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A study of strategy use by two emergent readers in a one-to-one tutorial setting

Frasier, Dianne Farrell, Ph.D.
The Ohio State University, 1991

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A STUDY OF STRATEGY USE BY
TWO EMERGENT READERS
IN A ONE-TO-ONE TUTORIAL SETTING

DISSERTATION

Presented in Partial Fulfillment of the Requirements
for the Degree Doctor of Philosophy in the
Graduate School of The Ohio State University

By

Dianne F. Frasier, B.A., M. A.

The Ohio State University
1991

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Dr. Diane DeFord
Adviser
College of Education
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by
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1991
To My Parents
and
My Daughters
ACKNOWLEDGMENTS

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CHAPTER 1
INTRODUCTION

Introduction

An alarming concern in the United States is the decrease in the number of literate citizens and the level of literacy that exists (Gee, 1986; Kozol, 1985). An increasing number of children, many from low-income minority families, are failing to become functionally literate members of society. "A great majority of parents recognize the importance of literacy... however, the responsibility for seeing that children acquire the skills of literacy is assumed to rest with the school" (Wells, 1986, p.160). Children who have had experience with books, learned about print, and heard "book language" are more likely to be ready for the school's approach to teaching literacy (Heath, 1983).

Children enter first grade after their sixth birthday to begin formal reading instruction at varying points of literacy development and with a wide range of emergent reading behaviors. Some children, however, have not had sufficient preparation or socialization for meeting the school's demands or using the school opportunities to become literate (Goelman, Oberg, and Smith, 1984). Special instruction may be required to support their efforts to learn to read. What is the nature of this special support service that helps the at-risk child learn to read? This research addressed issues related to the nature of special support services and the ways children respond to and learn from them.
Statement of the Problem

Literacy instruction in this decade has come under increasing scrutiny from public and private sectors; people are asking whether literacy instruction is making a difference or enough of a difference. The level of literacy students reach prior to entry into formal schooling at age five is a predictor of their school success (Mitchell, 1989; U. S. Department of Education, 1983). Low achieving students have little chance to change in rank from grade one through grade five (Wells, 1986). Retention, school dropout rates, and later economic problems have been shown to occur (Allington, 1987; Ogbu, 1985; Rist, 1970; Slavin, 1987; Smith & Shepard, 1987).

Early literacy acquisition is a complex process that demands understanding about where the learner is in his/her development. It requires that educators become disciplined and systematic observers of children on their road to becoming literate (Clay, 1979; Taylor, 1983). Educators must also have a secure, sound theoretical knowledge base that will inform their observations. Consequently, early literacy instruction and instructional practices for young children are primary concerns among early childhood educators today.

One program has proven successful in changing the prognosis of students who enter school at the lowest levels of their peers. Reading Recovery (Clay, 1979a) targets the lowest fifteen to twenty percent of the first grade cohort within a participating school and provides systematic one-to-one instruction as an early intervention for reading and writing difficulties. The goal of this program is to raise students' reading and writing abilities to within the average of their first grade class. This goal has been achieved in tests conducted in New Zealand, Australia, the United States and Canada (Clay, 1990; Pinnell, DeFord and Lyons, 1988). Students have maintained their
average performance in reading through fourth grade (DeFord, Pinnell, Lyons & Place, 1990).

The primary goal in beginning reading instruction is to assist at-risk readers in developing an independent, self-improving system for constructing meaning from print (Clay, 1979a). A self-improving system is based upon the independent use of reading strategies that integrate meaning, syntactic, and visual cues as sources of language information.

A self-improving system provides the child with ways to detect errors for himself and allows him to make checks or repetitions so he can confirm his attempts. Teachers strive to produce independent readers whose reading improves every time they read (Clay, 1979a). The following example demonstrates a reader in the process of developing a self-improving system.

T: I liked when you were reading here and you said, “Ah, said a bird, I see a” and you stopped. You were thinking it didn’t make sense and it didn’t look right, weren’t you?

What did you do then?

C: I looked at the beginning letter and I looked at the picture.

T: You checked both things and then what did you do?

C: I went back and fixed it 'cause a bird can’t see a bird.

T: That’s right. That was good thinking.

The reader is on his way to a self-improving system, able to detect errors on his own and then to reread to correct his errors. Clay states, “The end-point of early instruction has been reached when children have a self-improving system, which means that they learn more about reading every time they read” (p. 14).
Marie Clay's (1972) interpretation of reading strategies is similar to Piaget's problem-solving processes. Strategies are fast reactions that take place inside the reader's mind as he/she solves problems in constructing meaning from print. They provide ways to search for relationships, monitor progress, and organize and use meaning, structural and visual information in print. Strategies, specific strategy knowledge, and monitoring are closely related in the sophisticated strategy user (Pressley, M. & Brainerd, C. J., 1985).

In Clay's view, good readers swiftly and unconsciously orchestrate a range of effective strategies (1979b). The poorer readers need an early intervention program that will enable them to begin to use discarded strategies again and to become independent learners. Reading Recovery was designed to achieve these goals. But poor readers tend to use a narrow range of strategies and to use them ineffectively. They may even discard emerging strategies that might have been promising because poor readers do not immediately achieve positive results. The current research on Reading Recovery suggests that 70-85% of students served are discontinued from the program having achieved within the average band of their classes (± .5 standard deviation of the mean).

However, the Reading Recovery research also indicates that a portion of children served in New Zealand and the United States do not successfully reach average levels of performance. In other words, some children are more successful than others. It would be beneficial to explore how these initially low-achieving, but ultimately successful children acquire and use strategies in reading. Conversely, an examination of initially low-achieving, less successful children may serve as an interesting contrast. These differing profiles of development may offer insight as to how they develop an independent system.
for monitoring their use of strategies across the length of their program in a one-to-one setting. This knowledge would inform and guide teacher decision making about how to help at-risk beginning readers become successful and independent.

In Reading Recovery, teachers are trained to watch for behavioral evidence of children's emerging strategies in reading and writing. Based on their observations and the evidence provided by the child's use of the reading and writing processes, a teacher supports, questions, and teaches about effective strategy use. Thus, the Reading Recovery individual tutorial provides an ideal setting for the investigation of emerging reading strategies of young high risk children. This study utilizes a case study format to describe, over time, the emerging reading strategies of two at-risk readers as they operate on text within the context of the Reading Recovery setting. In this way, a complete description of one successful and one less successful student involved in this program may provide information to improve our understanding of literacy learning of at-risk students in a formal school setting.

Background of the Problem

All children enter school with a literacy background reflecting their individual experiences and opportunities. Some children begin school with solid literacy preparation and a desire to learn to read (Adams, 1990). Other children enter school with very little print awareness (Teale, 1986). "Success in learning depends on the child's condition when he or she begins receiving instruction. No child starts from zero when he or she comes to school. . . ." (Ferreiro & Teberosky, 1979).
There is a wide range of literacy development among children in first grade classrooms. Within the first few weeks of school in the traditional classroom, children are frequently divided into three groups according to ability in reading and placed in high, middle, and low groups. Research has provided evidence that there is little mobility among groups once they are established and groups receive differential treatment (Allington, 1983; Hiebert, 1983; Juel, 1990, McDermott, 1976; Rist, 1970; Wells, 1986). Many of these children are destined for retention and/or long-term remedial status. Children who are retained have a greater chance of becoming school drop-outs and unemployed members of society. Marie Clay's Reading Recovery program is designed to provide one-to-one tutorial help that will assist children in developing strategies to become readers, writers, and lifelong learners, and has been effective in doing so in three different countries with vastly different educational programs (Clay, 1987).

The 30-minute daily lesson with a trained teacher is designed to develop effective reading and writing strategies. Strategies are self-controlled and students develop effective strategies for reading increasingly difficult texts (Brown, 1982). Recent information regarding cognitive strategies, the development of schemata, and metacognition has begun to influence reading instruction (Brown, Armbruster, and Baker, 1984) in that researchers and teachers alike are emphasizing that the responsibility to use reading strategies must be shifted to the learner so their learning is self-regulated (Paris, 1984).

Clay (1972) states that poor readers have tried and failed to solve problems related to the complexities of print and may have abandoned some good responses. They need intensive help with knowledgeable teachers to become more active problem solvers in their approach to print, understanding
good strategies and building on them. Clay's research of good and poor readers led to the development of the Reading Recovery program.

Reading Recovery (Clay, 1979a) is a program designed to build on the strengths the reader brings to the reading process. The program focuses on the reader as an active problem solver to develop reading strategies. Reading Recovery is seen as a supplementary intervention above and beyond regular classroom reading instruction. Therefore, children receive an additional 30 minutes of reading instruction daily for a period of twelve to sixteen weeks, making accelerated progress. They are then returned to the average of their first grade class, learning with the average group.

The Reading Recovery teacher is an informed decision maker who selects texts and monitors his/her own responses to children. These decisions are based on a knowledge of the reading process combined with knowledge of the strengths and needs of the child. Controlled, systematic observation and decision making that follows the needs of the child are vital to accelerative learning.

Against this background of research on early literacy learning and strategy development in at-risk learners, it is important that an in-depth description of successful and less successful at-risk students' strategy use be accomplished to inform current research and practice in reading instruction.

Purpose of the Study

The study was designed to investigate the use of reading strategies by at-risk first grade students while they participate in Reading Recovery instruction for a period of 60 lessons. Specifically, two first grade students were observed for the duration of their Reading Recovery programs to gather
evidence of the development of reading strategies across time, to compare strategy use between the two children, and to examine shifts in the development and use of strategies by emerging readers.

Additionally, teacher intervention behaviors, such as prompting for strategy use, were examined across time for each of the two student subjects. The purpose of the study was to contribute to knowledge about how strategies are used in early stages of learning to read in the Reading Recovery tutorial setting.

Research Questions

The following questions were examined during this study:

1. How do students with different profiles of progress use strategies while reading text in a one-to-one early intervention setting?

2. What differences occur in reading strategy use over time in children with different paths of progress in a one-to-one early intervention setting?

3. What is the effect of teacher prompting for reading strategies for students with different profiles of progress in a one-to-one early intervention setting?

4. What differences occur in teacher prompting for strategies across the programs of children with different paths of progress?

Justification and Significance of the Problem

Children enter elementary school to begin reading instruction with a wide range of abilities and experiential background. Some children have learned to read before beginning formal instruction. Significant studies of early readers
(Butler, 1980; Clark, 1976; Clay, 1979; Durkin, 1961; Huey, 1908; Thorndike, 1973; White, 1954) provide evidence that these children are likely to have had rich experiences with written language, but in general have learned to read independent of formal instruction. These children have learned effective strategies with text that have provided them with a self-improving system. This enables them to read with independence on increasingly difficult texts.

Clay saw the importance of studying the strategies good readers use to gain insight into the confusions and needs of poor readers. According to Clay (1972), good readers integrate all three cue sources (meaning, language structure, and visual information) and use these sources to monitor their own reading. Good readers have high self-correction rates, generally one self-correction for every three errors.

It is important for children to develop effective strategies. The longer we leave a child failing, the more difficult the problem becomes to develop effective reading strategies. There is a greater deficit to be made up, there are consequences to other aspects of learning, and there are consequences for the child's personality, confidence, and self-esteem.

