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ABSTRACT

A study examined the effects on 80 first graders' reading achievement when direct instructional phonics is incorporated as a supplement to a whole language approach. Two first-grade classrooms used the Houghton-Mifflin Integrated Literature Program, and two other classrooms supplemented the program with direct phonics instruction. Subjects completed a school readiness inventory and word recognition and fluency pretests, and were given posttests on word recognition, fluency, and the Houghton-Mifflin Student Progress Survey. Results indicated that the direct instruction group: (1) did significantly poorer in the school readiness inventory; yet (2) scored as well on the word recognition and fluency posttests as the other group; and (3) scored higher on the student survey. A second study of teaching and learning of reading in seven upper elementary reading resource rooms was conducted using the premises of grounded theory research. One finding of the study is relevant to a possible explanation of teachers' willingness to consider new instructional ideas: an underlying routine seemed to bind together the more obvious routines into stable interlocking networks. Traditional teachers who resist a whole language orientation often raise concerns associated with routines. In order "to do" whole language, a traditional teacher must relinquish the notion that a transition to a whole language orientation simply means a change of materials and the inclusion of a few new procedures. For major changes to occur efficiently teachers need to appreciate that change in one routine may strongly impact others. (RS)

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RESEARCH BULLETIN

Pilot Study of the Effectiveness of a Direct Instructional Model as a Supplement to a Literature-Based Delivery Model

by

Brenda Thomson

Traditional Teaching to Whole Language: A Focus on Instructional Routines

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Lynn D. Miller, Ph.D.

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F.E.R.C. NOTES ON THIS BULLETIN

Brenda Thomson was an SLD teacher at Ballard Elementary School in Manatee County when she conducted this study. It is somewhat a rarity when teachers are able to conduct research while teaching. F.E.R.C. was pleased to fund this research and takes pride in publishing it for our readers' benefit.

Dr. Lynn D. Miller presented her paper at the 1992 Spring Brievogel Conference held at Florida International University. F.E.R.C. selected this paper to be published as Part II of this bulletin as both complementary to Brenda Thomson's research and as extremely important in its own right. F.E.R.C. is pleased to publish Dr. Miller's paper on the Whole Language Movement for the edification of F.E.R.C. subscribers.

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Pilot Study of the Effectiveness of a Direct Instruction Model (Reading Mastery Fast Cycle)

as a supplement to a

Literature Based Delivery Model (Houghton-Mifflin Integrated)

Reading Program

In Two Regular First Grade Classrooms

Ballard Elementary School

Manatee County District Schools

by

Brenda Thomson

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CONTENTS

Executive Summary

Often "whole language" proponents and phonics proponents are at odds over which method is best for all students. This study attempts to look at the effects of combining the approaches to enhance reading instruction for all students.

Eighty first grade students were involved in a comparative study to look at the effects on reading achievement when direct instructional phonics is incorporated as a supplement to a more global, "whole language" approach.

Two first grade classrooms used the direct instruction program known as Reading Mastery Fast Cycle to supplement the Houghton-Mifflin Integrated Literature Program. Two remaining first grade classrooms received the Houghton-Mifflin Integrated Literature Program without the direct instruction supplement. All four classrooms were given a school readiness inventory at the beginning of the school year. They were also given pre-tests on word recognition and fluency levels. Upon completion of first grade the students were given post tests on work recognition, fluency and the Houghton-Mifflin Student Progress Survey.

A T-Test was used to analyze the results of the pre and post testing. Because this was in a school setting, variances between the two groups existed that were not under control of the study. For example, the Direct Instruction group did significantly poorer on the school readiness inventory. Therefore, based on this instrument, they were less prepared for first grade skills than their counterparts. However, even with this variable, the Direct Instruction group was able to score as well on the word recognition and fluency post tests as the other group. They also surpassed their counterparts in the Houghton-Mifflin group on the Houghton-Mifflin Student Progress Survey.

These results suggest that there is a possibility that the direct instruction model had a significant effect upon these "less than ready" students and enabled them to function as well and in one case better than their peers.

Pilot Study of the Effectiveness
of a Direct Instruction Model
(Reading Mastery Fast Cycle)
as a supplement to a
Literature-Based Delivery Model
(Houghton-Mifflin Integrated)
Reading Program

INTRODUCTION

The current debate over phonics instruction vs. a more global approach to reading instruction has prompted many in education to choose sides (Kantrowitz, 1990). Proponents of whole-language, literature-based integrated reading programs, or other global approaches believe that "language is easy to learn when it is meaningful and functional" Goodman, 1990).

