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A STUDY OF THE EFFECTIVENESS OF A STRUCTURED TUTORING PROGRAM ON STUDENT READING SKILLS

by
Rita M. Neyer

A thesis
Submitted in partial fulfillment of the requirements of the
Master of Arts Degree
of
The Graduate School
At
Rowan University
Spring 2002

Approved by_____

Date Approved April 24, 2002

Abstract

Rita M. Neyer
A Study of the Effectiveness of a Structured Tutoring Program on
Student Reading Skills
2001
Dr. Stanley Urban
Learning Disabilities

The purpose of this study was to determine if the students in the after school tutoring program made greater gains when receiving tutoring by certified teachers in a consistent structured program when compared to students not enrolled in the program as measured by a pre and post assessment using the Macmillan/McGraw-Hill Informal Reading Inventory and Decoding and Phonics Inventory?

The population for the study consisted of two groups of first and second grade students. Group one (treatment group) attended the tutoring program, which meet two times per week. A certified teacher tutored students, one on one. Group two (control Group) did not attend the tutoring program. A pre and post assessment was administered and a comparison was made between the treatment and control groups to determine the difference in gains made by each group.

Results indicate gains in both groups, with a greater gain made by the treatment group. The findings of this study indicate a meaningful difference in the gains made by the treatment group.

Mini-Abstract

A Study of the Effectiveness of a Structured Tutoring Program on Student Reading Skills
2001
Dr. Stanley Urban
Learning Disabilities

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Acknowledgements

The author would like to express her appreciation to the following people for their contribution in the completion of this master's thesis:

- My husband, John, for his continued encouragement, support, and understanding throughout the course of this study.

- Dr, Stanley Urban, for his guidance, time, and assistance so willingly given throughout the entire process upon completing this project.

- J. Ronald Beebe, for providing support of the tutoring program and allowing research to be conducted as part of my duties in coordinating the tutoring program.

- Teachers and tutored for tutoring and assessments which provided the information needed for this study.

- Superintendent, and Board of Education, for allowing research to be conducted in their district.

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Chapter I

Statement of the problem

Background

The New Jersey Department of Education established thirty Special Needs School Districts or so called Abbott Districts in order to provide equal educational opportunity for all children enrolled in the public schools. During the school year, 1999-2000, the Pemberton School District, which is an Abbott District, was given the responsibility to choose a School Reform Model. After staff and administrators reviewed several models, The Comer Model was selected by a democratic vote and the process to incorporate that approach into the school system began in September 2000.

Many changes occurred as the model was implemented in the individual schools. One aspect of the reform model was "zero based individual school budgeting". The purpose of this approach is to allow each individual school to assess needs and develop a budget which addresses those needs. At the Emmons Elementary School located in Pemberton Township it was decided that there was a need for individual tutoring of students to increase academic achievement. In, 2000-2001, the first year of implementing The Comer Model, a homework club was established at Emmons School. Implementation took place in a community center in one of the low socio-economic neighborhoods of the township and was staffed by volunteer members of the Emmons School. Volunteers included teachers, support staff personnel and administrators. In

conjunction with this program, America Reads Students from Burlington County College were utilized as student tutors in the school building, during and after-school, and as assistants at the community center after-school. In addition a fourth grade tutoring program was established in the spring of the school year to improve the student's scores on the ESPA (Elementary School Performance Test).

A review of recent research showed volunteer tutoring to be an effective method of enhancing academic excellence. In an article on literacy, Cassidy and Wenrich report volunteer tutoring along with balanced reading instruction, constructivism, direct instruction, phonics and phonemic awareness are receiving positive attention and are considered "hot topics with literacy leaders in the nine regions of the world in which there are International Reading Association (IRA) members. Based on the research, and as an extension of the 2000-2001 programs at Emmons School a need for tutoring was established. Funds were included in the 2001-2002 school budget for tutors, a coordinator, materials and snacks.

Theory

The theory underlying an after school tutoring program rests upon the belief that student performance, positive feelings about school and learning, and parental support for learning will increase through a quality after school tutoring program. Individual needs can be addressed and met in a program of consistent tutoring by well-trained teachers. Communication between classroom teachers and teacher tutors to assess and structure tutoring to continually changing needs of the student will enhance the learning process. In addition, parent communication and

the establishment of parent-student-teacher rapport will promote a partnership, which will affect the learning of the student in a positive way.

Need for the study

Efforts to improve the academic achievement of low socio-economic students have taken many forms. The staff of Emmons School chose to implement an after school tutoring program staffed by trained certified professionals on a regular schedule which emphasizes consistency, research based instructional strategies and a parent-student- teacher partnership in an attempt to improve academic performance of the Emmons School students. It is important that the program have, as a component, an assessment tool which compares pre and post academic achievement of the tutees. This study will attempt to provide information to evaluate the effectiveness of this program.

Value of the study

This study will evaluate the effectiveness of the proposed after-school-tutoring program in improving reading and if successful could serve as a model for other schools located in Special Needs School Districts. If the results are positive, other districts or individual schools may choose to include a program such as this in their budgeting. In addition, this study will

contribute to the body of data, which is attempting to determine instructional approaches that contribute to improved academic achievement

Research Question

To accomplish the general purposes of this study, the data obtained will be used to answer the following research question.

1. Do students involved in the after school tutoring program make greater gains when receiving tutoring by certified teachers in a consistent structured program when compared to students not enrolled in the program as measured by a pre and post assessment using the Macmillan/McGraw-Hill Informal Reading Inventory and Decoding and Phonics Inventory?

Limitations

The following limitations must be noted when generalizing the results of this study. The sample studied and the demographics of the community in which the study took place limit the generalizability of the findings. Classroom teachers recommended students included in the study. In most cases, students needed transportation in one direction and it may have been that students who were referred as being able to benefit from the program did not have transportation and

who were referred as being able to benefit from the program did not have transportation and consequently did not participate. An attempt was made to have equivalent students and teachers in the treatment and control groups, however, this threat to internal validity could not be completely eliminated. Administration of the assessment instrument was completed by different teachers. Issues of reliability and validity of the measurement instrument pose threats to the conclusions drawn from this study. Data gathered over a longer time period and a greater number of participants in the study might prove to be more reliable.

Definition of Terms

The following terms have a specialized definition within the context of this study.

Special Needs School Districts-A rural or urban school district in the State of New Jersey in which over 20 percent of the students are considered low-income and "at-risk" for school failure.

After school tutoring program-The program involves certified teachers meeting twice weekly for one hour with students identified as needy by their classroom teacher. The sessions will take place either before or after school. The program will begin in October and continue through the school year.

Chapter II

Review of the Literature

Overview

The effect of tutoring on the academic achievement of elementary students has been examined in recent years because of renewed focus on students who are considered "at risk" for school failure and a renewed commitment to see that "all" students learn basic skills in the early grades. Wasik and Slavin (1993) state tutoring is the oldest form of instruction. Parents have always provided one-to -one instruction to their children, and many learning settings from driving instruction to on-the-job training typically employ one teacher for each learner for at least part of the learner's instruction. In recent years, tutors have been used in first grade to prevent early reading failure

Wasik and Slavin (1993) reported that there is an unprecedented willingness among educators to adopt expensive early intervention programs if they can be relied on to produce large effects. Examples of this include Project STAR in Tennessee and Project Prime Time in Indiana, which have implemented substantially reduced class sizes in early elementary grades. In his statement referring to the passage of the Reading Excellence Act, Kennedy (1998) states communities across the country are initiating innovative projects on reading. This bill encourages local school district partnerships to work in cooperation with community organizations and state agencies to and ensures that local, state and national efforts to improve literacy are coordinated, so that the most effective resources and practices are used to meet the

needs of children. It provides communities the support for trained tutors to give children practice in reading with adults.

