curriculum and
- 6) initiating a "home reading" program for kindergarten through third grades.

#### Administrative support actions

It is important to emphasize that the commitment to previous year's changes and the will to continue those improvements needed to be continuously supported through planned administrative/leadership actions. These actions were accomplished primarily through faculty and grade level meetings as well as one-to-one discussions with teachers. Many of our earlier changes were infrastructure type changes. These included an emphasis on uninterrupted classroom instruction, increased instructional time resulting from master schedule changes, elimination of pull-out programs and other measures outlined earlier. The point here is that these types of changes can be degraded and undermined if teachers and staff are not continuously reminded of the vision statements that guided these changes in the first place. Further, individual teachers frequently require help in solving problems that arise from these scheduling constraints so that whatever adaptations are made do not undermine the overall effectiveness of the instructional delivery system.

#### Further changes to the reading curriculum

The individual reading assessment program we began using the previous year showed us that many children were still leaving second grade unprepared for third grade level work in reading. In the previous year, we had begun using the SRA Fast Cycle Reading program with our lower performing children beginning in the second semester of second grade. For the six weeks of summer school, we began to provide many of these children with two reading sessions per day using the SRA program. This provided our these students with a preview and some experience with the SRA Reading program, in addition to adding further substantial gains to their basic word reading ability. Unfortunately, some of our students continued to struggle in the Fast Cycle Program.

At the same time that we were attempting to strengthen reading instruction for children with the weakest skills, the use of small group instruction was working very well to challenge our students with the strongest reading skills. At the end of the fourth grade, we had 20 of 74

students in a Level VI, grade six reading program. We also decided to add the *Accelerated Reader* (1994) program for all of our students in third, fourth and fifth grades. The *Accelerated Reader* program is basically a way of monitoring children's outside-of-class reading so they can be encouraged and rewarded for doing more reading outside of assigned class materials. We began offering incentive awards to encourage students to read. As students read books, they took a computerized test on the content of the book. The software in the *Accelerated Reader* program keeps a running record of all books read and the score of each comprehension test. By the second semester, we had second and first grade teachers also using the program and requesting more books on their students' levels. We purchased additional disks and books for kindergarten through second grades.

One of our major concerns and an initial reason for beginning the *Accelerated Reader* program was reading fluency. Although we work on fluency with students in SRA, there was an overall concern among the faculty that we needed something that involved our parents in reading. As Cunningham & Stanovich (1998) have recently underlined, once children acquire beginning reading skills, one of the keys to their becoming good readers by the end of elementary school is wide exposure to text. Thus, we began the read-at-home program for kindergarten through third grades.

We used out-of-adoption reading series books to send home with our children. The parents signed off on the pages read nightly. This was very successful at two grade levels and had an inconsistent implementation in two others. It did improve the fluency for some students and was a great way to involve parents in their children's' education. Changes at the Kindergarten Level

At the beginning of the second semester of this school year, we administered the *Test of Phonological Awareness* (TOPA) (Torgesen & Bryant, 1994) to all of our kindergarten children. Using this test, we identified students with severe weaknesses in phonological awareness. For these children, we initiated small group DISTAR language lessons (Engelmann & Osborn, 1987) in 20 minute sessions four days per week . We assessed these kindergarten students with the *Bracken Basic Concept Scale* at the end of the year to evaluate student progress and determine those needing to attend summer school.

Most of the children needed to attend. At the conclusion of summer school, we assessed kindergarten students to determine those needing the extra assistance in first grade. Four of the 18 students attending summer school went into the regular Open Court curriculum in 1997-98, while the others participated in small group instruction using the SRA *Reading Mastery I* curriculum. We felt that the SRA curriculum was more properly paced for these weaker students, and also that it provided more opportunities for explicit practice and skill building than did the *Collections for Young Scholars* materials. Those students receiving SRA also received the benefits of a portion of the Open Court lessons as well.

## The Change Process: 1997-98

For 1997-98, we identified some additional instructional strategies to make our students more successful. These included:

- 1) continuing to emphasize and monitor implementation of Open Court, SRA and *Accelerated Reader* programs;
- 2) provide small group instruction to our weakest first and second grade children using the Reading Mastery Curriculum (using Reading Mastery I and II instead of Fast Cycle) rather than

the Open Court curriculum;

- 3) implement the *Standardized Test of Assessment for Reading* (1995) (STAR) to determine leisure reading levels of students;
- 4) implement the *Waterford Reading Program*, Level 1 (Waterford Institute, 1995) in kindergarten and one first grade classroom; and,
- 5) expanding instruction for language delayed kindergarten students.

Further changes to the reading curriculum

We were convinced at this point that there was conclusive research to suggest the importance of explicit phonics instruction for less advantaged children (Brown & Felton, 1990; Foorman, Francis, Fletcher, Schatschneider, & Mehta, 1998). Although this type of instruction is provided in the Open Court curriculum, and some of our students from low income families were successful with it, many were not making adequate progress. As mentioned previously, we used the summer school data to determine which students needed SRA in first grade. Beginning this year, these students received their small group instruction using the *Reading Mastery* curriculum.