Jeanne Chall, of Harvard University's Reading Laboratory, and others lead the other side of the debate by stating that learning phonics is an essential first step (Chall, 1989).

At Ballard Elementary School, Manatee County, FL, we believe that we have a certain segment of students that need a step by step, sequential skill oriented phonetic delivery model to insure their success in overall reading achievement. We further believe that these students will be far more able to benefit from our current county-adopted, more global approach to reading and the rewards it has to offer when provided with supplementary approaches.

A Direct Instruction delivery model was chosen to be used as a supplement to the literature-based Houghton-Mifflin Integrated Literature Program during the 1991-1992 school year with four first grade classrooms. The direct instruction program chosen was the commercially produced Reading Mastery Fast Cycle. This delivery model provides the teacher and student with the necessary structure of specific teacher and student behaviors, skills built upon skills, active learning, teaching until mastery, and daily assessment (Englemann and Bruner, 1988). There is also a behavior shaping component built in. Teacher consistency is assured by scripted lessons and teacher pre-training

The Direct Instruction delivery model has been proved to be very successful in over 30 Specific Learning Disabilities classrooms in Manatee County in the last two years. An informal study done by the

SLD department during the 1989-90 school year did confirm a substantial increase in student achievement in the areas of word recognition and fluency.

The county-adopted delivery model used in all regular classrooms K-5 is the Houghton-Mifflin Integrated Literature Reading Program. It is a literature-based delivery model with a strong emphasis on meaning, reader reaction, writing, and the love of literature (Durr et al., 1989).

We believe that no delivery model can be all things to all students. However, when used together, even though the two models' philosophies on the surface seem to clash, student reading achievement can increase particularly for those students at risk.

Statement of Problems

The primary focus of this study was to address the effect on student reading achievement in two regular first grade classrooms at Ballard Elementary School who used the Direct Instruction delivery model known as SRA Reading Mastery Fast Cycle as a supplement to the Houghton-Mifflin Integrated Reading Program. Student achievement was measured both formally and informally throughout the school year. A comparison of reading achievement between two first grade classrooms who used Direct Instruction as a supplement and two first grade classrooms who only used the Houghton-Mifflin Integrated Reading Program was addressed.

Literature Review

Students at risk commonly have deficits in phonological processing. "They are often unaware of how written symbols map onto speech." "But these students can be trained to segment and blend" and they must to be able to achieve in reading (Liberman and Shankweiler 1979).

Invar Lundberg and his associates in Sweden found that phonological awareness was the single most powerful predictor of future reading and spelling skills in young children. "When students are trained through tasks designed to develop their awareness of phonemes, their reading achievement improves" (Lundberg, Olofsson, and Wall, 1987).

Marilyn Adams' recent most comprehensive research synthesis concluded, "perhaps the most influential arguments for teaching phonics are based on studies comparing the relative effectiveness of different approaches to teach beginning reading (Adams, 1988). Collectively, these studies suggest, with impressive consistency, that programs including systematic instruction on letter-sound correspondences lead to higher achievement in both word recognition and spelling at least in the early grades, and especially for slower or economically disadvantaged students" (Adams, 1988). The notable report, Becoming a Nation of Readers, also supported the effectiveness of phonics instruction (Chall, 1989).

"Research evidence, theory and practice all show that direct instruction in phonics can improve reading achievement significantly" (Chall, 1989). "It is not uncommon for some educators to hold erroneous views about those who teach phonics. They tend to believe that those who teach phonics cannot be concerned with the cognitive, meaningful, creative, and joyful aspects of literature" (Chall, 1989).

"Currently, the antiphonics movement has taken unto itself a pro-literature, pro-writing, and pro-thinking stance, as if those who teach phonics and decoding are opposed to these obviously excellent aims" (Chall, 1989). "An earlier and more systematic teaching of phonics brings about an earlier, more enlarged reading vocabulary to enjoy literature and a code emphasis leads to earlier rather than later writing."

METHODOLOGY

Sampling

Two first grade classroom teachers at Ballard Elementary School, Manatee County, FL, volunteered to participate in the use of a Direct Instruction program known as Reading Mastery Fast Cycle as a supplement to the Houghton-Mifflin Integrated Reading Program. Their reading achievement was compared with two first grade classrooms who were using only the Houghton-Mifflin Integrated Reading Program. All classrooms were comprised by Ballard Elementary School's administration in a heterogeneous random grouping based on previous classroom teachers' perceptions. No students were included in the study that entered Ballard Elementary after September 1991.