Clay's work examined the strategy use of good readers. Based on her observations, Clay proposed interventions for children who were not employing the strategies used by good readers. The present research attempts to build on her work (Clay, 1979a; 1979b; 1982) and the work of others (Askew, 1988, 1990; DeFord, 1989; Lyons, 1989; Pinnell, 1988). The study sought to explore significant interactions between teacher and child that helped promote accelerated progress. Specifically, this study should add information about the differences that may exist between children making accelerated progress and those making slow, steady progress, and how these differences may change
over time. In addition, the study should contribute to an understanding about the effects of teacher interventions for these children.

Definition of Terms

**Reading Recovery Program** - a short term (an average of 12-16 weeks) early intervention program for children at risk of failing reading. The program is provided within the first year of formal reading instruction.

**Reading Recovery Lesson** - a daily, thirty minute, one-to-one lesson which includes reading and writing. The lesson focuses on the child's strengths, addresses needs as they arise within the context of real reading (natural language texts) and real writing (from child's oral language), and builds on what the child knows. The lesson components are familiar reading, a running record of text reading, writing, the reassembling of a cut-up sentence, the introduction of a new book, and the first reading of the new book.

**Reading Recovery Teacher** - a teacher who has received one year of training in the Reading Recovery program and has a working knowledge of Reading Recovery procedures. The teacher is trained to carefully observe, diagnose, and analyze a child's reading ability, to identify the child's strengths and needs, and to build on those strengths.

**Diagnostic Survey** - a series of six assessments used to identify children at risk of reading failure. The six assessments include letter identification, a word test, concepts about print task, writing vocabulary, sentence dictation, and text reading.

**Running Record** - a record of the child's independent oral reading behavior taken by the teacher who is a neutral observer while the child reads a
text which was read for the first time the day before. An accuracy check
confirms that the book is at an appropriate instructional level.

**Strategy** - mental problem solving activity that enables the reader to
construct meaning from text. Readers gain power over the reading task by
solving problems using their theories of the world and their theories of written
language (Clay, 1979a). The critical goal is that the child takes the initiative for
strategy use and uses strategies independent of teacher intervention. In this
study, strategies included early strategies, monitoring, and searching (all
defined below).

**Early Strategies** - include directional movement, one-to-one matching,
and locating known and unknown words within text. Early strategies are
important because they provide a means for the reader to control his attention to
print and provide a means of checking that he is attending to the right part of the
page (Clay, 1979a).

**Monitoring** - a highly skilled process that enables the reader to check on
himself. Monitoring includes accurate reading, hesitation, stops, and appeals.

**Searching** - a highly skilled process that enables the reader to search for
all types of cues (meaning, syntactic, and visual cues).

**Cues** - sources of information used by readers, including meaning,
language structure, and visual information.

**Easy Text** - text read with 95-100% accuracy as measured by the running
record.

**Instructional Text** - text read with 90-94% accuracy as measured by the
running record.

**Difficult Text** - text read below 90% accuracy as measured by the running
record.
**Scaffolding** - the interactional support and shared activity provided in the teacher/child dialogue that is structured by the adult to maximize the growth of the child's intrapsychological functioning (Bruner, 1978; Clay & Cazden, in press; Wood, Bruner, & Ross, 1976).

**Zone of Proximal Development** - instruction that "marches ahead of development and leads it; it must be aimed not so much at the ripe as at the ripening function" (Vygotsky, 1972, p. 104). Vygotsky defined the zone of proximal development as "... the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (1978, p. 86).

**Assumptions**

Some assumptions were made at the onset of the study. One significant assumption was that behaviors that are observed give direct evidence of the process that is going on inside a reader's head. A related assumption is that evidence of strategy use can be observed in the behavior of beginning readers. A third assumption was made about the use of running records as an effective way to record and analyze oral reading behavior and strategy use.

**Limitations**

While the case study approach provided a close look at an ongoing reading setting, the case study methodology itself presented limitations to the analysis. One limitation that must be considered in interpreting findings is that the study was conducted with two Reading Recovery students and is not generalizable to all emerging readers. The study also involved only one
Reading Recovery teacher and is not generalizable to all teachers. The researcher was the Reading Recovery teacher who was also a Reading Recovery teacher leader. Her teaching schedule did not allow for the program continuity of a full-time Reading Recovery teacher. There is also the limitation that the use of videotaping may have altered the natural setting for instruction. However, in this particular study the videotaping was a regular part of the lesson and did not seem to affect the students.
CHAPTER II
REVIEW OF RELATED LITERATURE

Introduction

This study is based on research involving emergent literacy, the at-risk beginning reader, intervention programs for the at-risk beginning readers, and strategy use in beginning reading. The review of related literature is presented in four sections. The first section presents a review of current research on emergent literacy. The second section presents a review of the research on intervention programs for the at-risk beginning reader. The third section reviews the literature on strategy learning. The final section summarizes the literature review.

Emergent Literacy

The processes of literacy are complex; the acquisition of literacy skills entails the most complex forms of learning; the institution of schooling presents complex impediments to learning; and the cultural determinants of literacy in school and community are complex (Holdaway, 1979, p. 18).

Understanding the complexity of the literacy learning in young children is a challenge to educators. The more demanding challenge rests in the use of the understandings to support and enhance children's opportunities for learning (Taylor, 1989).

When referring to emergent literacy, the term "emergent" has special significance. "Emergent describes something in the process of becoming"
Emergent implies forward moving and, yet, coming from within. Literacy emerges in children beginning at birth and parallels the acquisition of language.

**Home Influences on Early Literacy**

Emergent literacy develops naturally in a language-rich environment around a host of experiences that are a part of today's society. It emerges as a result of social interaction (Clay, 1963; Hall, 1987; Harste, et al, 1984, Holdaway, 1979; Sulzby, 1985; Teale, 1983). The term 'emergent' implies that the development comes from within the child and is a gradual process occurring over time because of the child's innate desire to make sense of his/her world. Literacy develops because of the interactions among language users, not just the language use of one individual (Harste et al, 1984).

Children also learn from their observations of language used in their environment.

The child makes endless questionings about the names of things. . . . He is concerned also with the printed notices, signs, titles, visiting cards, etc., that come in his way, and should be told what these "say" when he makes inquiries. It is surprising how large a stock of printed or written words a child will gradually come to recognize in this way. (Huey, 1908, p. 314)

Yetta Goodman (1981) documented children's learning from what she referred to as environmental print; from labels on cereal boxes and other foods, and from logos and advertisements. Children developed an awareness of print from their community and culture that supports the emergent view of the early acquisition of literacy.

Children are uniquely individual and develop language according to opportunities provided during their years prior to school entry. Children learn language naturally and gradually. Halliday (1975) describes language
development as a process by which children gradually learn how to mean. In his descriptions of a young child before the age of one, he describes initial language acquisition as based upon function. In other words, what can be said reflects what can be done. Children use language to satisfy personal needs, to get things done, to control behavior of others, to tell about themselves, to get along with others, to learn things, to pretend and to communicate information to others.

In this process of learning how to mean, children are active learners acting on their world. Early attempts at language are rewarded by the caregiver, expanded, and extended. Children are constructing and reconstructing as their language develops (Cazden, 1972; Halliday, 1975). Oral language, then, is the base and support for ongoing literacy development. Children begin to connect their oral language with written language. Writing is a spontaneous activity developing out of a need to communicate. Durkin (1966) referred to early readers in her study as "pencil and paper" kids because of their ability to print and spell. Their writing was connected with their reading, and they enjoyed experimenting with language in all forms.

Recent descriptions of young children's learning suggest that reading, writing, and talking are all interrelated and interwoven in a child's literacy development (Clark, 1976; Clay, 1975; Dyson, 1982; Sulzby, 1981; Teale, 1986). Reading and writing are not separate processes in the child's learning, nor do they develop sequentially. Rather, the two processes support one another and are intimately tied with the child's oral language. (Teale, 1986).

Research of children involved in story book reading or read-aloud sessions support the importance of hearing book language. These experiences take children beyond their own language patterns into the language of books.
(Cazden, 1972). Doake (1981) studied the importance of these early experiences with books. He reported that children who were read to learned book handling skills, acquired concepts about print, and had more exposure to book language. A significant finding in the research on early readers is the importance of children hearing stories read aloud (Hickman, 1975; Huey, 1908; Holdaway, 1980; McKenzie, 1986; Meek, 1982; Spencer, 1987; Strong, 1988; Teale, 1984; Thorndike, 1973; Wells, 1986).

Stories are the essential link between learning to talk and learning to read because they are a special kind of play with language that separates it from speech. The simplest answer to the question, 'How does a child come to know how print works?' is by being read a story! (Meek, 1982, p. 27).

A child needs a mind that is "well stocked and active" to become a reader (Smith, 1971). Children who have heard stories read aloud have a rich literary base with which to begin reading instruction.

Hardy (1977) views narrative as a “primary act of mind.” We think in narrative and relay events of our every day lives in narrative. Through stories, children can learn how the world works, build background knowledge, and assimilate book language essential for beginning reading. Hearing stories also supports a natural development of literacy in a child that invites reading and writing.

Children emulate adults as they begin reading independently. Their behavior is self-regulated, self-correcting, and self-sustaining (Holdaway, 1979, p. 61). Hearing stories creates a personal joy and positive attitudes about reading as well as motivation to read. Literature stretches the imagination of the reader. It “. . .develops children’s imagination and helps them to consider nature, people, experiences, or ideas in new ways” (Huck, Hepler and Hickman, 1987, p. 8).
Television is another influence for children in the preschool years that makes an impact upon their literacy development. While too much television can be harmful, there is evidence that up to ten hours a week of television viewing can have a positive relationship in literacy acquisition (Williams, Haertel, Haertel, and Walberg, 1982). The research of the sixties influenced the creation of two television shows for preschool children. *Sesame Street* and *The Electric Company* reinforce learning the names and sounds for letters and demonstrate how these letters and sounds form words in a fast-paced format for children. Through television children see worlds they have yet to experience.

Shirley Brice Heath studied the literacy habits of three different cultural groups in Appalachia: Roadville, Trackton, and Maintown (1983). Her study provided evidence for different journeys to literacy by children in each of these groups.

Trackton adults could read and write but did not consciously model these tools of literacy for their children. Trackton children began to tell stories in keeping with the oral tradition of their adult models. Children did not see the mainstream ways of talking, reading, and writing before school but had their exposure to print through their environment, with advertisements, and t-shirt slogans.

Some literacy experiences more than others prepare children for first grade and beginning reading instruction. Heath (1983) found that Roadville and Maintown parents read to their children and provided them with book knowledge and experiences that made it easier to adapt to the decoding and sight word recognition of beginning reading instruction. But when the children progressed to upper elementary grades, the Maintown children maintained their progress because their parents had linked their book reading experiences to
other contexts within their every day lives, whereas Roadville parents did not go beyond the actual book reading event. The Roadville children had not had the experience of decontextualizing their knowledge and experiences. Trackton and Roadville children were not necessarily less able but had missed opportunities for learning to cope with school demands of literacy. By the time a child begins first grade, "strong roots for literacy" have been developed (Clay 1977; Ferreiro & Teborosky, 1979; Goodman, 1980; Harste, Burke, and Woodward, 1984).