## Continuing Administrative Support Actions

The principal, assistant principal, and an SRA trainer monitor the reading programs at all grade levels. One critical area to monitor is student's oral reading performance. Oral reading provides critical insight into the way children are progressing with both the accuracy and fluency of their word reading skills. Since all of our students read in small groups daily, this is easy to accomplish. In some rooms, the teachers were grading the daily, written comprehension assignments but not the actual reading. We met with the teachers, outlined the problem and talked with them about the solution. It was rectified within the week and is periodically monitored through observations. We use this as an example of what may happen if the principal and assistant principal are not actively involved in the reading program to help keep the attention of all personnel focused on the reading goals and achievements that everyone has agreed are important.

#### Assessment of Reading Skills

We began the *Standardized Test of Assessment for Reading* (STAR) (1995) this year. Using the STAR software, we evaluate the leisure and instructional reading level for each student. All students reading at the school take the assessment on a quarterly basis. This includes kindergarten children who are reading. In addition to generating individualized reading levels, it also produces a parent report and maintains a record of the results for each student. In addition, all students registering are assessed using the *Bracken* (kindergarten), *Woodcock-Johnson*(1st and 2nd grades) or SRA placement (3rd, 4th and 5th grades).

## Additions to the kindergarten curriculum

Given the large diversity in preparation for reading of the children coming into Hartsfield, we felt the need to continue to improve the quality of important pre-reading skills at this level. One strategy we adopted to provide high quality, individualized instruction in concepts about print, letter knowledge, phonological awareness, and vocabulary was to

implement the *Waterford Early Reading Program*, Level 1, in our kindergarten classrooms. This program is extremely engaging for young children, and it provides 20 minutes of individualized, high quality computer based instruction every day for the entire kindergarten year. An additional attractive feature of the program is that it has a set of books and video tapes which go home with the parents to use with their children.

In addition, we continue to provide small group instruction using the DISTAR (Engelmann & Osborn, 1987) language curriculum. This year, we added an additional 10 to 15 min. per day of specific instruction in phonemic awareness using activities from *Phonemic Awareness in Young Children: A Classroom Curriculum* that has been developed by Adams, Foorman, Lundberg, and Beeler (1997).

## Concluding comments

The recent comprehensive report on the prevention of reading problems in young children published by the National Research Council (Snow, Burns, & Griffin, 1998), suggests that the first step toward insuring that all children acquire effective reading skills involves a sound basic reading curriculum in kindergarten through second grade. We would agree with that statement, but we would also emphasize that schools must be prepared to go substantially beyond that step in order to reach all of their children. In our estimation the most important of these additional steps are: 1) identification of resources and procedures for delivering effective small group or individual instruction to higher risk children beginning in kindergarten and extending at least through second grade; 2) regular assessment of early reading growth to insure that the needs of all children are being met; 3) continuing administrative leadership to insure proper coordination and execution of all elements of the preventive effort; and, 4) a realistic time frame for implementation of all elements of the overall program.

Even though the reading achievement of children in first and second grades at Hartsfield Elementary School has shown substantial improvement over the last four years, we recognize that there are still many ways we can continue to improve our support of reading growth in our children. We are currently planning efforts for two initiatives to help many of our children enter kindergarten more prepared to learn to read and succeed in school. In our school based pre-K programs, we are beginning to institute a developmentally appropriate curriculum that will more systematically support the acquisition of pre-reading skills such as vocabulary, print awareness, and sensitivity to the sound structure of language. In coordination with these school-based experiences, we are also anxious to work with the Pre-K Parent/Teacher Organization to more effectively increase parental awareness concerning home based activities that can support growth in emergent literacy skills.

In addition to these improvements at the Pre-K level, we are currently planning for continuing efforts in the K-5 program in three areas. First we are investigating ways to more effectively use computer assisted instruction and practice to support reading growth at all grade levels. We view computer technology as particularly effective in providing the structured and motivating practice that many of our children require to consolidate the skills they are taught in the classroom. Second, we recognize the need for more teacher training focused on the "higher order" thinking skills that are required in the development of high levels of literacy. Our work thus far has focused primarily on word level reading skills, and now we must begin to explore ways to expand our efforts in helping our children develop the language and thinking skills required for high level comprehension of text. Finally, we recognize that we must continue to

focus on recruitment of high quality teachers who share our philosophical and research based orientation to reading instruction for all children. If we can accomplish these goals over the next five years, we expect to come very close to the ideal of assisting all children to acquire the reading skills required succeed at the next level of their education.

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## Figure Caption

Figure 1: Changes in year end reading performance of children during period of rapid curriculum changes in reading