During the first week of the 1991-92 school year, all first grade students were individually screened with The Lollipop Test: A Diagnostic Screening Test for School Readiness. This test was designed to be used primarily as a screening test to identify those children who may require additional psychoeducational evaluation (Chew, 1981). This diagnostic instrument has been designed to have concurrent validity with the widely used instrument known as the Metropolitan Readiness Tests (MRT) (Chew, 1981). The result of these individual assessments established baseline data for all participating students as well as established any differences among the two groups.

The Direct Instruction teachers received their training in Direct Instruction in the spring of 1992. After one day's training, the teachers visited several on-site Direct Instruction classrooms. The Specific Learning Disabilities Resource teacher continued the Direct Instruction training in both first grade classrooms with demonstration lessons two days a week throughout the 1991-92 school year. These demonstration lessons did not add additional instruction time to the students. The SLD teacher was merely acting as a substitute teacher for that particular group.

Procedures and Data Analysis

Research Question 1

Is there a difference in the achievement of students in the Direct Instruction classrooms on the Houghton-Mifflin Progress Surveys done three times a year when compared to the students who are not in Direct Instruction?

Procedures. Three Progress Surveys are provided in the Houghton-Mifflin Integrated Program. They are to be completed following the completion of prescribed reading selections. Directions are described in the manual. Teachers used the same directions for all four classrooms. The teachers conducted only one survey this year during the month of May.

The Houghton-Mifflin Teacher's Manual states that the surveys are holistic measures of a student's growth in reading (Durr et al., 1989). It was suggested that the percentage scores be interpreted with the following guidelines: If a student scored 70 percent or more, students were considered to be making satisfactory progress in the

book in which they were working. Students scoring below 60 percent were not considered to be making satisfactory progress in the program (Durr et al., 1989).

Research Question 2

Are word recognition skills increased in students using the Direct Instruction delivery model as a supplement to the Houghton-Mifflin Integrated Reading Program when compared to the students who are not in the Direct Instruction delivery model?

Procedures. Each student who attended only Ballard Elementary during first grade was administered pre and post Woodcock-Johnson Individual Achievement Tests. Subtests included were word recognition, sound blending, and passage comprehension. Pretests were administered in September 1991. Post tests were administered May 1992. Volunteers administered the tests.

Research Question 3

Are fluency levels increased in students using the Direct Instruction delivery model as a supplement to the Houghton-Mifflin Integrated Reading Program as compared to the students who are not in the Direct Instruction delivery model?

Procedures. A pre and post test one minute timing of words read on a Dolch first grade story were administered. Pretests were given in September 1991. Post tests were given in May 1992. Volunteers administered the tests.

Secondary Analysis

Progress Surveys

All four first grade classrooms were administered the Houghton-Mifflin Integrated Reading Program Survey in May 1992. A T-test was conducted to look at the combined means of T-test scores.

Word Recognition

All four first grade classrooms did participate in pre and post individual reading achievement tests known as the Woodcock-Johnson Individual Reading Achievement Test. Pretesting was administered in September 1991. Post testing was administered in May

1992. A T-test was conducted to look at the average gains in both the Direct Instruction group's pre and post test as compared to the Houghton-Mifflin group's average gain.

Fluency Levels

All four first grade classrooms did participate in a pre and post one minute timing of words read on a Dolch first grade story. Pretests were administered in September 1991 and post tests were administered in May 1992. The gain was calculated and compared between the two groups using a T-test.

RESULTS

Due to the school's transient population, only a total of 80 first grade students were able to be involved in the study to completion. The Direct Instruction group had a total of 44 subjects while the Houghton-Mifflin group had a total of 36 students involved.

Results of The Lollipop Test for School Readiness indicated that for the Houghton-Mifflin group their mean performance on this particular instrument was 67.9167. The Direct Instruction group's mean performance was 62.8409. The 2-tail probability was .000.

This indicated that according to The Lollipop Test the Houghton-Mifflin population was better prepared for the requirements of first grade.

Results of Woodcock Johnson Individual Reading Achievement Pretest indicated there was no difference between the groups. The Houghton-Mifflin group's mean performance was 5.9761. The Direct Instruction group's mean was 5.8882. The 2-tail probability was 649.

Results of the word fluency pretest indicated no difference between the two groups. The Houghton-Mifflin group's mean performance was 5.3333. The Direct Instruction group's mean performance was 7.8182. The 2-tail probability was 365.

Therefore, there was no significant difference between the two groups in any pretest except for the readiness instrument.