New Jersey has many urban and rural school districts in which over 20 percent of the students are considered low-income and "at-risk" for school failure. Whole School Reform (WSR) is the response of The New Jersey Department of Education (NJ DOE) to the state Supreme Court's 1998 Abbott v. Burke decision. As a result of the Court's landmark ruling, districts and schools were required to implement Whole School Reform (WSR) in accordance with N.J.A.C. 6:19A, in order to meet the needs of the "at-risk" students. Two Whole School Reform models presently being followed in Abbott districts are Success for All (Slavin et al, 1992) and The School Development Program (Comer et al, 1999).

Success for All

Success for All (Madden et al., 1991; Slavin, Madden, Karweit, Dolan, 1991) as cited in Wasik and Slavin (1993) is a comprehensive school wide restructuring program that is designed primarily for schools serving large numbers of disadvantaged students. Its main intention is to insure that by grade 3 all children are successful in basic skills, particularly reading. Success for All does not articulate a complete theory of beginning reading. However, an underlying model of reading can be seen in the structure and content of the program.

There are four components that drive the Success for All tutoring program. First, children learn to read by reading meaningful text. Second, phonics needs to be taught systematically as a strategy for cracking the reading code. Third, children need to be taught the relationship between reading words and comprehending what they read. Fourth, children need to be taught strategies to help them become successful readers. Through direct instruction, children are taught when,

how, and why they should use strategies. All first through third graders receive 1 hour of reading every day. The tutoring model is completely integrated with the reading program. The components that drive the Success for All program includes perceptual analysis, decoding, prior knowledge, oral language proficiency, inference making, reading strategies, metacognition and error detection, and error correction strategies. Students are assessed every 8 weeks; those who are doing well may be rotated out of the program as other students are rotated in.

School Development Program

James B. Comer established The School Development Program (SDP) model for Whole School Reform in 1968 in two elementary schools as a collaborative effort between the Yale University Child Study Center and the New Haven School System. The two schools involved were the lowest achieving in the city, had poor attendance, and had serious relationship problems between staff, students and parents. Comer (1999) contends in order to promote change, mechanisms must be in created that allow parents and staff to engage in a process in which they gain and apply child development knowledge systems and individual behavior knowledge and skills to every aspect of a school program in a way and at a rate that is understandable and not threatening. Comer developed a school reform model made up of 9 components (3 mechanisms, 3 operations, 3 guidelines) This included 1) a governance and management team representative of parents, teachers, administrators, and support staff; 2) a mental health or support staff team; and 3) a parents program. This model differs from the Success for All model in that it does not have a tutoring program as one of its critical components.

Tutoring is an integral part of many school reform models. Now, it (tutoring) has become common. You are as likely to find a "learning center" in a mall as you are a pizza parlor. Considering that it may cost upward of $35 an hour, hiring a tutor, whether a teacher, student or someone at a learning center, tutoring is almost a status symbol (Quigley 1996).

In recent years, tutors have been used in first grade to prevent early reading failure. Advocates of tutoring programs argue that first grade is a critical year for the learning of reading, and reading success in the early grades is an essential basis for success in the later grades. Tutoring can be a rewarding experience for the tutor according to Goolsby (2001). At the HOPE (Helping our Pupils Excel) tutoring center in Dallas Texas, one tutor reports,"What I marvel at is here they've gone to school all day and some of them don't have a chance to eat something before they come to tutoring, but they come with energy and ready to work. It's especially rewarding when they finally grasp an idea they've been struggling to understand."

Many school districts have adopted School Reform Models with intensive reading programs where tutoring, is a means of preventing early school failure. If success is seen as "entitlement" for all children, as is stated in the Abbott v. Burke court decision educators must have methods that produce success for all "regular education "students regardless of home background, no matter how expensive these methods may be. In any discussion along these lines, one-to-one tutoring for at-risk students is sure to be one element of the strategy to ensure success for all. (Wasik and Slavin, 1993).

Reading Recovery

Reading Recovery, developed by Marie Clay (1985) is one preventive tutoring program that has received a lot of attention and use in recent years. Tutoring in this program is done by

trained teachers. Students are tutored for 30 minutes each day until one of two things happen. If students reach the level of performance of their classmates in the middle reading group they are, "discontinued" from the program. If they receive 60 lessons without achieving this level of performance they are released from the program, but considered "not discontinued". In 1984-85 Marie Clay and a colleague, Barbara Watson, spent a year at Ohio State University. They trained a group of teachers to use the program and trained Ohio State faculty members to train others. Research at Ohio State has been conducted since that time.

The following tables from Wasik and Slavin (1993) Table 1 Comparison of Reading Recovery to four other tutoring programs.

Program	Location of Evaluations	Tutors	Tutees	Duration	Tutoring Methods and Curriculum
Reading Recovery	Ohio Chicago, Illinois	Certified reading teachers	Lowest first graders	30 minutes/day 12-20 weeks	Learning to read by reading. Reading short stories and connecting writing activities to reading. Tutors guide children to learn metacognitive strategies. No connection to classroom instruction.
Success for All	Inner-city Baltimore Maryland	Certified teachers	Lowest first and second graders	20 minutes/day evaluated/8 week cycle	Learning to read by reading. Closely integrated with structured classroom curriculum. Emphasis on metacognitive strategies.
Prevention of Learning disabilities	New York Ohio California	Certified Teachers	Lowest first and second graders	30 minutes 3-5 times a week	Use of directed activities to teach specific perceptual and spatial skills involved in reading Emphasis on skill acquisition. No emphasis on reading connected text .No connection with a classroom curriculum.
Wallach Tutoring Program	Inner city Chicago Illinois; rural North Carolina	Para Professionals	Lowest first graders	30 minutes/day 1year	Phonics based tutoring program Emphasis on systematic mastery of phonics skills. Does not focus on reading connected text. Not integrated with classroom instruction.
Programmed Tutorial Reading	Inner-city Indianapolis Ind. Lenoir City, N.C.	Para-Professionals	All first Graders	15-30 minutes/day	Highly detailed and prescribed lessons, with corresponding sight reading program, comprehension and word analysis. Emphasis on skills. Partially integrated with classroom instruction.

A pilot study Huck and Pinnell, (1986) and a second cohort Pinnell, Short, Lyons and Young, (1986) as cited in Wasik and Slavin (1993) are reviewed in Wasik and Slavin, (1993). Reading Recovery students outperformed control students on almost all measures. Handerhan (1990) as cited in Wasik and Slavin (1993) conducted a sociolinguistic analysis of the teachers and the children in Reading Recovery. Reading Recovery tutoring sessions were videotaped and sessions of four of the most successful teachers (based on what was accomplished with the student) were analyzed. Handerhan (1990) found that across tutors there was consistency in how they structured the lessons regarding similarities in language, materials and procedural techniques. However, more successful tutors showed greater variability in the strategies they used and less successful tutors engaged more in presenting letters and words as discrete skills without reading for meaning.

Components that drive the Success for All perceptual analysis, decoding, prior knowledge, oral language proficiency, inference making, reading strategies, metacognition and error detection, and error correction strategies. Students receive tutoring every day for 20 minutes, and the model is integrated with the reading program. Students are assessed every 8 weeks; those who are doing well may be rotated out of the program as other students are rotated in.

Zuelke and Nelson (2001) report on an after school-tutoring program operated by a nonprofit community based agency in cooperation with a city school system. Contrary to the tutoring literature, the analyses of the data indicated the tutoring did not improve reading and math grade point averages for the tutees. Zuelke and Nelson found that the findings might not have reflected the effects of "real" tutoring. One-to-one tutoring had not occurred. Instead small group or even small class size instruction had occurred. In addition the tutors did not coordinate

their tutoring efforts with the students' classroom teachers. Absences from school appeared to have the strongest effect on GPA's and the effect was negative. In an effort to reverse the outcome recommendations included, real one-to-one tutoring needed to take place, tutor classroom teacher communications needed improvement, and an itinerant coordinator needed to be available to give direction and assistance in time utilization and tutoring strategies..