Taylor and Dorsey-Gaines (1987) studied six urban black families living in poverty and identified similar uses and types of literacy identified by Heath. Teale (1986) researched the literacy acquisition of twenty-four low-income Anglo, black, and Mexican-American children in the San Diego area and also found that emergent literacy is very much embedded in the culture. Literacy for these twenty-four families was part of human activity and survival (paying bills, buying groceries, transmitting information). Literacy emerges in children in a variety of ways (Hall, 1987).

Clay (1982) reported similar findings in her study of the Maoris and the Polynesians of the South Pacific. Each of the different island groups have their own style of child-rearing based on their value systems which then, in turn, affects the way children respond to the school environment. If children take different paths to becoming literate, we need to be aware of their differences and adjust beginning instruction and the school environment to meet their needs. There is an obligation to become more knowledgeable about the cultural differences and the multi-dimensional aspects of emerging literacy to find improved procedures and instruction.
The Impact of Schooling on Early Literacy Development

When a child enters school he has a private frame of reference which stems from his personal preschool experiences. . . . A good teacher supports an individual child in finding his personal solution to coping with the new school situation. (Clay, 1979b, p. 41)

It is important for schools to provide the transition from home to classroom by providing opportunities for children to learn about print and books in social situations that have relevance to their lives. Children need to explore the uses of print before they are specifically taught to read and write and continue to use print meaningfully while they are learning (Holdaway, 1979, Taylor, 1983). Translating the child's available responses into appropriate reading responses will likely be more effective than insisting on a predetermined set of sequenced learning skills selected by the teacher (Clay, 1979b).

Early in their school experiences, children are frequently faced with situations inconsistent with the contexts of literacy acquisition they have previously experienced. For example, within the first few weeks of school, children are often grouped according to ability by selected criteria. Sometimes decisions are based on informal diagnosis and testing, teacher judgment, and occasionally with the added measure of a standardized test score. This grouping is largely for the purpose of managing reading instruction. When children are seen as immature or not quite "ready" for reading, they are frequently assigned to the low group. These are the children who may have had different literacy contexts and experiences from those expected by school personnel.

Theories of maturation and readiness were fueled by the standardized testing movement of the 1930's and 1940's (Betts, 1946; Gates, Bond, & Russell, 1939; Morphett & Washburn, 1931). Beginning reading instruction
based on the reading readiness model implies that one prepares for literacy by acquiring a set of prescribed skills (Morrow, 1989). Clay (1979) states that because we "invite" children into school at the age of five or six, we are obligated to begin our reading instruction. She contends that experiential factors are more powerful than maturational factors and that we cannot base educational decisions on assumptions about maturation. The longer we allow children to practice failure, the more difficult the task is for them to unlearn habituated responses and the greater the deficit to make up. There are also other consequences to failure such as changes in personality and lowered self-concept.

Vygotsky (1978) provided a "...devastating critique of theories which claim that the properties of adult intellectual functions arise from maturation alone, or are in any way preformed in the child and simply waiting for an opportunity to manifest themselves" (p. 6). Other studies offer evidence to negate the concept of maturation and the practice of raising the entrance age for schooling (Durkin, 1961; Durrell and Murphy, 1963).

With assignment to the "low group," at-risk children begin to receive reading instruction. Studies have been conducted to determine the effects of grouping on children and whether or not children in high, middle, or low groups receive differential treatment. McDermott (1976), in his doctoral research, observed the differential treatment between high and low reading groups. He found that children in the high reading group had the teacher's focused attention with no interruptions allowed. In round robin reading, all high readers got a chance to read but the children in the low group had many more interruptions and less time for actual reading. If children spend less time
engaged in real reading and receive less reinforcement than others, they will make slower progress.

Allington (1980) found the same phenomenon in his study of twenty-four first and second grade teachers from four school districts. Poor readers received different instruction than the good readers because they were seldom asked to read silently, either individually or as a group, thus spending less time engaged in real reading. Errors in reading were often treated out of the context in which they occurred, with the teacher emphasizing visual or phonic characteristics of the target word. Poor readers had more interruptions to their oral reading. He determined that the 'Crows' experience was a classroom atmosphere totally different from that of the 'Blue Jays' and the 'Red Birds.' For the 'crows,' reading was slow, labored, and halting (Wuthrick, 1990).

Besides grouping according to ability, children have been grouped according to social class. In his observational study of social class and teacher expectations, Rist (1970) reported on a kindergarten teacher's placement of children in reading groups based on social class. Since the original grouping tended to continue throughout the first several years of elementary school, it influenced later progress. In this instance, Rist found that the teacher's expectations for the different groups reflected the children's achievements in school. The children who were perceived by the teacher as her "fast learners" were the ones who were physically close to her at Table 1 and had a high degree of verbal interaction. Rist states, "...there is a greater tragedy than being labeled as a slow learner and that is being treated as one..." The success of an educational institution and any individual teacher should not be judged by the success of the high-achieving students, but rather by the success of those not achieving. When children are assigned to low groups there is a
greater chance their learning will be a self-fulfilling prophecy (Allington, 1980; Eder, 1981; McDermott, 1976; Rist, 1970).

Juel (1990) investigated the effects of reading group assignments on reading development in first and second grade. She found that reading group placement in first grade did not in itself seem to have a negative (or positive) affect on growth in reading development. She also studied how the children were initially placed in reading groups. In comparing eight first grade classrooms, she found that children were initially placed in reading groups based on Metropolitan Readiness Test results (1976), knowledge of the alphabet, and phonemic awareness. She also found there was little movement once children were placed in the groups. Juel attributed this to the low groups being held in readiness materials during the fall of first grade. Then it made it difficult to reassign the children to higher groups because by December the other groups had completed the initial readers. Second graders were "almost always" assigned to reading groups based on the group they were in at the end of first grade.

DeFord and Rinehart (1988), in a follow-up study of text reading and reading group placement of third grade children who had been served by Reading Recovery during first grade, found that children are typically not placed in reading groups strictly because of strengths and needs as a reader. Placement is often dictated by the basal program and the abilities of the children to complete workbook exercises and pass skills tests. At least 47% of the children in the lowest groups were placed in basal reading materials that were too difficult for them to read with at least 90% accuracy. It was also the case that the highest reading groups were placed in materials that were far too easy, offering relatively little in the way of challenge.
There is evidence that mixed-ability and mixed-age groupings within and across classrooms have positive effects on students' motivation and learning. Evidence drawn from classrooms of at-risk students shows benefits from non-graded early primary units, combination classes, and cooperative learning (Cuban, 1989).

If at-risk readers have little opportunity to practice reading and writing in the classroom and they have few opportunities to experience success, then their literacy progress is severely threatened. Meek (1984) believes that the way children are introduced to literacy in school has a profound effect on their life-long view of learning. Wells (1986) makes a similar point in that what children learn from instruction at this stage of their lives will affect the "whole of their subsequent years at school." This places a moral and ethical burden on educators to reevaluate current practice in light of this research to be informed decision makers based on systematic observation of each individual child in the classroom and to adjust instruction to meet those needs.

**Intervention Programs for At-Risk Learners**

Researchers before 1910 reported that the leading cause of reading difficulties was physical defects (Gates, 1936). Gates also claimed that other possible and probable causes of difficulty in learning to read included organic conditions which are not really physical defects (such as left-handedness or left-eyedness, psychological problems, lack of maturity, limited experiential background, poor motivation, failure to acquire essential techniques, and ineffective teaching). Of all the probable causes for difficulties in learning to read, Gates saw inefficient teaching as the leading cause.
Helen Robinson (1946) researched the wide range of causes for reading failure in a group of 30 poor readers and the therapy and mediation prescribed for the subjects to determine the effect of each. Her study revealed the practice of accepting the first anomaly observed as being the cause of the reading problem rather than looking at all the evidence. Like Gates, she also found there was a large proportion of inappropriate teaching procedures in addition to problems in the environment and with the home conditions.

Children who are at-risk of failure in beginning reading are often given labels such as learning disabled, remedial or corrective readers, reading disabled, or dyslexic. Educators have and still believe that a child’s failure to learn to read is often due to lack of proper instruction (Bateman, 1979; Cohen, 1969; Gates, 1936; Lyons, 1987; Robinson, 1946). Bateman (1970) also questioned instructional practices rather than questioning the learning.

Learning disabled children are those who must be taught by the best reading methods available if they are to succeed. So taught, they can and do learn to read. Therefore, teaching disabilities, is a more precise term than learning disabilities for the cause of reading failure. . . (p. 247)

Lyons (1987) conducted a pilot study to compare two groups of failing first graders, one group classified as learning disabled and the other group classified as less able readers. She found that the instruction in reading may have influenced how the children attempted to read and that the children may have been instructionally disabled rather than learning disabled.

In a further study, Lyons (1989) randomly selected 60 students from urban, suburban, and rural elementary schools in Ohio after one year of instruction in first grade. Half of the children had been labeled learning disabled and all of the children received Reading Recovery tutoring. Each learning disabled student and unlabeled poor reader were paired for instruction
with the same teacher to control for instructional effect. At the beginning of the LD students’ Reading Recovery program, it was apparent that the learning disabled children’s former remedial reading instruction had a heavy emphasis on letter-sound relationships and isolated skills. This was seen though in the children’s overuse of visual cues in analyses of their oral reading.

After Reading Recovery tutoring, however, the learning disabled groups made a shift to an integration of all three cue sources (meaning, structure, and visual information). Lyons argued that children may learn to be learning disabled because of instructional practices during the emerging literacy years. Effective instruction that helps these children learn to balance their use of strategies is effective in teaching them to learn to read. They no longer qualify for the label, “learning disabled.” Such evidence of success in helping the at-risk reader achieve average performance has lead researchers to examine Reading Recovery from a variety of perspectives.

Poor achievement is a complex problem and no one factor can be determined as causative. A number of risk factors including poverty, race, ethnicity, school attendance, poor self-concept, motivation, immaturity, and dyslexia are all currently cited for failure to learn to read. Strategies readers are taught to use, if limited to decoding only, or meaning only, or word recognition only may influence the range of strategies they feel they can use. For the at-risk reader, this can have a deleterious effect (DeFord, 1981).

Researchers continue to examine what is effective instruction for the at-risk populations that will give them the accelerative boost they need to overcome problems of low placement, low achievement, or differential treatment due to teacher expectations.
A number of remediation and intervention programs have been developed to address those risk factors. In the mid-sixties President Lyndon Johnson initiated a federally funded educational program designed to break the cycle of poverty. The federal government funded Head Start to provide services for early childhood care for children of poverty. It is the only federal program for early childhood services that continues to be funded with modest annual increases. By 1989, 31 states had appropriated funds for prekindergarten programs or direct contributions to the Head Start program. There is a growing awareness of the need for child-care for the labor force and for providing for developmental needs for children at-risk.

A study of an intervention that encouraged parent-child reading was conducted by McCormick and Mason (1986) with children in Head Start or kindergarten. Fifty-one children ages four and five years participated in the study. They were assigned to two research conditions, Book Recitation groups and Story Discussion groups. In the Book Recitation groups the children heard one new book a week for six weeks and became engaged with the text. The book was then mailed home.

In the Story Discussion group the children heard a story told by one of the investigators. The children were asked to retell the story using pictures. Illustrations discussed in the stories and retellings were mailed to each home. Children engaging with text and receiving the little books at home seemed to have a greater phonological awareness of letter sounds in words and a better understanding of how to read a book. Having the books at home encouraged the children to use language similar to written language for their reading attempts. The study revealed that children became more interested in learning
to read and parents became more involved with their children’s literacy
development (McCormick and Mason, 1986).