The post test results on two of the instruments indicated that even though the Direct Instruction group scored lower on their school readiness test, they were able to score very close to their Houghton-Mifflin peers. In other words, the Direct Instruction group had an apparent disadvantage when considering their readiness for first

grade skills. However, they were able to closely match the performance of their more "able" peers and in some cases, out-perform them.

For example, there was no difference between the two groups on the Woodcock-Johnson post test. The Houghton-Mifflin group's mean performance was 100.4167. The Direct Instruction group's mean performance was 99.2045. The 2-tail probability was .667.

There was also no difference for word fluency between the two groups on the post testing of the work fluency instrument. The Houghton-Mifflin group's mean performance was 5.3333. The Direct Instruction group's mean performance was 7.8182. The 2-tail probability was .365.

However, on the third test, the Houghton-Mifflin Student Profile, the Direct Instruction group significantly performed better. The Houghton-Mifflin group's mean performance was 69.7222. The Direct Instruction group's mean performance was 80.3864. The 2-tail probability was .046.

CONCLUSION

The results of this informal study draw as many questions as conclusions. For example, given the results of the readiness inventory, one would conclude that the Direct Instruction group would lag far behind the Houghton-Mifflin group on all post test results. That was not the case. The Direct Instruction group was able to keep up with their peers on two of the post testing instruments and, in fact, excelled in the Houghton-Mifflin student surveys.

Did the amount of extra attention from the SLD teacher have any effect? Did the additional training of the Direct Instruction teachers have any effect? It is hard to single out any of these factors. It is most difficult to assign success to the fact that the SLD teacher substituting as the classroom teacher provided enough additional teaching time for that to be a significant effect.

It seems just as difficult to assign success to the one day's worth of teacher training given to the Direct Instruction teachers in the previous school year.

It seems far more reasonable to consider the effects of a systematic, sequential, teach until mastery phonics approach such as found in Direct Instruction Reading Mastery Fast Cycle as having an impact.

The two Direct Instruction teachers have reported that they have

never had such a successful year. They indicate that all their students, even those who are recommended to repeat in the next school year, can read. That has never been their experience. They also report that they have never had the amount of students excel on their Houghton-Mifflin surveys in the past. Both teachers report that in the previous year they had approximately two to three students collectively score 100% on the survey. This year they had collectively 15 students scoring 100%.

The Houghton-Mifflin teachers indicated that in the previous school year they had approximately 2-3 students scoring 100% on the Houghton-Mifflin Survey. This year they had 4 students collectively scoring 100%.

It is also of interest that the Direct Instruction group ended up with more Specific Learning Disability students than the Houghton-Mifflin group. The Direct Instruction group had a total of 9 students qualify for SLD by the end of the school year. The Houghton-Mifflin group ended up with 3.

Therefore, in response to the research questions regarded in this study, the following conclusions can be derived:

Research Question 1

Is there a difference in the achievement of students in the Direct Instruction classrooms on the Houghton-Mifflin Progress Surveys when compared to the students who are not in Direct Instruction?

The Direct Instruction group appears to have out performed the Houghton-Mifflin group on the Houghton-Mifflin Student surveys. The Direct Instruction teachers have also reported an increase in achievement of this particular instrument.

Research Question 2

Are word recognition skills increased in students using the Direct Instruction delivery model as a supplement to the Houghton-Mifflin Integrated Reading Program?

The results are somewhat inconclusive due to the apparent difference in the two populations according to the readiness inventories. However, given the fact that the Direct Instruction group apparently was less ready to begin first grade, with the supplemental instruction they were able to function as well as the Houghton-Mifflin group in this particular area.

Research Question 3

Are fluency levels increased in students using the Direct Instruction delivery model as a supplement to the Houghton-Mifflin Integrated Reading Program as compared to the students who are not in the Direct Instruction delivery model?

The results are also somewhat inconclusive due to the apparent differences in the two populations according to the readiness inventories. However, given the fact that the Direct Instruction group apparently was less ready to begin first grade, with the supplemental instruction, they were able to function as well as the Houghton-Mifflin group in this particular area.

It should also be noted that Ballard Elementary School plans to expand its use of Direct Instruction next year to include all first and second grades. It was decided by the school administrator as a result of the progress the Direct Instruction group made. It will continue to be used as a supplement to the county-adopted reading program known as Houghton-Mifflin. By using both approaches, possibly more students will be able to experience success.