In addition to the tutoring programs discussed here, which use highly trained teachers, there are other programs, which rely on paraprofessionals and volunteers (Invernizzi, Juel, and Rosemary 1997). One such program is the Charlottesville (Virginia) Volunteer Tutorial Program. The tutoring session in this program consists of reading, writing, and phonics. Tutors follow a sequence of core activities planned by a reading coordinator in a four-part lesson plan. The tutoring lessons include (a) rereading familiar story books, (b) word study, (c) writing, and (d) reading a new book. Pre and post assessment scores have shown statistically significant increases on measures of alphabet, phonemic awareness, and word recognition according to (Invernizzi, Juel and Rosemary 1997). This program offers an affordable, alternative plan to early intervention when funds are not available for certified teacher tutors.

Vadasy, Jenkins, and Pool, (2000) examined the effectiveness of nonprofessional tutors in a phonologically based reading treatment similar to those in which successful reading outcomes have been demonstrated. Participants were 23 first graders considered "at risk" for reading failure who received intensive one-to-one tutoring from non-certified tutors for 30 minutes, 4 days a week, for 1 school year. Tutoring included instruction in phonological skills, letter-sound correspondence, explicit decoding, rime analysis writing, spelling and reading phonetically controlled text.

At year-end, tutored students significantly outperformed untutored control students on measures of reading, spelling and decoding. Findings suggest that phonologically based reading instruction for first-graders "at risk" for reading failure can be delivered by nonteacher tutors.

Wasik (1998) identifies specific features of a successful tutoring program. These components, she states, if all are in place, could ensure a systematic and effective approach to developing volunteer tutoring programs. Following area list of the components Wasik proports.

1. A certified reading specialist needs to supervise tutors.
2. Tutors need ongoing training and feedback.
3. Tutoring sessions need to be structured and contain basic elements.
4. Tutoring needs to be intensive and consistent
5. Quality materials are needed to facilitate the tutors' model.
6. Assessment of students needs to be ongoing.
7. Schools need to find ways that tutors will attend regularly.
8. Tutoring needs to be coordinated with classroom instruction.

Wasik (1999) concludes in many situations, it is impractical for school to create programs anything like those anticipated in the above guidelines. Resources for supervision, training, and follow-up are often lacking. However, one-to-one tutoring is not the only role volunteers can play in order to affect the literacy development of young children. Wasik (1999) suggests as reading coaches volunteers can provide literacy enrichment experiences for children without emphasizing the diagnostic and intervention aspects of reading. Wasik (1999) concludes with reading coaches, the expectations are not lowered but shifted to another goal, the goal of providing rich literacy opportunities to young children. For some children, literacy may not be a

priority in the home. Reading coaches can provide the critical literacy rich experiences for these children. Although this does not take the place of parent involvement, it matches some of the benefits.

Summary

In the Cassidy and Wenrich (1998/1999) review of "hot" topics in literacy research, they report volunteer tutoring leaped to the forefront when U.S. President Clinton called for the formation of a corps of literacy volunteers. Subsequently entitled America Reads, the concept received a great deal of press attention throughout 1997. Many programs have evolved from the America Reads Program, they include programs in which university students are selected and trained to tutor at-risk children in elementary schools Gupta (2000). The Republican counterproposal embedded in the Reading Excellence Act called for paid tutors with parents receiving vouchers for such service. The mainstream media focus made this a very hot issue.

Wasik and Slavin (1993) conclude one-to-one tutoring of low-achieving primary grade students shows potential as an effective instructional innovation. They further state, although we want to know much more about how tutoring works and how to maximize the effectiveness (and minimize its cost), it appears from the research reviewed in this article that one-to-one tutoring is a potentially effective means of preventing student reading failure. As such, preventive tutoring deserves an important place in discussions of reform in compensatory, remedial, and special education. Preventive tutoring can be an alternative for providing a reliable means of abolishing illiteracy among young children who are at risk for school failure.

In discussion of volunteer tutoring (Baker et al., 2000) report on a volunteer one-on-one tutoring program in the state of Oregon. Start Making a Reader Today (SMART) is a volunteer tutoring program established to help Kindergarten through second grade students learn to read. It is somewhat like Waslk's coaching program in that the emphasis is on the fact that adults can make a difference in the lives of young students by spending time reading to them. Also the one-to-one experience need not be hinged on diagnostic and intervention techniques, but rather contain the simple aspect of modeling reading and the enjoyment of reading. Review of the literature indicates tutoring in many forms has proven to be effective meeting the needs of elementary students who are "at risk" of school failure.

Chapter III

Methodology and Procedures

Population

The population for the study consisted of two groups of first and second grade students. Group one (treatment group) attends the tutoring program, which meets two times per week. A certified teacher tutors students, one on one. Group two (control Group) does not attend the tutoring program. All of the students attend an elementary school in a rural southern New Jersey town that is considered a Special Needs District; this school has an enrollment of 421 students. The students are assigned to a first or second grade class that is heterogeneously grouped. There are two first grade and two second grade classes in this school.

Method of Sample Selection

The sample used in this study came from recommendation of first and second grade teachers. Four teachers were instructed to submit the names of the six students in need of interventions to improve reading achievement. Group one consists of students who joined the tutoring program, with the permission of their parents and with the agreement that the parent would provide the necessary transportation. Group two consists of students who did not join the tutoring program. The sample for each group consisted of diverse backgrounds. Twelve of the students were in first grade and twelve of the students were in second grade. Group one consisted of 6 Black, 5 White, and 1 Hispanic student. In this group 6 of the subjects were girls and 6 were

boys. Group two consisted of 6 Black, 4 White and 2 Hispanic students. The gender break down of group two was 7 girls and 5 boys.

Treatment Procedure

The subjects in the treatment group were tutored by teachers for one hour twice a week. Classroom teachers in the Emmons Elementary School participated in the program they volunteered to tutor, but were reimbursed for their time at the contractual rate of $30.83 per hour. An effort was made to match the tutees with their classroom teacher. When this was not possible the assigned tutor received information on a regular basis as to the needs of the tutee. The tutors experience level ranged from first year teachers to teachers with ten years of experience. Tutors reassessed the needs of the tutees throughout the program. Tutors based lessons on the specific needs of the tutees. Consistent attendance was required of the tutees. Tutors communicated with parents on a regular basis.

Instrumentation and Scoring

The instrument used in this study was a Decoding and Phonics Inventory and an Informal Reading Inventory (IRI) both published by Macmillan/McGraw Hill. The Individual Reading Inventory consisted of reading passages and associated questions. The students were scored on comprehension skills, oral reading accuracy and oral reading fluency, reading behaviors were noted. The Decoding and Phonics Inventory consisted of Phonemic Awareness, (Same/Different,

Blending, Splitting Syllables) Letter Recognition, Letter sound relationships (Regular non-word patterns, phonetically regular words, phonetically irregular words) and word recognition. See Appendix A for a sample of the test.

The IRI was consisted of five comprehension questions per reading passage. The number of questions correct was given a percentage score. Oral reading accuracy was scored using number of errors converted to a percentile score (each passage had a chart which converted number of errors to percentile for that particular passage). Oral reading fluency was scored by calculating a reading rate based on words read per minute. In Decoding and Phonics Inventory each section was scored by giving a percentile score to the number of correct responses.

Collection and Analysis of Data

Data for the research was gathered by administering pre and post assessment tests. The children in Group one were administered the test by their individual tutor. The children in Group Two were administered the test by their classroom teacher, or another certified teacher. The test was administered once in the beginning of the school year by the end of October, and again in the middle of the school by the end of March. Percentage gains were recorded by finding the difference between the pre and post assessment test scores. For example if a child scored three out of ten items (30%) correct on the pre test and five out of ten items (50%) on the post test, the child made a 20% gain. In the case of reading fluency the reading rate (words per minute) was compared in the pre and post assessment. This analysis enabled a comparison of the students reading achievement when receiving tutoring compared to a students reading achievement when receiving no tutoring.

Table 1

Group 1
Treatment Group
(Received Tutoring)

Subjects	Grade	Ethnic Background	Gender	Pre-Assessment	Post Assessment	Gain/Loss
#1						
#2						
#3						

Table 2

Group 2
Control Group
(Received no tutoring)

Subjects	Grade	Ethnic Background	Gender	Pre-Assessment	Post-Assessment	Gain/Loss
#1						
#2						
#3						

Chapter IV

Analysis of Results

Interpretation of Assessment Results

The data gathered from pre and post assessment tools was analyzed by comparing the differences between the treatment group and the control group. The first grade students were given a decoding and phonics inventory. The second grade students were given an informal reading inventory.