The Elementary and Secondary Improvement Amendments of 1988,
which is a reauthorization of Chapter 1, created Even Start, a $50 million joint
parent-child education program aimed at improving adult literacy and offering
early childhood education to children between the ages of one and seven and
extended the Chapter 1 migrant education program to include three and four
year olds. The government realized the need for early childhood programs
because of the increased demand for child care from the growing numbers of
working mothers in all income groups, concern about the changing work force,
and the greater ethnic and racial diversity as the minority becomes the majority,
the attempts to move mothers off welfare into the labor force, the desire to
provide a better start for poor children in school, and the accumulating body of
evidence that high-quality early childhood programs have long-term positive
effects for disadvantaged children (Mitchell, 1989).

Title 1 was initiated to help educationally disadvantaged children. The
program was intended to supplement rather than supplant local school funds.
Launor Carter, the principal investigator of the "Sustaining Effects Study of Title
I," concluded that Title 1 did not represent a unified or coherent treatment
program. Title I was better defined as a funding program than as an
educational treatment (Ralph, 1989). The pull-out programs utilized within Title
I were seen as a further segregation of slow learners and were observed to
stigmatize children who lagged behind their peers. Instruction was a skills
model, mechanical approach directed towards the students’ deficits. The
program was too spread out and the funds were not concentrated on the
neediest schools.
Slavin (1987) found that the programs having the greatest potential for accelerating the at-risk students are comprehensive modifications of the regular classroom instructional program that allow the teacher to meet the wide range of student needs. The students are mostly taught in small mixed-ability groups that focus on cooperative learning. In these groups students work as teams toward a common goal, i.e., reading comprehension, writing, or spelling. Reading instruction is still given to homogeneous groups but the advantage to cooperative learning is that it accommodates a wide range of levels of student performance and, therefore, benefits all learners.

In examining Chapter 1 programs for the at-risk population, Slavin found that pull-out or in-class models have few differences. In programs like Distar, U-Sail, Pegasus, Pace, ECRI, Project Instruct, Gems, and Early Childhood Preventative Curriculum, students move at their own pace and are taught in small groups.

Allington (1990) argued against the concept of slowed-down instruction in remedial programs. Slavin cited preventive tutoring models such as Reading Recovery to be effective Chapter 1 programs but sees them as expensive. He also mentions that the expensiveness can be minimized because the preventive tutoring is designed to eliminate early reading problems so remedial and special education will be unnecessary.

Distar was developed by Engelman and Bruner (1974) and was similar to Venezky’s program of teaching prereading skills such as symbol identification, sequencing, blending, and rhyming—what Chall (1977) referred to as code emphasis. The program was designed for mastery of essential elements and children progress through the sequence at their own rates. Starter 101 (O’Keefe, 1971), a perceptual conditioning program (Glass, 1971),
Vail's Formula Phonics (1969) and the Monterey Reading Program (Baker and Gray, 1972) are all similar programs to Distar designed to help children with reading difficulties.

Modality instruction was also considered in trying to alleviate reading problems. Arter and Jenkins (1975) reviewed 15 studies that considered modality preferences in the learner and 14 of the 15 studies found no interactions consistent with modality predictions. The one study that reported an interaction consistent with modality preference was with tenth graders and measured comprehension skills. The other 14 studies were with elementary-aged children.

The Impact of Reading Recovery as an Early Intervention Program

Reading Recovery, an intervention program for at-risk first graders, has been found to be effective (Clay, 1979a, 1982; Pinnell, DeFord, & Lyons, 1988). Reading Recovery began in New Zealand with the work of Marie Clay, a child psychologist, who studied and observed what good readers do as they begin to read so that she could understand more about poor readers. Reading Recovery came to the United States through the efforts of Charlotte Huck and Gay Su Pinnell. A small group of university personnel was trained at The Ohio State University in 1984. Implementation of the Reading Recovery program continues to spread nationally and internationally.

The lowest achieving first graders are identified within a first grade class and given 30-minute daily one-to-one lessons for an average period of 12-16 weeks. Children spend the 30 minutes reading, writing, and actively problem solving with the help of a trained Reading Recovery teacher. The emphasis is on strategy use rather than a sequential learning of skills. Teaching is also
directed at building on what the child knows and, therefore, not wasting valuable teaching time on what the child already knows. The teacher and child are always working within what Vygotsky (1978) calls the child's "zone of proximal development." In the structuring of learning for the child we must arrange the environment so the child can reach higher, more "abstract ground from which to reflect, ground on which he is enabled to be more conscious" (Bruner, 1975, p. 24).

On the one hand the zone of proximal development has to do with achieving 'consciousness and control.' But consciousness and control come only after one has already got a function well and spontaneously mastered. . . If the child is enabled to advance by being under the tutelage of an adult or a more competent peer, then the tutor or the aiding peer serves the learner as a vicarious form of consciousness until such a time as the learner is able to master his own action through his own consciousness and control. When the child achieves that conscious control over a new function or conceptual system, it is then that he is able to use it as a tool (Bruner, 1975 pp. 24, 25).

The help provided by another has been called scaffolding (Bruner, 1975). What the child can do with the assistance of others is more indicative of the child's mental development than what he/she can do alone. This is the zone of proximal development and the basis for the one-to-one tutoring in Reading Recovery. Vygotsky states, "The zone of proximal development can become a powerful concept in developmental research, one that can markedly enhance the effectiveness and utility of the application of diagnostics of mental development to educational problems" (p. 70).

A fundamental tenet of Reading Recovery is, "Never do for the child what he can do for himself." This tenet is based upon the belief that learning creates the zone of proximal development and awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in cooperation with his peers.
Once these processes are internalized, they become part of the child's independent developmental achievement (Vygotsky, 1978).

Another principle of Reading Recovery is not to waste time working on something the child already knows. Vygotsky (1978) states that learning which is oriented toward developmental levels that have already been reached is ineffective from the viewpoint of a child's overall development. It does not aim for a new stage of the developmental process but rather lags behind this process. Thus, the notion of a zone of proximal development enables us to propound a new formula, namely, that the only 'good learning' is that which is in advance of development (Vygotsky, 1978, p. 65).

Clay and Cazden examined the instructional design of Reading Recovery based on Vygotsky's work and found it to be "more than a teacher scaffolding a child during reading/writing instruction but rather a system of social interaction organized around the comprehension and production of texts that demonstrably creates new forms of cognitive activity in the child" (Clay & Cazden, in press). As the child and the teacher work together, within the child's zone of proximal development, the child shifts from inter-individual functioning to intra-individual functioning (Clay & Cazden, in press). A major goal in the Reading Recovery program, then, is that children will become independent problem solvers with a self-improving system that incorporates well orchestrated strategies so that every time they read, they learn more about reading. They control the reading process and "learn to read by reading" (Smith, 1971).

Strategy Learning

**Strategy Use**

In order to control the reading process, children must employ a wide range of strategies. Marie Clay's (1972) interpretation of reading strategies is
similar to Piaget's problem-solving processes. Strategies are fast reactions that take place inside the readers' minds as they solve problems with print. Strategies provide ways to search for relationships, monitor progress, organize, and use meaning, structural, and visual information in print.

Good readers swiftly and unconsciously orchestrate a range of effective strategies (Clay, 1979b). But poor readers tend to use a narrow range of strategies and to use them ineffectively. They may even discard emerging strategies that might have been promising because they do not immediately achieve positive results.

In their research of strategy use, Pressley et al (1985) noted important attributes of strategies. Strategies involve more than just the processes that are a consequence of doing the task. For instance, looking at words is not a reading strategy. All strategies are purposeful for increasing probability of accomplishing cognitive goals, and children's use of strategies is not always tied to understanding strategy's effects. Strategies are almost always potentially controllable (Brown, 1978, p. 75).

Because of lack of evidence, strategies are not defined as deliberate and voluntary. "Cognitive psychologists are much more willing to acknowledge conscious processing and accept learner's reports of it than they were when Flavell (1977) proposed his definition" (Pressley, et al, page 3). Strategies as Pressley and Brainerd (1985) define them are composed of cognitive operations over and above the processes that are a natural consequence of carrying out the task, ranging from one such operation to a sequence of interdependent operations. Strategies achieve cognitive purposes (e.g. comprehending memorizing) and are potentially conscious and controllable activities. (pg. 4).

Pressley and Brainerd outline three cognitive goals that can be accomplished using strategy variations that are real-world associative learning,
text processing, and writing. During text processing, strategies can be invoked when readers realize something is not quite right and check on themselves or monitor (Clay, 1974; Garner & Reis, 1981; Just and Carpenter, 1980). Strategy use includes strategies, knowledge about strategies, and monitoring along with the dynamic interaction of these components. Monitoring is keeping track of cognition and it is an important part of cognitive processing (Pressley and Brainerd, 1985). A critical strategy for the beginning reader to use is monitoring. A reader must monitor or check on oneself (Clay, 1979; Palinscar, 1986; Paris, 1986; Pressley, 1985).

The Role of the Teacher in Strategy Development

This section reviews more recent studies that describe the role of the teacher in strategy development. Paris, Cross, and Lipson (1984) studied how metacognition can be taught to increase awareness and lead to better use of reading strategies. The researchers created instructional procedures to highlight three classes of variables—schemata, strategies, and metacognition. They wanted to see how children used such strategies as using context to discern new words and stopping periodically to check their own comprehension. Their use of the term metacognition refers to cognitive abilities such as planning, estimating, and checking (Brown, 1978). Children from four third and fifth grade classrooms were given an experimental curriculum (Informed Strategies for Learning ISL) that was designed to increase awareness and uses of effective strategies. The researchers found that direct instruction in the use of strategies can increase awareness and use of strategies.

Paris and Oka (1986) conducted research on the improvement of students' use of reading strategies by increasing their metacognitive knowledge
about reading. Their subjects were 500 third graders and 500 fifth graders with 600 children acting as a control group. The third and fifth graders were taught the ISL that emphasized reading strategies. Children’s awareness of reading was improved significantly, and they could discuss cognitive processes, strategies, and task factors that influence reading comprehension.

Paris and Cross (1988) conducted another study using the ISL with the same population, third and fifth graders, with the hypothesis that children’s understanding of their own cognitive skills (metacognition) plays a major role in learning and development. Two third grade and two fifth grade classes received training in ISL and the control group did not. They found that group instruction can be used to inform children about reading strategies and that children can use these strategies on their own.

Short and Ryan (1984) conducted a study with older poor readers to test whether a metacognitive intervention program would increase comprehension monitoring. They assigned 42 fourth grade poor readers to three groups. Fourteen skilled readers served as a control group. Strategies training consisted of the use of five “wh” questions about settings and episodes. The study was not designed to teach knowledge such as main character, setting, conclusion, or feeling, but rather to teach a strategic plan so it could be applied as a strategy in other reading. Results showed that strategy training improved poor reader’s comprehension by providing them with metacognitive skills. Palinscar (1986) states that

a characteristic of successful metacognitive strategy instruction is the gradual transfer of control of the strategy from the teacher to the students. This transfer from teacher to student is achieved by explicit instruction of efficient strategies that empowers the learner for further independent strategy use. (p. 120)
Duffy et al (1986) examined whether explicit teacher explanation of how reading skills can be used as strategies would result in increased student awareness of what was being taught as well as increase achievement scores on standardized measures. Twenty-two teachers participated in this study. The teachers became more explicit in their teaching of reading strategies and their increased explicitness resulted in increased student awareness. They found that instructional talk had a powerful impact on what students remembered and understood.