References

Adams, Marilyn J. (1988). "Phonics and Beginning Reading Instruction," draft a report prepared for the Reading Research and Education Center, University of Illinois, Urbana, cited in Chall, Jeanne S. (1989) "Learning to Read: The Great Debate 20 Years Later—A Response to 'Debunking the Great Phonics Myth,' " *Phi Delta Kappan*, Phi Delta Kappa Educational Foundation, March 1989 (p. 529).

Anderson, Richard C. et al., Becoming a Nation of Readers: The Report of the Commission of Reading (Urbana: Center for the Study of Reading, University of Illinois, 1985), cited in Chall, Jeanne S. (1989) "Learning to Read: The Great Debate 20 Years Later—A Response to 'Debunking the Great Phonics Myth,' " *Phi Delta Kappan*, Phi Delta Kappa Educational Foundation, March 1989 (p. 529).

Chall, Jeanne S., "Learning to Read: The Great Debate 20 Years Later—A Response to 'Debunking the Great Phonics Myth,' " *Phi Delta Kappan*, Phi Delta Kappa Educational Foundation, March 1989 (pp. 521-537).

Chew, Alex L., *The Lollipop Test: A Diagnostic Screening Test for School Readiness*, Humanics Limited, Atlanta, 1981.

Durr, William K. et al., *Houghton Mifflin Integrated Reading Series*, Houghton-Mifflin Company, Boston, 1989.

Englemann, Siegfried and Bruner, Elaine C., *Reading Mastery I/II Fast Cycle*, Science Research Associates, Inc., Chicago, 1988.

Goodman, Ken, University of Arizona, cited in Kantrowitz, Barbara, "The Reading Wars." *Special Edition Newsweek*, Fall/Winter, 1990 (p.9).

Kantrowitz, Barbara, "The Reading Wars." *Special Edition Newsweek*, Fall/Winter, 1990 (pp. 8-14).

Liberman, Isabelle Y. and Shankweiler, Donald J., "Speech, the

Alphabet, and Learning to Read," in Resnick, Lauren B. and Weaver, Phyliss A., eds., *Theory and Practice of Early Reading*, Vol. 2 (Hillsdale, N.J.: Erlbaum, 1979) Helfgott, "Phonemic Segmentation and Blending Skills of Kindergarten Children: Implications for Beginning Reading Acquisition, *Contemporary Educational Psychology*, Vol. 1, 1976, pp. 157-169: Fos, Barbara and Rough, Donald, "Phonomic Analysis and Synthesis as Word Attack Skills, *Journal of Educational Psychology*, Vol. 68, 1976, pp. 70-74; and Treiman, Rebecca A. and Baron, Johnathan, "Segmental Analysis Ability: Development and Relation to Reading Ability," in Walker, T.G. and MacKinnon, G.E., eds., *Reading Research: Advances in Theory and Practice*, Vol. 3 (New York: Academic Press, 1982) (pp. 159-198), cited in Chall, Jeanne S., "Learning to Read: The Great Debate 20 Years Later—A Response to 'Debunking the Great Phonics Myth,' " *Phi Delta Kappan*, Phi Delta Kappa Educational Foundation, March 1989 (p. 531).

Williams, Joanna P. "The ABC's of Reading: A Program for the Learning Disabled" in Resnick and Weaver, Vol. 2, pp. 179-195: Wallach, Michael A. and Wallack, Lise, "Helping Disadvantaged Children Learn to Read by Teaching Them Phoneme Identification Skills," in Resnick and Weaver, Vol. 2, pp. 197-215: Tunmer, William E. and Nesdale, Andrew R., "Phonemic Segmentation Skill and Beginning Reading," *Journal of Educational Psychology*, Vol. 77, 1985, pp. 417-427 and Bradley and Bryant, op. cit., as cited in Chall, Jeanne S., "Learning to Read: The Great Debate 20 Years Later—A Response to 'Debunking the Great Phonics Myth,' " *Phi Delta Kappan*, Phi Delta Kappa Educational Foundation, March 1989 (p. 529).

Traditional Teaching to Whole Language: A Focus on Instructional Routines

by
Lynne D. Miller, Ph.D.

South Florida teacher may expect to educate children who are characteristically poorer and more ethnically and linguistically diverse than in the past. They are asked to deliver a quality education in an environment fraught with growth-related challenges and serious societal problems—all to be done with increasingly limited resources. Making changes necessary to address these problems is a formidable task, but possible. The possibilities of success increase if we identify, discuss, and understand issues specifically.

While many changes have been proposed for South Florida elementary schools within the past few years, perhaps one of the most jarring shifts is the movement in reading instruction from a traditional to a whole language orientation. Whole language draws from a solid foundation of current socio-emotional-psycholinguistic research and best practice findings. Proponents advocate that whole language enhances the probabilities of successful learning experiences for children, because it best represents how children learn (Cambourne, 1988; Goodman, 1986; Newman, 1985).