This information was used to answer the following research question.

> Question 1- .Did students involved in the after school tutoring program make greater gains when receiving tutoring by certified teachers in a consistent structured program when compared to students not enrolled in the program as measured by a pre and post assessment using the Macmillan/McGraw-Hill Informal Reading Inventory and Decoding and Phonics Inventory?

A total of 24 students were studied. Twelve students received additional services and were considered the treatment group. Twelve students did not receive additional services and were considered the control group. Results are recorded on 4 separate tables, since the assessment tools differed. Results are presented in Tables 3 and Table 4 for first grade students, and Table 5 and Table 6 for second grade students.

An inspection of the Table 3 shows the subjects in the treatment group in first grade by ethnic background, gender, and percentage of success on the decoding and phonics inventory an

the percentage of success on the entire inventory for each of the tutored students and compares the results of the pre assessment inventory to that of the post assessment inventory.

Table 3

First Grade
Group 1
Treatment Group
(Received Tutoring)

Subjects	Grade	Ethnic Background	Gender	Pre Assessment	Post Assessment	Gain/loss
#1	1	Black	Female	71%	63%	-8%
#2	1	Black	Male	74%	82%	+8%
#3	1	White	Female	56%	56%	--
#4	1	White	Female	74%	88%	+14%
#5	1	White	Male	63%	79%	+16%
#6	1	White	Female	77%	88%	+11%
					Total Average Gain/Loss	+41% +6.8%

Table 4 presents parallel information for the control group. The subjects in this group did not attend tutoring sessions.

Table 4
First Grade
Group 2
Control Group
(Received no Tutoring)

Subjects	Grade	Ethnic Background	Gender	Pre Assessment	Post Assessment	Gain/loss
#1	1	Black	Female	83%	87%	+4%
#2	1	Hispanic	Male	80%	Moved	--
#3	1	White	Female	56%	63%	+7%
#4	1	Black	Female	80%	72%	-8%
#5	1	White	Male	74%	78%	+4%
#6	1	Black	Male	80%	87%	+7%
					Total Average gain	+14% +2.8%

The overall gain of the tutored students was 41% (average 6.8%) and of the non tutored students 14% (average 2.8%). A comparison of the percentages shows that while both groups improved their scores, the tutored group made greater gains. Thus, supporting the hypothesis students involved in the after school tutoring program made greater gains when receiving tutoring by certified teachers in a consistent structured program when compared to students not

enrolled in the program as measured by a pre and post assessment using the Macmillan/McGraw-Hill Informal Reading Inventory and Decoding and Phonics Inventory.

The twelve students in second grade were given an informal reading inventory. The pre assessment took place in October and the post assessment took place in March. Six students in the treatment group who received tutoring were compared to six students in the control group who did not receive tutoring.

Table 5 shows the subjects in the treatment group by grade, ethnic background, gender, and level of performance on the informal reading inventory. The IRI used equates levels three, four, and five to beginning, middle, and end of first grade reading. Levels six, and seven equal first and second half of second grade reading.

Table 5

Second Grade
Group 1

Treatment Group
(Received tutoring)

Subjects	Grade	Ethnic Background	Gender	Pre-Assessment	Post-Assessment	Gain/Loss
#1	2	White	Male	Level 5	Level 8	+3 Levels
#2	2	Black	Male	Level 5	Level 8	+3 Levels
#3	2	Hispanic	Female	Level 6	Level 7	+1 Levels
#4	2	Black	Male	Level 3	Level 3	-------
#5	2	Black	Female	Level 5	Level 7	+2 Levels
#6	2	Black	Male	Level 6	Level 7	+1 Level
					Gain/Loss Average	+10 Levels +1.7 Levels

Table 6 shows the subjects in the control group by grade, ethnic background, gender, and level of performance on the informal reading inventory. The IRI used equates levels three, four, and five to beginning, middle, and end of first grade reading. Levels six, and seven equal first and second half of second grade reading.

Table 6
Second Grade
Group 2
Control Group
(Received no tutoring)

Subjects	Grade	Ethnic Background	Gender	Pre-Assessment	Pos Assessment	Gain/Loss
#1	2	Black	Female	Level 5	Level 5	------
#2	2	Black	Male	Level 5	Level 5	------
#3	2	White	Female	Level 5	Level 5	------
#4	2	White	Female	Level 5	Level 5	------
#5	2	Black	Male	Level 7	Level 7	------
#6	2	Hispanic	Female	Level 3	Level 4	+1 Level
					Gain/Loss Average	+1 Level +.17 Levels

An inspection of the two tables indicates that there was little growth in the control group while the treatment group showed significant progress. The average gain of the treatment group was 1.7 levels while the control group gained an average of .17 levels. In the second grade student group the results support the hypothesis, students involved in the after school tutoring program made greater gains when receiving tutoring by certified teachers in a consistent structured program when compared to students not enrolled in the program as measured by a pre

and post assessment using the Macmillan/McGraw-Hill Informal Reading Inventory and Decoding and Phonics Inventory.

Chapter V

Summary, Conclusion, and Discussion

Summary

The purpose of this study was to determine if the students in the tutoring program made greater gains in reading when compared to students who did not participate in the tutoring program as measured by a reading inventory appropriate to grade level of the student.

The subjects for the study consisted of two groups of first and second grade students. Group one (treatment group) attended the tutoring program, which meet two times per week. A certified teacher tutored students, one on one. Group two (control Group) did not attend the tutoring program. All of the students attend an elementary school in a rural southern New Jersey town that is considered a Special Needs District; this school has an enrollment of 421 students. The students are assigned to a first or second grade class that is heterogeneously grouped. There are two first grade and two second grade classes in this school.

Results indicate positive gains in both groups with the treatment groups displaying a greater positive average gain than the non tutored group. The findings of this study indicate a meaningful difference in the gains made by the treatment group.

Conclusion

The data generated by this study support the conclusion that progress was made in both groups during the time frame of the study, and that the treatment group made more significant gains than the control group. There are many factors to consider when generalizing these findings. When analyzing the findings it should be noted that within the treatment group the tutoring was done by different teachers, teacher styles and expectations were not uniform. For example, one teacher's expectations may focus mainly on comprehension while another may emphasize fluency in reading. It is significant to note the treatment group did exhibit greater gains over the control group.

The standardization procedures in the administration of the assessment must also be considered. The assessment was administered by several teachers and the same teacher may not have administered both pre and post assessment. .

Discussion

The data generated in this study indicates students involved in the after school tutoring program made greater gains when receiving tutoring by certified teachers in a consistent structured program when compared to students not enrolled in the program as measured by a pre and post assessment using the Macmillan/McGraw-Hill Informal Reading Inventory and Decoding and Phonics Inventory.

Research indicates that there is a need for remediation for "at risk" students in reading. Since this study indicate greater gains for the students tutored (treatment group) in this program it would appear this program is one way of remediating students in reading successfully.

The amount of time between pre and post test was approximately 5 months. This is a very brief period in which to generalize a child's progress. A follow-up study on analysis of the gains made at the end of the tutoring program would give a better comparison of the two groups. Further study of the program should be completed to support the findings presented here.

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Appendix A

Decoding and Phonics Inventory
Macmillan/McGraw Hill

DECODING AND PHONICS INVENTORY

This part of the booklet provides information about the Decoding and Phonics Inventory (DPI) and directions for administering and scoring it. Worksheets can be found at the end of this section.

Description of the DPI

The DPI is a set of individually administered worksheets designed to assess a child's phonemic awareness, letter recognition, knowledge of letter-sound relationships, and word recognition. These worksheets may be most useful for assessing children in Kindergarten and Grade 1 to collect information on each child's progress in making speech-print connections.

These worksheets are not intended to be used as formal tests. They are designed for informal use with individual students. You can gather valuable information about each child by recording and analyzing his or her responses on each worksheet.