Students construct understandings about instruction to gain control of what they are to learn. When a child doesn’t understand, the teacher responsively elaborates (Duffy and Roehler, 1987). Helping students become strategic readers involves being explicit about the mental processes involved and responding to children’s confusions rather than looking for correct responses. Less effective teachers look for correct answers, which is a type of teaching that can become proceduralized. But a decision-making model for teaching requires the teacher to respond to students reasoning and is a “dynamic and fluid interactional exchange” (Duffy and Roehler, 1987).

Teacher as Decision Maker

Children are active participants in their learning and their efforts to construct meaning. The role of the teacher is increasingly becoming one of observer, facilitator, and as a model for literacy in action.

A teacher accepts the efficiency of the learner’s own system to govern the complexities of the process—it does not require a teacher to control the immensely complicated behavior or provide a learning progression. (Holdaway, 1979, p. 81)

Paulo Freire, head of Brazil’s literacy campaign, reiterates the concept of empowerment and of the learner’s need to be active in his or her own
education. For empowerment to occur, educators must have a fundamental belief in the learner's ability to learn. With this faith in the students' ability to understand that which relates directly to their lives, teachers move from directing to facilitating, from talking to listening, from doing to observing. Controlled observation and moment-to-moment decision making based on the child's responses to text, to instruction, and to the teacher are the keys to the teacher's role in Reading Recovery.

Cazden (1988) investigated how adults assisted language development through scaffolding, modeling and direct instruction. The teacher interaction with a child during a Reading Recovery lesson parallels the caretaker/child language interaction. The teacher provided the interactional support to promote and strengthen strategy use by the child. Throughout the children's program the teacher scaffolded as the children read increasingly difficult text while integrating all cue sources and continued to build their self-improving system (Clay & Cazden, in press).

In a study conducted to determine whether teachers functioned as technicians or decision makers, Burko, et al (1984) observed four second grade teachers in a rural Appalachian elementary school during three four-six week cycles of the school year. Their focus was on how decisions were made. They discussed goals of the basal reading program, the basal reading series, evaluation of student progress, classroom activities, scheduling, and preferred instructional techniques with the participants.

The investigators described two types of teachers with differing conceptions of the teaching process and the roles and responsibilities of teachers. One type viewed teaching as a process which led the teacher to make numerous decisions about each student's maximum learning potential.
The other type saw the teacher's role as a technician who made her decisions based on county and school guidelines and by taking her students through the prescribed instructional program. Technician versus decision-maker is a philosophical choice of every teacher.

Teacher decision making is the focus of the Reading Recovery training. Teachers spend a year sharpening their observation and decision-making skills during the training. They watch weekly lessons of peers teaching a child behind a one-way glass. During this observation, teachers discuss strategies the child is using, observe teacher and child interaction, and discuss decisions made by the teacher. These discussions with colleagues center on the observation of a lesson with a child and assist all the teachers in a theory-building process that is always evolving (Pinnell, 1987, 1989).

This study examined decisions made in fostering strategy use by a more and a less successful at-risk emerging reader. There are few studies that examine strategy use by emerging readers and the teacher's role in fostering that strategy use (Askew, 1988, 1990; Clay, 1963; Pinnell, 1988). The results and findings from this study will add to the growing body of research on strategy use for beginning readers and the teacher's role in fostering strategy use.

Summary

Current research on emergent literacy provides evidence that literacy acquisition begins with birth, is uniquely individual, and develops within the social and cultural context of the child. The child is an active learner with an innate desire to construct meaning. The literature reviewed in this chapter provides a theoretical and practical framework for a study of two students
evaluated as being at risk of reading failure in their first year of formal reading instruction.

The first section reviewed the critical research on the theories and practices in the school setting that make an impact on learning. The second section of the literature reviewed examined current intervention programs for children at-risk of failing in first grade reading instruction. The federal government, the state government, and the schools recognize the need for additional programs to break the cycle of poverty. Reading Recovery is one of several programs found to be effective in accelerating learning for at-risk readers. Reading Recovery emphasizes strategic learning and the role of the teacher/child interactions that scaffold the child's learning.

The third section reviewed the current research on strategy use and the teacher as a decision maker. For children to take control of their learning, they must employ effective strategies that will enable them to become independent learners with a self-improving system. Teachers need to be keen observers with a strong theoretical base to observe children, to understand where they are in their literacy acquisition, and to help them move forward in their natural development. This requires informed decision making by the teacher/professional. The third section of the literature review examines the growing body of research on strategy use and teacher as decision maker.
CHAPTER III
METHODOLOGY

This study utilized two in-depth case studies to investigate strategy use over time by two emerging at-risk readers in a one-to-one tutorial setting. The case study approach was selected so that the researcher could concentrate on two entities, or cases, in order to uncover the interplay of factors characteristic of the cases. The methodology allowed the researcher a great deal of freedom to decide the means of data collection and analysis. In this study, the case study was used to provide insight into the range of behaviors and the types of progress trajectories that might be expected.

Data were gathered on two at-risk beginning readers during their first year of formal reading instruction and analyzed at five specific points of their program. Both case study subjects were initially low achievers. One case study subject was highly successful; the other subject was less successful. This circumstance provided a useful comparison which would provide further insights into the process of constructing strategies in reading. Teacher and student interactions were analyzed as a means of understanding how students developed a self-improving system.

The focus throughout the study was on the students' strategy use and the influence of the teacher's prompting for strategy use. This chapter presents the rationale and criteria that guided decisions about procedures and methodologies for collecting and analyzing data.

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The following research questions were investigated during this study:

1. How do students with different profiles of progress use strategies while reading text in a one-to-one early intervention setting?

2. What differences occur in reading strategy use over time in children with different paths of progress in a one-to-one early intervention setting?

3. What is the effect of teacher prompting for reading strategies for students with different profiles of progress in a one-to-one early intervention setting?

4. What differences occur in teacher prompting for strategies across the programs of children with different paths of progress?

Subjects and Design

The subjects were two first grade students from the same classroom in one elementary school within a suburban school district in North Texas. The school enrollment of 494 students included children from pre-kindergarten through second grade. Approximately 20% of the school population was Anglo. The minority populations included 27% black students, 48% Hispanic students, and 5% Asian and American Indian students. Fifty-five percent of the students were on free or reduced lunch programs and approximately 57% of the students were identified as bilingual or ESL children. The school was in a highly mobile area; the mobility index was 98.2%. Student achievement results on a nationally normed reading test indicated that only 25% of the second graders scored at or above the national median.

Reading Recovery students were identified by the first grade teachers as being among the most at-risk students, scoring in the lowest 15% of their first
grade class on the Diagnostic Survey (Clay, 1979). Early identification was made using the following selection criteria:

1. Each teacher completed an alternate ranking of her first grade class within the first two weeks of school, identifying the highest reader first, then the lowest reader, then the next highest reader, the next lowest reader, and so on until the entire class had been ranked.

2. The Metropolitan Readiness Test scores from the end of kindergarten were also considered for children who attended this elementary school the previous year.

3. Based on teacher rankings and the Metropolitan results, the Reading Recovery teachers in the school administered Marie Clay's Diagnostic Survey to the lowest third of all first grade classrooms.

Fourteen children were placed in the Reading Recovery program early in the school year to be served by 3.5 Reading Recovery teachers in this building. In order to control for classroom instruction and to facilitate communication about the students, the two students who participated in the study were selected from one classroom. The selection of the teacher was based on several factors, including the number of children in her classroom that qualified for Reading Recovery, her experience with at-risk populations, the principal's approval, and her willingness to participate.

From this teacher's classroom, seven children were placed in Reading Recovery at the beginning of the school year. Four of these children were placed with the researcher. Parent permission letters were obtained for all four children for potential inclusion in the study (see Appendix A). Data were collected on all four children in order to select one high-progress child and one low-progress child for further analysis. The two children who met the criteria for
assignment according to level of progress and who were consistently in attendance in the school were selected for the study.

The researcher was one of 3.5 Reading Recovery teachers in the school and was also one of two teacher leaders for the school district. She was in her third year as a Reading Recovery teacher and her second year as a Reading Recovery teacher leader.

From the four children taught by the researcher, two were selected for this study. Data were gathered on all four students. The two students that were selected for this study emerged during their programs as one making accelerated progress and one making slow, steady progress.

Zak emerged as the high progress child selected for the study. He was a black male who was 6 years and 7 months old when he began his program. His prereading composite score was Stanine 2 on the Metropolitan Readiness Test. His scores on the Diagnostic Survey were among the lowest in the first grade at the school.

Katie, the low progress child chosen for the study, was a black female who was 6 years and 3 months old when her Reading Recovery program began. No kindergarten data from the school she had previously attended were available for Katie. Katie's diagnostic test scores were also among the lowest in the first grade.

This study investigated the use of strategies by two at-risk first grade students' in a one-to-one intervention setting. A case study approach was used to examine strategies used by the subjects and to observe the influence of teacher prompts on strategy use. The case study approach is best suited to examine the variables and to describe strategies as they exist at one particular point in beginning reading. Information about strategies from the study should
contribute to the field and raise more questions for further study. The approach to the study is based on previous research on strategy use by Clay (1966), Pinnell (1988) and Askew (1988). Analysis of strategy use in reading was based on the coding of transcripts of videotapes and audiotapes made at five specific intervals in each of the two students' programs. Data derived from careful analysis of transcriptions were analyzed quantitatively through frequency data and descriptively through observational and interactional data.

Materials
The materials used were natural language texts that have been leveled for use in the Reading Recovery program. The texts were selected according to each child's strengths and needs as indicated by the daily running record. Text reading levels used in Reading Recovery range from 1 through 20, representing basal reading levels preprimer through grade two.

Data Collection
Three categories of data were collected. First, Marie Clay's Diagnostic Survey was administered to both children at the beginning of the year and again at the end of the year. The Diagnostic Survey consists of six subtests that include: letter identification, word identification, Concepts About Print, a writing task, a dictation task, and text reading. The survey is administered as a whole and the results of all six subtests are considered in identifying children in need of early intervention.

Second, the teacher audiotaped every lesson for each child. She also videotaped each child at approximately one week intervals and transcribed five
lessons in their entirety; one at the beginning and at the end of their programs and three lessons in between.

Third, running records of text reading were collected for all daily lessons throughout each child’s program. The running record is a written account of the child’s oral reading behavior. The teacher is a neutral observer who records and observes strategy use by the child as he processes new text. Through error analysis the running record provides a reliable record of the child’s independent use of strategies. Cue sources used by the reader are also recorded and analyzed.

Development of Categories

In order to describe and analyze behaviors of students and teachers during the videotaped reading portions of the Reading Recovery lessons, the researcher devised a category system. Based on a system developed by Askew (1988), the researcher developed a set of categories and experimented with them using available data on the subjects. The categories used in this study, then, evolved as they were subjected to actual data. Categories were developed to include the child’s behaviors and the teacher’s behaviors.