There seems to be a high degree of tension between the traditional instructional practices of many teachers and their attempts to implement a whole language model of instruction. Because of this tension, many traditional teachers who attempt "to do" whole language inadvertently meet with frustration. They subsequently claim that "whole language doesn't work" or that "whole language can be used only with certain types of children in limited types of school environments." These teachers may give up on (their version of) "whole language" without ever understanding the heart of a whole language philosophical orientation.

I invite you to consider a theory for the difficulty some teachers have in shifting to a whole language orientation. I propose that teachers may more readily accept an instructional practice as workable if it fits easily within their existing instructional routines. They may ignore or reject those which call for conceptualizing radically different ones. While routines spring from belief systems, I contend that teachers operate at the level of routines when considering

instructional practices. This theory could help to explain why some teachers ignore ideas that work well for others. I will build a case for this theory by (1) placing this article within the context of grounded theory research, (2) highlighting a pertinent finding from a grounded theory study, and (3) examining several critical features of traditional and whole language philosophical orientations germane to the theory.

Grounded Theory Research

The premises of grounded theory research are not widely known within the mainstream of educational research. I mention a few of them explicitly to provide a context for the style, form, and content of this article.

Grounded theory research is primarily explorative, descriptive, and generative. The researcher uses a variety of qualitative and quantitative procedures to conduct a rigorous, dynamic investigation. The researcher analyzes data on an ongoing basis and uses insights gleaned to drive the investigation. By the end of the study, the researcher has identified core variables central to the focus of the study and suggests possible connections among them (Glaser & Strauss, 1967). The researcher's continual and purposeful interaction with the data during collection and analysis differentiates grounded theory research from ethnographic paradigms.

The integrity of grounded theory research may be measured by the degree to which the researcher develops analyses grounded in the data. Its value is confirmed as others consider and interact with generated ideas. Posturing based on quantitative versus qualitative research often hinges around the looming specters of validity, reliability, and generalizability. Narrowly defined, these three critical aspects of quality research may limit our ability to address through rigorous, systematic study complex issues we need to understand to transform education. Two major tenets underlying grounded theory research provide a sensible framework for addressing complex social issues: (1) research of any kind is as good as it contributes to the understanding of a phenomenon; and (2) individuals gain an understanding of a complex phenomenon by synthesizing knowledge from multiple sources (e.g., personal experience, best practice, qualitative and quantitative research, etc.). Research becomes one source of information and a springboard for ideas and discussions.

A Grounded Theory Study

In 1988, I conducted an in-depth study of the teaching and learning of reading in seven upper elementary (grades 4, 5, 6) reading resource rooms (Miller, 1988). The reading resource rooms were part of a district-wide Chapter 1 program that provided supplemental reading instruction to qualified students. These students worked in their regular classrooms for the major part of each day, spending either 30 minutes or 40 minutes daily in the reading resource rooms. The teachers participating in the study held standard elementary certification, reading specialist certification, and Master of Arts degrees in reading. They all had seven or more years of teaching experience.

One aim of this exploratory study was to identify, analyze, and describe core variables of the teaching and learning of reading within this type of educational context. A second purpose was to generate theory grounded in the research data. The conceptual framework for the study emanated from grounded theory research methodology.

Over a period of four months, I spent a total of 84 hours in seven reading resource rooms. I adapted data collection procedures from (1) participant observation (Spradley, 1980), (2) continuous observation (Borg and Gall, 1983; Glaser, 1978), and (3) ethnographic and counseling interview techniques (Spradley, 1979; Lauver, 1984). These specific data collection procedures helped with the systematic collection of qualitative, observational field work data.

While observing continuously for consecutive mornings in each reading resource room, I recorded observations in chronologically ordered field notes written in narrative form. These field notes constituted the primary data. Exit interviews with the reading resource room teachers were secondary data. The main purposes of the exit interviews were to have the teachers confirm the accuracy of my observations and to clarify interpretations or assumptions.

Data were analyzed within a concept-indicator model (Strauss, 1987). I systematically analyzed bits of data as indicators of concepts. This meant a word-by-word and line-by-line combing of the field notes. Each bit of data was potentially an indicator of a concept. These concepts were generated through my interaction with the data.