Administering the Prereading Inventory

The DPI is organized in sequence by general level of difficulty, from phonemic awareness through word recognition. The worksheets should be administered in this sequence. However, depending on the characteristics of children to be assessed, you may wish to begin at different points in the sequence. For example, with a Kindergartner who does not yet read words, you might begin with the phonemic awareness worksheets. For a child who can read some words but seems to have trouble with certain letters, you might begin with letter recognition or letter-sound relationships.

The following section gives directions for administering each part of the DPI. Information about scoring and interpreting the results is provided for each part. At the end of the section is a Summary Evaluation Chart for recording results for each student on all of the worksheets.

Phonemic Awareness

The first part of the DPI has three separate tasks designed to measure a child's phonemic awareness. The three tasks in this part of the inventory are sequenced from the easiest to the more difficult.

Each of the Phonemic Awareness tasks is administered orally; the child does not see a copy of the page. To administer the Phonemic Awareness assessment, make a copy of each worksheet for your own use, and write the child's name at the top. Follow the directions at the top of the

worksheet, and work through the example preceding each section. Make sure that the child understands what to do, and then administer the items. Record the child's responses on the worksheet.

If the child has difficulty with the first few questions or cannot answer them, you may wish to discontinue administering the task at this time. However, you may find that some children will have trouble with phonemic awareness tasks because they are unfamiliar. If a child seems to be having trouble with a particular exercise, you may choose to move on to letter recognition.

Worksheet 1: Same/Different

In the first task, read three or four words aloud and ask the child which one does not belong. The child decides which one is different from the others by distinguishing beginning sounds, ending sounds, or middle sounds. For example: big, bat, hat, boy.

Worksheet 2: Blending

In the second task, say three or four phonemes aloud to the child: for example, "/k/ ... /i/ ... /d/." The child's task is to put the sounds together and say "kid."

Worksheet 3: Splitting Syllables

In this task, you would pronounce a word and ask the child to (1) say the first sound, or (2) say the word without the first sound. For example: if you say "date," the child says "d-d-d" or "ate" (depending on your instruction).

After noting the child's responses to the questions, you may then wish to use the Decoding and Phonics Inventory Summary Evaluation Chart to record and evaluate the child's responses on each task.

Letter Recognition

This part of the DPI is designed to help you determine how well a child recognizes letters (both uppercase and lowercase). To administer the Letter Recognition assessment, make two copies of *Worksheet 4*. Write the child's name at the top of your copy. Give one copy to the child, and then read the directions below. Have the child point to each letter you name. On your own copy of the page, record the child's responses.

Directions: **I am going to ask you to find some letters. Point to the first row.** (Help the child find the first row, marked "Example" on the worksheet.) **Look at the first row. There are four letters. Find the letter T. Point to the letter T.** (Let the child point to a letter.) **Okay, now I will ask you to find some more letters in the same way.**

Make sure the child understands what to do. Then continue in the same way with the letters in each row.

1. K	3. I	5. m	7. r
2. S	4. F	6. y	8. b

Record the child's responses on the worksheet. The results of this assessment will indicate the child's ability to recognize letters. Items that the child answers incorrectly will indicate those letters which the child has not yet learned, and those letters may be emphasized during instruction. You may also choose to use this same worksheet again for follow-up assessment; if so, administer the items in the same way and ask the child to find a different letter in each row.

Letter-Sound Relationships

The Letter-Sound assessment consists of three worksheets with three lists on each worksheet. The word lists on each worksheet measure knowledge of letter-sound relationships with different kinds of letter patterns and words, as described below.

Worksheet 5 consists of phonetically regular nonword patterns based on the phonic elements taught in Levels 1–3 in Macmillan/McGraw-Hill Reading/Language Arts.

Worksheet 6 has two parts. In each list, the top half includes phonetically regular words, based on the words from the Dolch Graded List, Fry's Instant Words, and the phonic elements taught in Levels 1-3 in Macmillan/McGraw-Hill Reading/Language Arts. The bottom half of each list consists of phonetically irregular words, which include mainly two kinds of words: words with silent letters, such as *walk, could, often, caught;* and words with irregular vowel sounds, such as *are, there, said, been.*

To administer either of these worksheets, make a copy of the worksheet for the child and a copy for yourself. Write the child's name at the top of your copy of the worksheet. Choose one of the lists on the worksheet and have the child read the nonword patterns or words on the list. Record the child's responses on your copy of the worksheet.

This activity will help you identify the letter-sound relationships that the child does not recognize. These letter-sound combinations may then be emphasized during instruction. You may choose to use these same worksheets for follow-up assessment; if so, follow the same procedure as described above and have the child read a different list on each worksheet.

Word Recognition

This part of the DPI is designed to assess a child's ability to recognize common words. *Worksheet 7* has three lists of high-frequency words, based on the Dolch Graded List, Fry's Instant Words, and the Harris-Jacobson Basic Words List. To administer this test, make a copy of the worksheet for the child and a copy for yourself. Write the child's name at the top of your copy of the worksheet. Choose one of the lists on the worksheet and have the child read the words on the list. Record the child's responses on your copy of the worksheet.

This activity will help you identify the child's degree of familiarity with these words and may help you understand any problems or difficulties the child has in shared, emergent, or independent reading activities. You may choose to use this same worksheet for follow-up assessment; if so, follow the same procedure as described above and have the child read a different list on each worksheet.

Interpreting Results

As stated earlier, the DPI is not intended to be used as a formal assessment. It provides phonemic awareness and decoding/phonics activities for informal use with individual students, and the results of these activities may be used to help guide further instruction.

Considered separately, the results on each worksheet will indicate specific strengths and weaknesses in the child's reading and language development. When administered as a whole, the seven worksheets given in sequence will help identify the level of the child's development. For example, one child might do well on phonemic awareness and letter recognition, but not so well when it comes to reading words. Another child may do well on the first six worksheets, but not recognize some of the words on the word recognition list. The child's level of performance on the series of worksheets can be used to help determine his or her instructional needs.

Student Name _____ Date _____

PHONEMIC AWARENESS: SAME/DIFFERENT
Worksheet 1

Directions: **I am going to read some words. Listen to the beginning sound of each word. Tell me which word does not belong.**

Example. **Listen to these words: big, ball, fun. Two of the words begin with the same sound. One word does not belong. Tell me which one does not belong: big, ball, fun. (fun)**

1.	pin	man	pool	
2.	sip	take	top	
3.	can	came	him	cat
4.	deep	when	dog	done

Directions: **I am going to read some words. Listen to the ending sound of each word. Tell me which word does not belong.**

Example. **Listen to these words: red, seed, mom. Two of the words end with the same sound. One word does not belong. Tell me which one does not belong: red, seed, mom. (mom)**

5.	bus	push	miss	
6.	box	fix	take	mix
7.	long	sing	wrong	think

Directions: **I am going to read some words. Listen to the middle sound of each word. Tell me which word does not belong.**

Example. **Listen to these words: hat, cat, see. Two of the words have the same middle sound. One word does not belong. Tell me which one does not belong: hat, cat, see. (see)**

8.	bug	tag	hug	
9.	pet	get	let	sat
10.	pale	sail	fall	mail

Student Name _____ **Date**_____

PHONEMIC AWARENESS: BLENDING
Worksheet 2

Directions: **I am going to make three sounds. Listen to the sounds and put them together to make a word. Listen carefully.**

(Note: Pronounce each sound phonetically, as it would be pronounced in the word itself.)