Category definitions/descriptions were examined by two trained and experienced Reading Recovery trainers. Agreement was reached among the researcher and the two responders as to which categories were appropriate for the study and how they should be described. (See Appendix B for the category descriptions.)

In order to determine interrater reliability for the coding system, a trained and experienced Reading Recovery trainer blindly coded one of the transcripts selected at random from the ten available transcripts. The interrater reliability
for this first coding was .78. Following a discussion of category definitions and some minor changes in the category system for purposes of clarity, another transcript was selected and coded. Interrater reliability was then established at .88.

Data Analysis

Diagnostic Survey

Pre and post Diagnostic Survey scores for each child were reported and described. Analyses were reported for the two children at two points of their program.

Videotapes

Videotapes were transcribed verbatim in their entirety at five different points in each child's program. During each Reading Recovery lesson, the child reads at least two familiar books, one book that was new from the previous day and referred to as the running record, and a new book introduced for the first time. Every book read during the videotaped lesson was included in the analysis. These text records of reading were examined for cue use M, S, V, MS, MV, SV, MSV (M=meaning; S=structure; V=visual information; MS=meaning and structure; MV=meaning and visual information; SV=structure and visual information; and MSV=meaning, structure and visual information).

The ten selected transcripts, five for each child, were then coded according to predetermined categories (see Appendix C for sample coded transcripts) to describe strategy use by the students and prompts for strategy use by the teacher. For analysis purposes, language units were set at the sentence level. For example, each book read by the child was coded sentence by sentence in order to control for amount of text coded in a given manner.
Following the coding of each transcript, the researcher prepared an interaction chain to display student behaviors, teacher behaviors, and the influence of each on the other across the lesson segments. (See Appendix D for a sample coding chain.)

The data were subjected to several analyses. Frequency counts of specific strategy behaviors were used to describe differences/similarities between the two subjects and to describe shifts in behaviors over time. Similarly, frequency counts were used to describe teacher behaviors with the two children and how her behaviors tended to change over time in program. Some quantitative analyses were also applied to the interaction chains to make inferences about the influence of prompts on children's behaviors and any shifts in these interactions over time.

Descriptive data were used to describe trends and patterns observed in the strategic behaviors of high-progress readers and low-progress readers, with pretest and posttest scores offering beginning and end of program status comparisons.

Running Records

From all of the daily running records collected for each child, five sets of five consecutive running records were chosen for analyses. The bases for set selection was at the point of each videotaped lesson. For each of the five videotapes, daily running records were analyzed for the two days preceding the taping, the day of the taping, and the two days following the taping. Running records were analyzed according to Clay's (1963) and Lyons' (1988) coding system to describe cues used and cues neglected on both errors and self-corrections.
Summary

The major purpose of the study was to describe and analyze strategy use by two at-risk first-grade students and to analyze teacher and child interactions during a one-to-one Reading Recovery intervention. A case study approach was used.

One high-progress child and one-low progress child were studied for the duration of their programs. Pre and Post Diagnostic Surveys were administered.

Daily records were maintained. Lessons were audiotaped daily and videotaped weekly. Transcriptions of the text reading portions of five lessons at regular intervals in their programs were coded for each child according to a category system devised by the researcher. Codes were analyzed according to frequencies and interactions to investigate trends in each child’s use of strategies and in the student-teacher interactions observed over time.
CHAPTER IV

ANALYSIS OF FINDINGS

Introduction

The purpose of this study was to investigate strategy use by two emerging at-risk readers in a one-to-one tutorial setting and to look at their strategy use over time. The findings are reported in this chapter.

Three major sources of data will be analyzed in this chapter. First, the Diagnostic Survey, a controlled, systematic assessment, was administered at two points in each child’s program. These fall and spring assessments for each child will be presented and analyzed to describe the parameters of the reading behaviors of the two children.

Second, transcripts of videotapes and audiotapes of the two subjects’ Reading Recovery lessons were coded for strategy use by the children and for strategy prompts by the teacher. The analysis of these coded data will be presented in this chapter, along with teacher and child interaction chains drawn to reflect change over time in the relationship between a child’s behaviors and the teacher’s prompts for strategy use.

Finally, data were analyzed from another controlled assessment, the running records, at specific points in each child’s program. Findings from five sets of data, each representing five consecutive days of text reading analysis, will be presented and described.
A discussion of the similarities and differences between the two subjects' development as readers will bring closure to this chapter. Detailed descriptions of the behaviors of the children over time as well as behaviors of the teacher over time will conclude with a summary of the findings.

Strategy Differences Between the Two Children

Question one examined strategy use of the two children as they began formal instruction in reading: How do students with different profiles of progress use strategies while reading text in a one-to-one early intervention setting? A time frame was established for analyses of differences between the two children. In order to look at the differences between the two children without the variable of time in the program, a time frame was established. This time frame included the following program components for each child: (a) the Diagnostic Survey administered prior to entry into Reading Recovery, (b) the ten sessions called Roaming Around the Known (Clay, 1979), and (c) the first five Reading Recovery lessons. On all three observations, differences between the children were noted in the ways in which they approached text and operated on print.

Diagnostic Survey

The Diagnostic Survey is a controlled measure for observing how children actually read and write at the beginning of their formal school instruction. It is designed to allow the teacher to observe children as they perform six tasks: letter identification, word identification, concepts about print, writing, dictation, and text reading. The Survey was administered and analyzed before tutoring began with the subjects. Both children were given the
Diagnostic Survey within the first two weeks of first grade and were diagnosed as being the most in need of early intervention in one first grade classroom. Although the scores for the fall Diagnostic Survey were similar for both subjects, there were definite differences between the two children (Table 1).

### Table 1

**Fall and Spring Diagnostic Survey Results**

<table>
<thead>
<tr>
<th>Subtests</th>
<th>Letter ID (max=54)</th>
<th>Word Test (max=20)</th>
<th>CAP (max=24)</th>
<th>Writing</th>
<th>Dictation (max=37)</th>
<th>Text Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katie</td>
<td>32</td>
<td>50</td>
<td>0</td>
<td>11</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Zak</td>
<td>39</td>
<td>53</td>
<td>0</td>
<td>14</td>
<td>5</td>
<td>19</td>
</tr>
</tbody>
</table>

The most striking difference was that Zak was willing to take risks during his initial testing. This willingness to risk was indicated in the following ways. Zak attempted 51 of the 54 letters on the letter identification. For one of the three letters he did not know, "g", he responded by saying, "I never heard of it." All of his 12 letter confusions were visually similar. He made two attempts on the word test (*levi* for *let* and *ink* for *here*). While he received a score of 0, one of these attempts was visually similar. The Concepts About Print assessment revealed that Zak knew five concepts: the front of the book, the bottom of the
picture, that the left page is read before the right, the concept of letter, and the meaning of a period. He responded appropriately to the statement, “Show me the first part of the story,” but did not respond to the prompt, “show me the last part.”

Zak could write two words (his name and A). He also attempted to write five other words (Shinmaney, red, I, no, and DeLisia). He attempted every word during the dictation test and articulated words slowly. He correctly recorded 3 of 37 sounds. On the text reading task, Zak’s errors were meaningful and structurally acceptable. Zak made no appeals and received no tolds. He was able to repeat the language pattern for A Bird Can Fly with meaning overriding the last repetitive pattern.

Text: A horse can run. C: So can I.
Text: A dog can dig. C: So can I.
Text: A monkey can swing. C: So can I.
Text: A bird can fly. So can I. C: A bird can fly. I can’t.

In reading Hats, Zak held the language pattern and strongly relied on picture cues for the types of hats rather than their color and read:

Text: (The sailor) has a white hat. C: has a sailor hat.
Text: (The witch) has a black hat. C: has a Halloween hat.
Text: (The woman) has a yellow hat. C: has a flower hat.

Katie, on the other hand, was reticent in responding when she was not sure of the answer. She knew 32 letters. During the assessment for letter identification, Katie made no attempts for the 19 letters that she didn’t recognize. Her three confusions were visually similar: b/d, d/b, and p/q. Katie
recognized most of the letters that were in her name but couldn’t give the letter name for two of the letters. She attempted one word on the word list (up for am). She controlled four concepts about print: the front of the book, the concept of first and last, that the left page is read before the right page, and word-by-word matching. Although one-to-one matching was recorded on CAP by a teacher-in-training, Katie provided evidence during Roaming Around the Known that she did not understand the concept of one-to-one matching or that print contains the message. She wrote her name but refused to attempt any other words on the writing vocabulary task. She made one attempt in the 37 sounds on the dictation test (b for bus) and then refused to write more.

Katie attempted three books during the text reading. During the first text, she appealed for “No, no, no,” and the examiner gave her “tolds” for no, no, no. In the second book, I Can Fly, she appealed to the examiner again and was given “tolds” for the repetitive pattern, “So can I.” She then read:

<table>
<thead>
<tr>
<th>Text: (A dog can dig.)</th>
<th>So can I.</th>
<th>C: I can.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text: (A monkey can swing.)</td>
<td>So can I.</td>
<td>C: I can too.</td>
</tr>
<tr>
<td>Text: A bird can fly.</td>
<td>So can I.</td>
<td>C: I can fly.</td>
</tr>
</tbody>
</table>

All of her errors were meaningful and structurally acceptable, but she did not retain the language pattern. She refused to read Hats, saying, “I don’t know this book.”

Diagnostic Survey scores were similar for the two children, but there were differences in the behavior and stance of the two subjects. Zak provided more evidence of being a risk taker in his willingness to make attempts for all the six assessments. He also provided evidence that he had more print awareness in his approximations of print during the word test, in his writing attempts, and in the dictation. His attempts during writing, j for l, red with the e
upside down and no were almost acceptable except for reversals and letter formation. He also had the consonant framework with some vowels for Shinmaney and Delisia. Zak showed control of directionality, left to right and top to bottom, in his writing. He was able to continue a patterned text during text reading.

Katie would not make any attempt on tasks she did not control. When prompted to try, she shook her head and refused. She also provided evidence of understanding directionality in writing because she wrote her name in the top left-hand corner of the page, wrote left to right, but refused to try other words. Her one attempt on the dictation test was in the top left-hand corner of the page but she refused to try any more sounds. Katie appealed to the examiner when asked to read and did not hold the language pattern. She refused to try for the third text, Hats.

Roaming Around the Known

Katie and Zak began their tutorial program with a two week period called “Roaming Around the Known.” During this time the teacher read and wrote with the children calling upon what the children already knew. The teacher introduced nothing new in these two weeks, but observed and recorded behaviors of the children as they operated on print during meaningful reading and writing experiences. If the child exhibited new knowledge, this was incorporated into future lessons.

As Clay (1985) indicated, the teacher is an informed observer who can assess where the children are and what strategies they are employing on print. The teacher is looking for evidence of directionality, one-to-one matching, the ability to locate known and unknown words in print, monitoring, cross-checking
cue sources or searching for cues. Reading and writing are structured to be at a level where the children feel success and are able to use what they know fluently and flexibly. In this study both children demonstrated very different behaviors and exhibited different strengths and needs at the beginning of their early intervention program.

Zak was a risk taker from the start as evidenced on the Diagnostic Survey and observed during Roaming Around the Known. He chose new books to read and immediately had favorites. He had a good memory for patterns in language and joined in on the repetitive phrases of predictable books that were read to him such as The Bus Stop and The Big Fat Worm. He wanted to hear the stories read again and again and immediately chose them when given a choice among books.