As I examined the indicators comparatively, I assigned a provisional name to the indicator of a class of events or actions. This name

became a code, and the class suggested a category. Thus, coded categories were derived from the data. This procedure of comparing indicators, concepts, and categories continued until the codes were verified and saturated. A code became verified when the ongoing systematic examination of the data continued to support the code. A code became saturated when no new indicators, concepts, or categories were found.

An Important Finding

This study resulted in several findings, all thoroughly grounded in the observational field note data. One is particularly relevant to a possible explanation of teachers' willingness to consider new instructional ideas. This finding deals with the significance of classroom routines.

The teachers in the reading resource rooms had established a variety of routines. Some routines were for the management of instruction (students raised hands for questions, index cards with students' names for turn taking). Others helped with the management of behavior (reward stickers, names on the chalk board). Still others addressed the management of materials (access to the pencil sharpener, access to students' folders).

Through the collection and analysis of data, I became aware of an even more subtle and pervasive underlying routine. It seemed to be established by the intangible elements of the teachers' belief systems that I inferred through the teachers' verbal interactions with students and instructional choices. This underlying routine seemed to bind the other more obvious routines (managing instruction, behavior, materials, etc.) into stable interlocking networks.

During the exit interviews, I was able to re-create the essence of each resource room teacher's underlying routine. By the end of these interviews, the reading resource room teachers, without exception, reported that I not only accurately described their programs, but that I had accurately captured the essence of the teaching and learning of reading in their rooms. I believe I did this by becoming aware of and attending to the underlying routines.

There was another verification that routines were well ingrained. I observed no verbal or behavioral signs of surprise or confusion related to anything the students found when entering the resource rooms or related to any of the activities or modes of instruction in

which they became involved. The routines, both the underlying and more obvious, created a predictable flow to the teaching and learning of reading within each resource room, regardless of the quality of instruction. My findings seemed to complement the findings of Forness and Gurthrie (1977), who conducted a study to figure out the point at which successive days of classroom observation resulted in a reliable sample of behavior. They reported that stable measures of behavior were obtained in four to six days time. I use the Forness and Guthrie finding to support the idea that there are consistent, ongoing, predictable patterns of behavior, or routines, within classrooms.

The origins of the routines, especially the central underlying routine, seemed outside the teachers' immediate awareness, rooted in a network of belief systems. I noted that all but one of the teachers spoke about what would work in their classrooms and what would not by making references to their routines and not to their belief systems.

From Traditional Teaching to Whole Language

Traditional teaching is characterized as product-oriented and teacher-controlled, while whole language is process driven, child-centered, and language-based. These two pedagogical orientations stem from very different philosophical bases that become actualized in teachers' belief systems about teaching and learning. They each support distinct networks of interlocking classroom routines. The philosophical bases are so different that it is difficult, and at times impossible, for a teacher from one orientation to understand clearly what a teacher from the other orientation means when, for example, debating such terms as "teacher-controlled" and "child-centered." It is equally as difficult to install effectively a whole language procedure, replete with its supporting routines, into a traditional classroom without radically affecting basic instructional routines which support the traditional orientation.

Teachers who resist a whole language orientation often raise concerns associated with routines. Consider, for example, a case in which traditional teachers are told that the use of basal readers is not necessary for reading instruction in a whole language classroom and that students may apply newly learned reading strategies in 100% self-selected books. Traditional teachers will often ask questions like the following:

How do you know the grade level of the books?

What if students pick books that are too hard or too easy?

How do you run a reading group if the students are reading different books?

How do you know the students read all the story?

How can you keep track of the books the students have read?

What do you do if students self-select the same book repeatedly? . . . if students do not want to read the whole book but want to choose a different one? . . . is students are not responsible enough to choose their books? . . . if students become off task?

Similar sets of questions arise when traditional teachers hear of procedures related to flexible grouping, process writing, invented spelling, and student-centered integrated instruction. These questions reflect a philosophical orientation that supports traditional teaching, but they focus on routines. From a traditional teacher's orientation, these questions signify major obstacles.

Whole language is effective for learners not so much because of what teachers do, but why they do it. The trappings of whole language (children's literature, big books, dialogue journals, hands-on projects) are alluring, and whole-language classrooms are exciting for teachers and learners. Traditional teachers hear of high levels of student involvement in addressing important questions, generating and developing ideas, sharing projects, creating dramatizations, reading and sharing children's literature, writing in journals, and discussing progress on other pieces of writing. The teachers learn of a continual ebb and flow of students as they move in and out of direct involvement with one another and the teacher. Traditional teachers may conclude that by transporting materials and activities used in whole-language classrooms to traditional classrooms, they will be able "to do" whole language. This conclusion misses a critical point: in a whole-language classroom, theory drives practice and provides teachers with a set of principles from which to make sound, consistent instructional decisions on a day-to-day basis (Crafton,

1991). These decisions result in networks of internally congruent, theory-based routines, each necessary for the others to work well.