Example. **Listen to these sounds: /t/. . . /ā/. . . /k/. What word do they make? /t/. . . /ā/. . . /k/ (take)**

1. /l/ . . . /ā/ . . . /t/ (late)
2. /f/ . . . /a/ . . . /l/ (fall)
3. /m/ . . . /e/ . . . /n/ (men)
4. /b/ . . . /u/ . . . /g/ (bug)
5. /w/ . . . /i/ . . . /th/ (with)
6. /d/ . . . /ē/ . . . /p/ (deep)
7. /l/ . . . /u/ . . . /k/ (look)
8. /m/ . . . /u/ . . . /st/ (must)
9. /s/ . . . /o/ . . . /ng/ (song)
10. /ch/ . . . /i/ . . . /n/ (chin)

Student Name_____ **Date** _____

PHONEMIC AWARENESS: SPLITTING SYLLABLES
Worksheet 3

Directions: **I am going to say a word. Listen to the beginning sound. Then say the beginning sound back to me.**

Example. **Listen to this word: kite . . . kite. Tell me the beginning sound. (k)**

1.	sit	/s/
2.	day	/d/
3.	bed	/b/
4.	take	/t/
5.	mean	/m/

Directions: **I am going to say a word. Listen to the beginning sound. Then say the word back to me <u>without</u> the beginning sound.**

Example. **Listen to this word: cup . . . cup. Say the word back to me without the beginning sound. (up)**

6.	cat	(at)
7.	fill	(ill)
8.	wait	(ate)
9.	think	(ink)
10.	near	(ear)

Student Name_____ Date _____

LETTER RECOGNITION
Worksheet 4

Example	**P**	**T**	**U**	**V**
1.	H	W	K	V
2.	S	Z	C	G
3.	T	J	L	I
4.	A	E	F	B
5.	m	n	v	w
6.	o	p	q	y
7.	d	r	u	x
8.	b	i	d	j

Student Name_____ Date _____

LETTER-SOUND RELATIONSHIPS
Worksheet 5

List 1	List 2	List 3
med	lin	kip
kot	meep	det
swip	dut	bote
gan	pog	gro
dree	nack	sime
bick	blo	nug
shub	shu	moy
doy	fet	juck
cho	han	skib
flate	stip	bry

Student Name_____ Date _____

LETTER-SOUND RELATIONSHIPS
Worksheet 6

List 1	List 2	List 3
hot	man	cap
win	fit	date
bed	tap	time
make	save	sun
can	red	lay
sick	late	rake
feet	way	meet
mat	feed	swim
are	any	what
many	door	often
two	there	eight
only	been	four
enough	sure	walk
said	would	were
could	does	some
high	caught	should

Student Name_____ Date _____

WORD RECOGNITION
Worksheet 7

List 1	List 2	List 3
not	big	and
see	come	make
jump	me	did
little	away	where
you	but	well
can	like	must
here	funny	yellow
down	are	for
look	three	we
my	our	they
this	she	yes
want	can't	fly
ride	who	sit
am	pet	no
get	will	your

Student Name _____ Date _____

Teacher Name _____ Grade _____

DECODING AND PHONICS INVENTORY

Summary Evaluation Chart

Assessment/Worksheet	Number Correct	% Score	Notes
1. Phonemic Awareness: Same/Different	/10		
2. Phonemic Awareness: Blending	/10		
3. Phonemic Awareness: Splitting Syllables	/10		
4. Letter Recognition	/8		
5. Letter-Sound Relationships: Regular Nonword Patterns	/10		
6. Letter-Sound Relationships: Phonetically Regular Words	/8		
Phonetically Irregular Words	/8		
7. Word Recognition	/15		

Appendix B

Informal Reading Inventory
Macmillan/McGraw Hill

INDIVIDUAL READING INVENTORY

This part of the booklet provides information about the Individual Reading Inventory (IRI) and directions for administering and scoring it.

DESCRIPTION OF THE IRI

The Individual Reading Inventory (IRI) consists of reading texts and teacher worksheets. The reading texts have been excerpted from literature selections in Macmillan/McGraw-Hill Reading/Language Arts, Levels 3–14. Each level of the IRI consists of two Student Pages and two Teacher Pages.

The reading texts, labeled Passage 1 and Passage 2, appear on the student pages. Both passages at each level have been excerpted from the same literature selection. They range in length from 44 words in Level 3 to nearly 200 words in Level 14.

There is a Teacher Page corresponding to each passage. The Teacher Page contains directions, questions, responses, and guidelines for scoring. The directions on the Teacher Page should be read aloud before the student begins reading. These directions include one or two prereading questions to help the student activate prior knowledge and set purposes for reading.

The questions on the Teacher Pages are designed mainly to measure comprehension and the use of reading strategies. There are six to eight questions for each passage.

Questions 1–5 are based on the comprehension and vocabulary strategies taught at each level in Macmillan/McGraw-Hill Reading/ Language Arts. These questions should be used to evaluate student performance on each level.

Questions numbered 6, 7, 8 are designed to measure metacognitive awareness—knowing which reading strategies to apply and when to apply them, reading interests, literary appreciation, and self-assessment. These questions are not intended to be included in the scoring of results for each passage, but they may provide useful information about each student's reading interests and attitudes, strategy development, and awareness of strengths and weaknesses.

The questions for each passage are numbered and labeled with a letter (C, V, or M) indicating the type of question:

- **Comprehension (C)** questions measure the student's understanding of the text at the literal, inferential, and evaluative levels.
- **Vocabulary (V)** questions require the student to use context clues from the passage to determine word meaning.
- **Metacognitive (M)** questions deal with the student's self-awareness—knowledge of reading strategies and when to use them, personal reading interests, literary appreciation, and self-assessment.

Along with the questions for the reading text, the Teacher Page provides expected responses to the questions and guidelines for scoring the student's performance. A copy of the Teacher Page may be used during the administration to record the responses for each student.

How to Use the IRI

Although there are several ways to use the IRI, we recommend using the reading selections to measure Silent Reading Comprehension. For most students, administering and scoring Passage 1 in each level will provide adequate information to support instructional placement decisions.

In cases that seem to require further information before you can make a reliable judgment, you may choose one of these approaches:

- Administer Passage 2 at the same level as a follow-up measure of Silent Reading Comprehension. Add the results from both passages (a total of 10 scorable questions).
- Use Passage 2 to assess Oral Reading Comprehension by having the student read the passage aloud and then answer the questions.
- Use Passage 2 to take a Running Record to assess the student's oral reading accuracy and fluency.

Information derived from the IRI can be extremely helpful, but decisions related to placement and instruction must also incorporate other aspects of the student's development. Particularly in the primary grades, the student's cumulative record, information gathered from classroom observation, and recommendations from the student's previous teachers must be considered.

Successful use of the IRI depends heavily on teacher judgment, and the placement of students based on IRI results should be considered tentative. Teachers should observe students closely during classroom activities for at least two weeks following the initial placement decision to verify the appropriateness of the placement.

Determining Which Levels to Administer

The IRI can be used to help determine the level in Macmillan/McGraw-Hill Reading/Language Arts at which the student is most likely to succeed. To make this decision, begin by estimating the most appropriate reading level for the student. This estimate may be based on:

- The student's cumulative record or Assessment Portfolio and the recommendations of the student's previous teacher
- The student's results on the Early Literacy Assessment (Levels 1–5) or the Pre-Book Assessment (Levels 6–14)

Begin administering the IRI at least one level below the estimated placement.

Administering the IRI

Administer the Silent Reading Comprehension passage at the chosen level, and continue administering passages until reliable instructional decisions can be made. In most cases, three levels should be adequate. For example, a student whose estimated placement is at Level 6 (beginning of Grade 2) would begin with the Level 5 passage in the IRI. You would administer passages from Levels 5, 6, and 7.

There is no time limit for administering the IRI. Students should be allowed as much time as they need to read the passages and answer the questions. For planning purposes, you should expect to spend 15–20 minutes administering the IRI to each individual.

In order to administer the IRI efficiently and make the directions understandable, you should be familiar with the directions, passages, and questions in this booklet before beginning the administration. To administer the IRI, follow these procedures.

1. Make a copy of the Student and Teacher Pages for at least three levels of the IRI, beginning one level below the estimated level for the student.

2. Explain the purpose and general guidelines of the IRI to the student.

3. Refer to the directions at the top of the Teacher Page for Passage 1 at the first level you plan to administer. Read the directions aloud to the student; then instruct the student to begin reading. Give the student as much time as he or she needs to finish reading; then ask the questions.

4. From the Teacher Page, read the questions aloud to the student and let the student respond to each one. Do not provide any help or prompting while the student is answering the questions.