In addition to risk taking during text reading, Zak began to relate information from one setting to another, linking new experience with the old. Zak noticed and commented on details of the illustrations in books shared with him during Roaming Around the Known. On the last page of The Farm Concert, he noticed a picture in a frame on the wall of the farmer’s house and asked, “Is that him in the picture?” In sharing a picture book about vegetables and fruit, Growing Colors, Zak talked a lot about his favorite foods and how his Mom prepared them. Zak related other new stories he heard to his experiences. The book, Baby Brother, reminded him of his sister, Oviance, which prompted writing stories about her.

Zak’s linking behaviors also became evident in writing. He used his strong oral language and generated complex sentences in writing settings such as, “She cries at night when I’m trying to go to sleep,” and “When mama puts her down, she wakes up.” Zak noticed many details about print during Roaming
Around the Known and began linking new information to his experiential world. When the teacher wrote “g,” for goes in one of his stories, he commented, “That looks like ghost.” When reading Down to Town, he remarked, “T-o, that’s to.” When shown the book, I Can Read for the first time, he said, “That’s like I Can Fly.”

Zak would occasionally attempt one-to-one matching during his reading but did not monitor when the one-to-one matching was off. He also displayed some confusion about directionality and read the right page before the left page. However, in writing, Zak gave evidence of controlling directionality and he did not have to be prompted to write from left to right.

Zak could hear and give the letter name for sounds but had many reversals in his writing. He heard the g in a continuation of a story he was writing with the word goes in it, but he didn’t know how to write a g. He verbalized the difference between an m and an n, but when he went to write an m, he wrote a w. He displayed other confusions and reversals with letters (b for d, f or t, q for g, j for l). When he saw the f in family, he asked, “Is that a j?”

Zak had to be prompted to take control of the book because he tended to sit with his hands in his lap and wait for the teacher to turn the pages. The teacher frequently said to him, “You turn the pages and I’ll read.” During Roaming Around the Known, Zak increased his contributions to shared writing. He was reading level 1 books fluently and independently with some one-to-one matching and was ready to begin reading level 2 and 3 books. He was willing to attempt new tasks with the teacher’s help and showed evidence of making links with prior knowledge and experience.

During early sessions in Roaming Around the Known, Katie interacted very little with the text and with the teacher. She responded when spoken to, but
did not contribute to the conversation about the stories. She had to be encouraged and supported to interact during these sessions. She willingly controlled the books during reading but would turn the pages so fast that the teacher had no time to read the print on the page.

Katie expressed more interest and enthusiasm for writing than reading during Roaming Around the Known and liked to make books based on her generated sentences. She dictated, “The balloon can go,” and wrote the c in can. When adding to this pattern, “The _____ can go,” she wrote can independently.

She consistently said that she wanted to write by herself. In other writing opportunities in this time period, Katie attempted to write, but often produced strings of letters, (T, O, l, T, l, O) and asked the teacher to “read what it says.” When asked to draw a picture for her writing, she again drew strings of letters which she wanted the teacher to read. Katie much preferred writing on the dry erase board. She requested to write other words that she knew like her sister’s name, and she once again wrote a string of letters which contained a t for the beginning of her sister’s name.

While Katie seemed to enjoy the act of writing, however, she needed to be prompted to generate a story for writing. Her stories were three and four word sentences such as, “The balloon can go,” and “The bike can go.” She became frustrated easily during writing stories because she found it very difficult to remember the sentence she just gave for the writing. She enjoyed writing the high frequency words she controlled and was able to read the stories back after a shared reading with the teacher.

Katie also wanted to read by herself. She read very quickly and invented a story for the pictures. She had some difficulty controlling patterns of texts so
the teacher would frequently join in to keep the pattern for her. When the teacher would join in for a shared reading, Katie said, “I want to read it by myself.”

In contrast to Zak, Katie made few links when operating on text. She read level 1 books and chose books quickly from the choices given to her but rarely made comments about the stories, the illustrations, or rarely showed a preference for a favorite story. When asked to reread a book, she would respond negatively but could be convinced to read in a shared manner.

Again, unlike Zak, Katie initiated no links in writing to what she read to what she already knew. She did, however, respond positively to her writing and liked to read the books that she wrote. Katie did not verbalize that she noticed similarities between the books she wrote and the ones she read.

Therefore, during the close observation sessions in Roaming Around the Known, the teacher recorded evidence that Zak was beginning to attend to print in reading with some one-to-one matching and was beginning to make links in reading and in his writing while Katie was passive and resistant in her attention to print, did not one-to-one match and had to be prompted to slow down her fast responding with frequent shared readings. Katie appeared to be more comfortable with writing than reading, and although her oral language interfered with story generation and holding a sentence pattern in her head to reread, she was generally inflexible.

Lessons began at a text reading level 1 for Katie and a level 2 for Zak. Zak appeared more confident and both readers were fluent with the many little books that they could read independently. Katie had directionality under control in writing and in her reading. Zak had control of directionality in writing but needed to gain control of directionality in reading. Both subjects needed to
learn to attend to print with one-to-one matching and locating known and unknown words within text.

First Five Lessons

In order to explore differences between the two subjects at the beginning of intervention, emerging reading behaviors of both children were closely analyzed during the first five lessons. Data sources were daily running records for the first five lessons and coded transcriptions of lesson three for both children.

Although a running record was taken daily for each of the two subjects during their Reading Recovery tutoring, only the first five lessons for both children were analyzed to compare the differences between the two children in strategy use at the beginning of their programs. Running Record data for the first five lessons are displayed in Table 2.

Katie began lessons at a level one and her first five running records were taken on level one texts which had consistent placement of print, two or three words to one line of print, and print highly supported with picture cues. She used meaning and structure cues, read fluently, but made no attempt to match on new text or attend to the visual information. One-to-one matching was recorded on CAP; however, that test had been administered by an inexperienced tester and may not have been accurate. Katie may have adequately performed the testing task but did not fully control one-to-one correspondence in all contexts. Katie provided evidence during Roaming Around the Known that she did not understand the concept of one-to-one matching or that print contains the message. By lesson three Katie was able to one-to-one match with prompting on text that was organized as two words in
one line of print. She appealed for words she didn’t know with no attempts by her before the appeal. Her errors were based on meaning and structure (mom for mommy, dad for daddy, and arm for hand), with visual similarity a happenstance. Katie had no self-corrections or attempts at self-corrections during this early period.

Table 2
Analysis of Running Records for Observation 1 (lessons 1-5)

<table>
<thead>
<tr>
<th>L#</th>
<th>Katie</th>
<th>Title/Level</th>
<th>Accuracy</th>
<th>SC Rate</th>
<th>E SC Rate</th>
<th>E SC Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>HAVE YOU SEEN</td>
<td>89%</td>
<td>1: nil</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>DRESSING UP¹</td>
<td>83%</td>
<td>1: nil</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>BUILDING WITH</td>
<td>90%</td>
<td>1: nil</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>SHOPPING¹</td>
<td>100%</td>
<td>1: nil</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>WHAT'S IN THIS EGG?¹</td>
<td>66%</td>
<td>1: nil</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 Analysis of Running Records for Observation 1 (lessons 1-5)
Table 2 (continued)

Text Information and Error Analysis

<table>
<thead>
<tr>
<th>L#</th>
<th>Zak</th>
<th>Title/Level</th>
<th>Accuracy</th>
<th>SC Rate</th>
<th>SC (cues used)</th>
<th>E (cues used)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>WHERE ARE THE CAR KEYS?</td>
<td>66%</td>
<td>1:nil</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

2 told

told

1

2

3

2 THE CAT ON THE MAT | 100% | 1:1 | 2 |               |

m = meaning
s = structure
v = visual information

msv = meaning cues
msv = meaning and structure cues
msv = meaning, structure and visual cues
Zak began lessons at a level two and by lesson five, he was reading at a level three. During Zak's first lesson, he did not one-to-one match and there was little evidence of self-monitoring. In lesson two, he had two self-corrections based on visual information (sheep for goat and chick for cow). During lesson five, when his one-to-one matching was off, he monitored with a known word, we, and returned to the beginning of the line to self-correct his one-to-one matching. He had two other self-corrections: tub for bath and the for a.

Early in their Reading Recovery programs, then, Katie and Zak demonstrated different reading behaviors. Although both children relied heavily on meaning and structure cues when reading text, Zak also attended to some visual cues to confirm, monitor, and even to self-correct. Zak was becoming secure enough with one-to-one matching to use the procedure to monitor while Katie was still requiring a great deal of prompting to match and to attend to print.

In summary, important differences between the two children existed early in their programs in their oral language development, their ability to repeat and hold language patterns, their awareness of print, their willingness to take risks, and their interactions with the teacher during the one-to-one sessions. In examining both subjects' strategy use at the beginning of their program, there was a difference between the two readers in the way they began to attend to print during the Diagnostic Survey, Roaming Around the Known, and with their first five lessons in the one-to-one tutorial setting.

In terms of development of early strategies, Zak was able to one-to-one match, monitor his own reading, and sometimes self-correct, and he also noticed words that he knew within text. Katie had to be prompted consistently to look at print and to one-to-one match. When faced with new text, she would
start to rub her eyes, an action that the teacher thought indicated discomfort with the task of reading.

The differences between one-to-one matching behaviors of the two children are reflected in the analysis of teacher prompts for matching shown in Figure 1. For comparison purposes, the number of teacher prompts in each observation period was considered in relation to the number of words read by each child during that lesson. The data in Figure 1, then, represent a ratio between the actual number of prompts and the total number of words read. For example, Katie received 52 prompts per 100 words of text read in Observation 1 compared with Zak's 18 prompts per 100 words. (Actual frequency data are shown in Tables 14 and 15.)

![Figure 1. Teacher Prompts for Matching Across Five Observations variable adjusted for length of text: number of prompts for matching per 100 words of text)
Differences in Strategy Use Over Time

The response to question 2 charted the paths of progress of two at-risk readers. The behaviors of these children, one high progress and one low progress child, provide important insights into the range of behaviors that may be expected. Two sources of data were used to describe differences across time. (a) Data collected from the transcription and coding of audiotaped and videotaped lessons at five specific intervals in both subjects' programs will be reported to describe the strategy use of the two children over time. (b) Data collected and analyzed from running records will also be reported.

Following descriptions of these two data sources, the analysis of findings related to strategy behaviors across time will be presented. Data from both sources will be combined to display these findings according to reading behaviors (relative to text levels, error behavior, and self-correction behavior) and according to specific strategy behaviors (linking, monitoring, and searching).

Description of Data Sources

Coded Transcriptions. Descriptive codes for categorizing data transcribed from videotapes of five lessons for each of the subjects were established based on strategies or behaviors used by the child and teacher prompting for strategy use in the reading portion of the Reading Recovery lesson (See Appendix B for code descriptions). Frequency data were recorded and ratios were calculated for strategy use by the subjects according to the amount of text read.
The five observational points in each subject's program are listed as Observations 1, 2, 3, 4, and 5. Observation 1 for both subjects was lesson 3 at the beginning of their programs, observations 2, 3, and 4 were at the mid-points of their programs, and observation 5 was at the end of their programs.

Coded transcriptions were also used to analyze self-correction behaviors for children on familiar text as well as novel text. Coded data were additionally displayed in interaction chains to graphically portray the reciprocal effects of student and teacher behaviors.