In order "to do" whole language, a traditional teacher must relinquish the notion that a transition to a whole language orientation simply means a change of materials and the inclusion of a few new procedures (Chew, 1991). The teacher must be willing to examine long-held belief systems that support traditional instruction and be open to those that undergird whole language. They must also be willing to risk the initial unevenness that comes when experimenting with new networks of routines.

Further Discussion

Based on insights from the grounded theory study and from extensive experience with classroom teachers, I propose that classrooms are reflections of actual belief systems. Belief systems operate automatically at subconscious levels. These belief systems once formed are not often radically revised. They become a means of making sense of the world, and individuals tend to operate from rather than question these fundamental beliefs. Routines spring from the actual belief systems and support the day-to-day operations of instruction. These routines form a tightly interlocking network. Too radical a change in one routine causes tension among others. Sensing the implications of this tension, teachers may declare a new idea unworkable in their classroom or ignore the idea completely.

For major change to occur efficiently, such as a change in philosophical orientation toward whole language, teachers need to appreciate that change in one routine may strongly impact others. Therefore, they should enter the change process reflectively, methodically, and at their own pace. They should consider problems as useful indicators of routines that need to be addressed.

In an eagerness to help teachers grasp whole language, there has been a tendency to depict traditional teaching at one end of a continuum and whole language at the other. This continuum is then used to discuss and gage transitions toward whole language. This continuum is simplistic. It implies that traditional teaching and whole language share a common philosophical base. It suggests that a transition to whole language may be accomplished without changes in a teacher's fundamental belief system about how children learn.

The fundamental philosophical differences between whole lan-

guage and traditional teaching are more accurately represented if each has its own set of continuums. Different continuums help to explain why teachers who try to carry out whole language practices within a framework of traditional classroom routines often experience frustration and disillusionment and why some teachers declare that "whole language does not work." They also emphasize that making an efficient and successful transition to whole language means delving in to underlying belief systems and establishing different networks of routines.

A goal of grounded theory research is to contribute to ongoing discussions leading to understandings of complex social phenomenon such as those found within the schools of South Florida. Ideas are set forth to be considered and debated. Within this article, I attempted to provide enough information about grounded theory research, a particular grounded theory study, and features of traditional and whole language orientations to establish a context for the theory related to the possible significance of instructional routines when instituting change. I offer the theory for consideration, possibly to be tested through research and experience. Instituting the meaningful changes required to address the serious challenges currently facing teachers and learners merit our full consideration and ongoing collegial exchanges.

References

Borg, W.R., & Gall, M.D. (1983). *Educational Research: An Introduction* (4th ed.). New York: Longman.

Cambourne, B. (1988). *The Whole Story: Natural Learning and the Acquisition of Literacy in the Classroom.* New York: Ashton Scholastic.

Chew, C (1991). *Whole Language in Urban Classrooms: Encounters with Literacy.* New York: Berrent Publications, Inc.

Crafton, L.K. (1991). *Whole Language: Getting Started . . . Moving Forward.* New York: Richard C. Owen Publishers, Inc.

Forness, S.R., & Guthrie, D. (1977). Stability of pupil behavior in short-term classroom observations. *Psychology in the Schools, 13,* 116-120.

Glaser, B.G. (1978). *Theoretical Sensitivity: Advances in the Methodology of Grounded theory.* Mill Valley, California: The Sociology Press.

Glaser, B.G., & Strauss, A.L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research.* Chicago, IL: Aldine Publishing Company.

Goodman, K. (1986). *What's Whole in Whole Language.* Portsmouth, NH: Heinemann.

Lauver, P.J. (1984). *Basic Communication Skills.* Unpublished manuscript. College of Education, University of Arizona.

Miller, L.M. (1988). *The Teaching/Learning of Reading in Reading Resource rooms: An Exploratory Study.* Tucson, AZ: University of Arizona.

Newman, J. (ed.). (1985). *Whole language: Theory in Use.* Portsmouth, NH: Heinemann.

Spradley, J.P. (1979). *The Ethnographic Interview.* New York: Holt, Rinehart and Winston.

Spradley, J.P. (1980). *Participant Observation.* New York: Holt, Rinehart and Winston.

Strauss, A.L. (1987). *Qualitative Analysis for Social Scientists.* New York: Cambridge University Press.