5. Questions numbered 1–5 (and labeled with a C or V) measure comprehension and vocabulary. For each question the student answers correctly, put a check mark on the Teacher Page for Passage 1. The total number of check marks on the page is the total number correct. You may also want to record any incorrect responses, or responses that require teacher judgment, to help determine the nature of the student's error(s).

   Please note that some of the student's responses will require teacher judgment in determining whether or not they are correct. Answers which may vary are indicated on the Teacher Page with the phrase *example response.*

6. Questions numbered 6, 7, 8 (and labeled with an M) measure metacognitive awareness. These questions may be considered optional. Responses to these questions are not intended to be included in the comprehension score, but they can provide valuable information about the student's reading abilities. If you ask the student to respond to these questions, record each response on the Teacher Page.

If the student does not answer the questions at the first level successfully, administer Passage 1 at the next lowest level.

If the student answers the questions at the first level successfully, then administer Passage 1 for the next highest level. Continue administering Passage 1 for each succeeding level for as long as the student reads and answers the questions successfully.

Record the student's score on each level by writing the number correct and the percentage score on the Teacher Page for each passage administered.

In most cases the student's performance on Passage 1, Silent Reading Comprehension, will provide adequate information for making an initial placement decision. However, in any case which seems to require further information, administer Passage 2 at the same level before proceeding to another level. Passage 2 may be used as a follow-up measure of Silent Reading Comprehension, when poor performance indicates a need for additional information, or as a measure of Oral Reading Comprehension.

A student's performance in Oral Reading Comprehension is closely related to the student's familiarity with the content of the passage. Passages 1 and 2 are both excerpted from the same literature selection. A student who has already read Passage 1 silently should be sufficiently familiar with the context of the story to proceed directly to Oral Reading Comprehension in Passage 2. If a significant amount of time passes between the administration of Passage 1 and Passage 2, you may wish to allow the student to read Passage 2 silently before reading it aloud.

To evaluate Oral Reading Comprehension, direct the student to read Passage 2 aloud. When the student has finished reading, ask the comprehension questions on the Teacher Page. Record and score the student's responses in the same way as in the Silent Reading Comprehension.

You may want to keep a record of each student's performance on the IRI and the placement decision made from the results. If so, make a copy of the Summary Evaluation Chart on page 83 in this booklet and fill in the record for each student.

Scoring the IRI and Interpreting Results

The student's score in Silent Reading Comprehension is based on the number of comprehension questions answered correctly. There are five scorable questions for each passage. If only one passage is administered, the student's score is based on the number correct out of five. If two passages are administered, the student's score is based on the number correct out of ten.

The number correct can be converted to a percent score by multiplying times 20 or times 10. These percents are listed in the table below.

Number Correct	Total No. = 5	Total No. = 10
1	20%	10%
2	40%	20%
3	60%	30%
4	80%	40%
5	100%	50%
6		60%
7		70%
8		80%
9		90%
10		100%

A student should be placed at the highest level at which he or she answers 70–90% of the comprehension questions correctly. The Teacher Page includes a box for recording the score. It indicates the total number of questions and the percentage represented by the number of questions answered correctly.

Based on the results of Passage 1 (questions 1–5), a student score below 70% indicates the need to administer Passage 1 at the next lowest level. A score of 90–100% would indicate the need to administer Passage 1 at the next highest level.

If the student's performance seems to be borderline, you may want to administer Passage 2 at the same level before proceeding. Add the number correct on both passages (a total of 10 questions) and determine the percentage score.

The chart on the next page summarizes the recommended action based on the student's scores in Silent Reading Comprehension on Passage 1.

Student Score in Silent Reading Comprehension	Recommended Action
Less than 70%	Administer next lowest level.
70–90%	Place student at this level. Or, if the student's performance seems to be borderline, administer Passage 2 and add the scores together.
90–100%	Administer next highest level.

Note for Grade 1. The first level of the IRI is for Level 3, *Something New*. A student score below 70% on Level 3 would most likely indicate that the student should be placed in Level 2.

As explained earlier, instructional decisions should be based on a comprehensive profile of each student, derived from the results of multiple assessments. For making placement decisions, we recommend first using the Assessment Portfolio or other cumulative records from the previous year(s). If previous records do not provide adequate information, then administer the Early Literacy Assessment (Levels 1–5) or the Pre-Book Assessment from the Progress Assessment Book (Levels 6–14). The Individual Reading Inventory is intended to help provide additional information which may be used to verify or clarify instructional decisions; it is not intended to be the sole source of assessment information for placement.

Case Studies

The following "case studies" may be helpful in deciding the best use of the IRI with particular students.

Example 1. Mrs. Jackson is a second-grade teacher who wants to place Maxine in the appropriate level for instruction in Macmillan/McGraw-Hill Reading/Language Arts. Maxine has transferred in from another school, and her cumulative records indicate that she was reading in the 2-1 Reader of a different reading series. Mrs. Jackson decides to administer the IRI, beginning at Level 5 (end of first grade). She uses Passage 1 at each level. The following chart shows the results.

Level	Reading Comprehension Score (% correct)
Level 5, *Let's Pretend*	100%
Level 6, *Family Fun*	80%
Level 7, *Penpals*	60%

Maxine scored 100% on Level 5, so Mrs. Jackson administered the next highest level. Maxine scored 80% on Level 6, indicating that Level 6 could be an appropriate placement. Maxine's score on Level 7 (60% correct) verified that she should begin instruction in Level 6.

Example 2. Mr. Moran is a second-grade teacher. Lenny, a new student, has begun reading in the Level 6 reader but appears to be having some difficulty understanding the material. Mr. Moran decides to use the IRI to determine the best placement for Lenny. He begins with Passage 1 at Level 5, and Lenny scores 80% correct. They move on to Level 6, and Lenny again scores 80% correct. Mr. Moran notices that Lenny answers the questions with considerable hesitation, so he administers Passage 2 as a follow-up measure of Silent Reading Comprehension. He adds the number correct on both passages at Level 6. The chart below shows the results.

Level	Reading Comprehension Score (% correct)
Level 5, *Let's Pretend*	80%
Level 6, *Family Fun*	
Passage 1	80%
Passage 1 + Passage 2	60%

Lenny's performance on both passages together in Level 6 indicated that he was having some problems. Mr. Moran decided to place him in the Level 5 Reader.

If Mr. Moran were still not sure about Lenny's placement in the program, he could assess his Oral Reading Accuracy with the Running Record, as explained in the following pages.

RUNNING RECORD

This part of the booklet provides information about the Running Record and directions for administering and scoring it.

Description of the Running Record

Essentially, the Running Record is an individually administered instrument designed to assess oral reading accuracy and important aspects of oral reading fluency. Oral reading fluency is based on reading rate and a number of other characteristics, such as phrasing, intonation, and the "naturalness" with which the student reads aloud. Information gathered from the Running Record may be used to verify or clarify instructional decisions after the IRI has been administered, or it may be used separately throughout the school year to assess student progress in reading.

In principle, the Running Record may be used with any reading text at any time. However, the reading texts should be appropriate for the grade level in terms of interest, length, and reading difficulty. The excerpts from literature selections provided in the next part of this booklet are particularly appropriate for use with the Running Record because they represent a carefully controlled range of difficulty levels in reading and vocabulary from Levels 3–14.

As explained earlier, for each level of the IRI, there are two Student Pages and two Teacher Pages. In addition, there is a Running Record page for the teacher's use in recording results from either of the passages on the Student Pages.

Administering the Running Record

To evaluate oral reading performance, use a copy of a passage from an appropriate level in the IRI selections. If you use a passage with which the student is not familiar, allow the student to read it silently before reading it aloud. If you use Passage 2 for oral reading and the student has already read Passage 1 silently, you may ask the student to read Passage 2 aloud without further preparation.

To assess oral reading accuracy, have the student read aloud and record any errors the student makes. Recognizing and recording errors in oral reading takes a little practice, but the information gathered from such an exercise can be extremely valuable in recognizing students' strengths and weaknesses and in identifying instructional needs.

To assess oral reading fluency, have the student read aloud while you keep track of the time it takes the student to complete the reading. While the student is reading, take note of any specific reading behaviors that may offer additional insights to understanding the student's instructional needs.

The procedures for administering the Running Record are explained in more detail below.

1. Make two copies of the reading passage.

2. Hand one copy of the reading passage (or a book, open to the selected page) to the student. You may choose to read the passage aloud to the student first, emphasizing pauses for punctuation. Then ask the student to read the passage aloud.

3. To evaluate oral reading accuracy, use your copy of the passage to record any student errors during the reading. (The procedure for recording errors is explained in the following section.) After the student has completed the reading, count the number of errors and calculate the percentage of errors to determine the student's level of oral reading accuracy.

4. To evaluate fluency, keep track of how long the student takes to read the passage and take note of specific reading behaviors (as described in the following section). Calculate the number of words read per minute to determine the student's reading rate, and consider any noted reading behaviors in making judgments about the student's fluency.

5. Use a copy of the Running Record page in this booklet to record and evaluate the results of the student's oral reading. There is one Running Record page for each reading level.

You may also wish to tape-record the student's reading performance. This approach can be especially helpful in providing opportunities for later review and evaluation.

Reading Errors

The student's score in oral reading accuracy is based on the number of reading errors noted. In the following chart, the left-hand column shows the types of errors which should be noted as the student reads the passage aloud. The right-hand column shows examples and the type of notation which could be used to record each error.

Reading Errors	Examples and Notations
1. Omission (words or parts of words omitted)	The girl reads a book.
2. Insertion (words or parts of words inserted)	The girl reads a book.
3. Mispronunciation/Misreading	The girl ~~reads~~ a book.
4. Substitution (words or parts of words substituted for those in the text)	The girl reads a book.
5. Hesitation (teacher provides word)	The girl reads a book.

Notes

If the student hesitates over a word, you should wait at least five seconds before providing the word that causes the student's hesitation.

If the student makes exactly the same error repeatedly (for example, omits the *-ed* ending from a word), it is scored as only one error.

If the student makes an error and then self-corrects before proceeding, it should not be counted as an error.

Reading Behaviors

During an oral reading performance, the student may exhibit any of a number of specific reading behaviors. These behaviors should not be considered errors and should not be included in the score for oral reading accuracy. However, they may provide helpful insight for understanding the student's reading patterns and instructional needs, and observation of these behaviors can contribute to judgments about the student's level of fluency. As time allows, you may want to record these reading behaviors during the administration.

In the chart below, the left-hand column describes the types of reading behaviors which may be observed. The right-hand column provides examples and the type of notations to be used in recording these behaviors.

Reading Behaviors (not scored)	**Examples and Notations**
1. Repetition (The student repeats words or parts of words.)	The girl reads a book.
2. Self-Correction (The student repeats a word or words to correct an error.)	c/reds The girl reads a book.
3. Pausing (The student pauses, then reads the word without help.)	✓ The girl reads a book.
4. Mispronunciation or Substitution/Dialect (Words are pronounced in a nonstandard way or replaced with dialectical equivalents.)	The girl writes with a pen. (pin)
5. Phrasing (The student reads with phrasing that does not coincide with punctuation or emphasis in the text.)	The girl/has/a/pen, some paper, and some/crayons.

Interpreting Results

The student's score in oral reading accuracy is based on the number of reading errors noted, calculated as a percentage. The student should read 95% or more of the words correctly.

For the two reading texts at each level in this booklet, there is a Running Record chart. This chart provides space for recording the student's percentage score in oral reading accuracy on each passage. Below each chart are two tables showing the total number of words, the number of errors noted, and score. These tables may be used to determine the student's percentage score on each passage.

If the student makes more than the number of errors shown on the table, you can calculate the percentage score by using the formula described below. If you use reading texts other than those provided in this booklet, you may calculate the percentage score with this same formula.

To calculate percentage, count the total number of words in the passage. Then, after the student has finished reading, determine the number of words the student read correctly (total number of words minus the number of errors) and divide by the total number of words. Multiply times 100 to get the percentage. The formula is as follows:

$$\frac{\text{Total \# of Words - \# of Errors}}{\text{Total \# of Words}} \times 100 = \_\_\_\_\_ \%$$

The student's score in oral reading fluency is based on the reading rate (number of words read per minute) and observations of reading behaviors. In general, the reading rate should be equivalent to the student's age x 10, plus or minus 10. Thus, a student at age 7 should be able to read 70 words per minute, plus or minus 10 = 60–80 words per minute. A student at age 8 should be able to read 70–90 words per minute.

To calculate the reading rate, count the total number of words in the passage and record the number of seconds taken to complete the reading. Divide the number of words read by the number of seconds. Then multiply times 60. The formula is as follows:

$$\frac{\text{Total \# of Words Read}}{\text{\# of Seconds}} \times 60 = \_\_\_\_\_ \text{ words per minute}$$

Example. The example below shows the annotations made by a teacher during the administration of an oral reading passage and the amount of time the student took to read the passage.

Family Fun, Level 6

Passage 2

Henry used to walk to school alone. When he walk ~~walked~~ he used to worry about tornadoes, ghosts, biting dogs, and bullies. He walked as fast as he could. He +he looked straight ahead. He never looked back.

But now he walked to +he school with Mudge.

And now when he walked, he thought about vanilla ice cream, rain, rocks, and good dreams. He walked to school but not ~~too~~ fast. He walked to school and sometimes backward.

He walked to school and patted Mudge's big head, happy.

Time: 1 min., 19 sec.

The 7-year-old student who read this passage made a total of five errors. In line 2, she mispronounced *walked*. In line 4, she substituted the word *the* for *He*. In line 5, she inserted the word *the*. She hesitated over the word *vanilla* in line 6, and the teacher had to provide the word. And in line 8, she omitted the word *too*.

This passage has a total of 85 words, and the scoring table indicates that a total of five errors represents a percentage score of 94%. Since the student did not attain a score in the 95–98% range, she may need additional instruction in reading and decoding. Record the student's score on the Teacher Page as follows.

Oral Reading Accuracy	
Total No. of Words: 85	
# of Errors	%
5	94

Scoring Table	
# of Errors	**% Score**
1	99%
2	98%
3	96%
4	95%
5	94%
6	93%
7	92%
8	91%

To calculate the reading rate, the teacher noted the time taken by the student to read the entire passage. The student took 1 minute, 19 seconds, or 79 seconds. The total number of words (85) divided by the time required (79 seconds) times 60 = the reading rate (65 words per minute). A 7-year-old should be able to read 60–80 words per minute, so this student reads at an appropriate rate of speed. The reading rate may also be noted on the Running Record chart.

Qualitative Analysis

In addition to reading rate, oral reading fluency is based on other aspects of reading, such as phrasing, "naturalness," and intonation. If you take note of specific reading behaviors during the student's oral reading performance, you may want to go back and review this information before making judgments of oral reading fluency.

For example, the 7-year-old in the example above achieved a reading rate of 65 words per minute, which is within the expected level of 60–80 words per minute. However, during the oral reading, the teacher noted that the student made several self-corrections, paused on three different occasions before reading the words without help, and did not always read with phrasing that coincided with the punctuation in the text.

These kinds of reading behaviors are important to observe. Self-correction, for example, is an important skill in reading development, but it tends to slow the reading rate because it adds to the amount of time involved. Pausing before reading words without help may suggest that the student is using decoding strategies to decide how to read specific words. Inappropriate phrasing may suggest that the student does not understand the significance of punctuation marks.

A qualitative analysis of the student's reading performance should consider any observed reading behaviors as well as reading errors and reading rate. This kind of analysis may be very helpful in making instructional decisions about individual students.

In making placement decisions based on the IRI and the Running Record, the comprehension score should be considered most important. For example, at Level 5, a student who scores 80% in silent reading comprehension and 90% in oral reading accuracy should probably be placed in Level 5. The results of the oral reading assessment may be used as additional information to help plan instructional emphases for this student.