**Running Records.** In addition to the data from the five coded observation points, daily running records were analyzed for five consecutive days, two preceding and two following each observation point. There were, then, five sets of five daily running records taken from five different points of each child's program, corresponding with the observation points for coded transcription data. Analysis was done at the point of error, noting cues used and cues neglected (meaning, structure, or visual information). Self-corrections were also analyzed for use of cues.

**Analysis of Reading Behaviors**

The analysis of reading behaviors was based on data gathered from the coded transcriptions and from running records. First, attention will be given to the influence of text reading levels. In-depth attention will then be given to error behaviors and self-correction behaviors of each subject.

**Levels.** An important factor in the analysis of findings was related to the text level read by each child at each point of analysis. The levels of books read by Katie and Zak during the five observation points are recorded along with text
accuracy in Table 3. Text levels 1-8 have predominantly oral language structures with repetition and illustrations that provide support for the text.

Beginning with level 8, the language structures become more sophisticated with unusual, challenging vocabulary and less support from the illustrations. Several factors are considered in determining the levels. These factors include: content in relation to background knowledge, language patterns, vocabulary, illustrations, and narrative style (Peterson, 1989).

Table 3
Text Level and Accuracy Rate Across Five Observations

<table>
<thead>
<tr>
<th>Obs.</th>
<th>Level</th>
<th>Acc. Rate</th>
<th>SC Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Katie</td>
<td>Zak</td>
<td>Katie</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>90%</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
<td>50%</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>7</td>
<td>92%</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>9</td>
<td>100%</td>
</tr>
<tr>
<td>5</td>
<td>9</td>
<td>17</td>
<td>80%</td>
</tr>
</tbody>
</table>

Note: Variable adjusted for length of text

Obs. = Observation  Acc. Rate = Accuracy Rate
SC = Self-correction rate
In examining the text levels across the five observations for the two children, Zak progressed through the levels at a faster pace (see Figure 2) and began to use visual information by lesson 5 as compared to Katie's lesson 21. By lesson 18, Zak was reading a level 5 while Katie did not attempt a level 5 until lesson 40. By lesson 23, Zak was reading a level 8 and had moved into the average reading group in his classroom (November). By lesson 23, Katie was reading a level 3 and at lesson 38, was reading a level 5. By lesson 60, Katie was beginning to read at level 9 and was still functioning in the lowest reading group in her first grade classroom. Zak continued to progress at a steady rate and by lesson 60 was reading a level 18. The following is an example of the contrast in levels with excerpts from one page of each of the two texts.

**Level 9 - Oh No!**

“There's a spot on my sweater. Oh, no!”

**Level 18 - The Popcorn Book**

“The kernels of popcorn are really seeds. They will grow. You can see what happens when the seeds start to grow.

You will need --

- popcorn seeds
- a paper towel
- a glass
- sand or soil
The text level at which each child was reading was then an important consideration when considering the specific reading behaviors. Discussions about error behaviors, self-correction behaviors, and strategic processing must be considered in light of the type of text demands placed upon each child at each observation point.

**Error Behavior.** Error analysis provides a window for exploring a child's processing of text (Goodman, 1970). The running record is a written account of oral reading behavior. The teacher is a neutral observer who observes and records strategy use by the children as they process new text. Through error analysis, the running record provides a reliable record of independent strategy use. The teacher analyzes the errors to see what cue sources (meaning,
structure, and visual information) the children are using or neglecting. Do they read solely for meaning with little attention to the visual information in text? Do they read and interpret their reading based on their oral language or do they read with attention to what sounds right grammatically and is according to book language? Do they use visual cues from the words or letters? Do they read word by word and ignore the fluency and phrasing of spoken language? The teacher uses the information gained from the running record to evaluate and inform her decision making about instructional material selection. She chooses the text difficulty for the child according to his use of strategies and progress, thus, supporting accelerative learning.

A text accuracy rate is determined by comparing the number of errors with the number of words in a text. If the error rate is more than 10 per cent on a new book, the text is considered too difficult for the child and strategy use may break down. Accuracy scores are categorized to determine difficulty of text: 95 - 100% is easy text, 90 - 94% is instructional text, and 89% or below is difficult text. Katie’s accuracy rate fluctuated more than Zak’s across five observations (Figure 3). A score was calculated for the running records at the five different observation points. Differences are noted for the two subjects.
As indicated in previous findings (See Figure 1) Katie needed more teacher prompting to attend to print and to gain control of the early strategies. That her oral language tended to override her attention to print was also a factor affecting the accuracy rate. She also had difficulty recalling labels for concepts. Text selection was also a factor. It was more difficult for the teacher to select a book to support her oral language and print knowledge.

Midway in her program, Katie was gaining control, beginning to use all three cue sources and orchestrating strategies (levels 3-5). Zak, on the other hand, had a more constant accuracy range from the beginning and was fairly consistent throughout his program. The running record was a means of collecting data for both subjects over time. Cue sources used by the subjects
during the reading of novel texts were recorded and analyzed after each running record (See Table 4).
<table>
<thead>
<tr>
<th>Student/Date</th>
<th>Set</th>
<th>TL</th>
<th>L</th>
<th>Words Read</th>
<th>T</th>
<th>M</th>
<th>S</th>
<th>V</th>
<th>MS</th>
<th>MV</th>
<th>SV</th>
<th>MSV</th>
<th>M</th>
<th>S</th>
<th>V</th>
<th>MS</th>
<th>MV</th>
<th>SV</th>
<th>MSV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katie</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>1</td>
<td>1.5</td>
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<td>3</td>
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<td>18-22</td>
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<td>1</td>
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<td>3</td>
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<td>3</td>
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<td>Zak</td>
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<td>23-27</td>
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</table>

Set = Running Records  
TL = Text Level  
L = Lesson Number  
T = Tolds  
M = Meaning Cues  
S = Structure Cues  
V = Visual Cues  
MS = Meaning, Structure Cues  
MV = Meaning, Visual Cues  
SV = Structure, Visual Cues  
MSV = Meaning, Structure, Visual Cues
In analyzing error behavior for the two readers during Set 1 of the observations, Katie used meaning and syntactic cues and read at a level 1 but appealed when she came to a difficult part. She tended not to make further attempts. She relied on meaning and structure with little evidence of attention to visual information.

Zak read at levels 1-3 during Set 1. In lesson 2 he had 2 self-corrections based on visual information and also reread after monitoring and self-correcting. He had one appeal but when given wait time, he returned to the beginning of the line, reread, and read correctly on his own. Zak reread and self-corrected based on visual information again in Lesson 5. He also recognized a known word which helped him to monitor and self-correct his one-to-one matching.

Katie's errors in the second set were mostly for labels she did not have—badger, steam shovel, or a child's name, Amy. She monitored and had two self-corrections. Her first evidence of rereading was during lesson 18 as opposed to Zak's rereading in lesson 2. Katie was reading at levels 2-3 during this observation period, and Zak was reading at levels 3-5. Zak provided evidence for cross-checking meaning and structure with visual information when he self-corrected woman for mother. He also self-corrected three times for directionality.

By the third set of observations, Zak was reading at levels 7-8 as opposed to Katie still reading at a level 3. Some of Katie's errors were based on her oral language overriding her use of visual information. She still appealed seven times during this observation but was rereading more to search for cues. She was still relying on meaning and structure while Zak was using all three cue sources.
During the 4th set of observations, both readers were using all three cue sources regularly and orchestrating strategies, but, again, Zak was reading at levels 8-9 and Katie was reading at levels 3-5. The same was true for the 5th set of observations. Zak was reading at a level 17 on a more sophisticated, higher level text and Katie was reading at levels 7-10. Both readers were using strategies and integrating all cue sources.

**Self-Correction Behaviors.**

The spontaneous corrections of errors presumably stems from an awareness, however, vague, that there is always a neat fit between the spoken and printed words. Readers may become conscious of the difference between what they have said and one of the several messages of the text -- semantic, syntactic, morphophonemic or graphic. The child aware that 'something is wrong,' may search for a response which resolves the dissonance. (Clay, 1982, p. 37)

A self-correction rate is calculated to determine the self-correction behavior of the reader when errors are made and the reader uses cue sources (meaning, structure, and visual information) to discover errors in reading and to self-correct the errors. A self-correction rate of one in three to five errors is considered good (Clay, 1982). Self-correction rates need to be interpreted along with text difficulty and text accuracy scores. Self-correction can occur based upon a reader’s use of cues, one cue or a combination of cues: Does what I read make sense (m)? Does what I read sound right (s)? Does what I read look right (v)?

To illustrate self-correction behavior, an example from Katie may be useful:

C: A dinosaur ain’t, na, is not
   What’s this word (pointing to is)?
T: (waits with no response verbally or nonverbally)
C: (rereads) A dinosaur is not my friend.
Katie began to self-correct midway in her Reading Recovery program. Her oral language was overriding her attention to visual information but she monitored, used a known word, is, that she could write fluently and self-corrected. After monitoring, she appealed for the word is but the teacher knew she knew is and could write it fluently so the teacher waited and gave Katie no response to her appeal.

At this point, Katie is on her way to a self-improving system but is tentative in her use of what she knows. Because the teacher knows what she controls, she is able to allow Katie to strengthen her strategy use and continue to gain independence towards a self-improving system.

There are three types of reading events in each lesson: familiar reading, the running record book, and the first reading of a new book. For ease of presentation, self-correction data will be presented in three sections: familiar reading, running record text, and first reading of the new book.

**Familiar Reading.** Self-corrections for the two children during the familiar reading of five observation points across time were tallied and analyzed according to frequency of self-initiated or teacher-prompted self-corrections across five observations. Self-correction behavior based on running record data has already been reported, but will be addressed in this section as well. Data from familiar readings (see Tables 5 and 6) and the reading of novel texts (See Tables 7 and 8) were also analyzed.

As shown in Table 5, Zak had seven self-corrections during familiar reading. All of the corrections were self-initiated. Zak's self-corrections began early in his program. In observations 1, 2, and 3, Zak's self-corrections were based on known words or on picture cues that strongly supported the text. However, it is possible that he cross-checked meaning and structure with visual
He had no self-corrections in observations 4 and 5 during familiar reading.

Table 5
Analysis of Zak's Self-Corrections During Familiar Reading

<table>
<thead>
<tr>
<th>Obs</th>
<th>Reader/Text</th>
<th>E</th>
<th>SC</th>
<th>E</th>
<th>SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>the mom</td>
<td>1</td>
<td>ms</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>n</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>leopard greyhound</td>
<td>1</td>
<td>ms</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>the help</td>
<td>1</td>
<td>ms</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>run can</td>
<td>1</td>
<td>ms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>steps path</td>
<td>1</td>
<td>ms</td>
<td></td>
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</tr>
<tr>
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<td>steps path</td>
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<td>ms</td>
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</tr>
<tr>
<td></td>
<td>you l</td>
<td>1</td>
<td>ms</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Obs. = Observation  
m = meaning cues

E = Error  
s = structure cues

SC = Self-Correction  
v = visual cues
Table 6
Analysis of Katie's Self-Corrections During Familiar Reading

<table>
<thead>
<tr>
<th>Obs.</th>
<th>Reader/Text</th>
<th>E</th>
<th>SC</th>
<th>E</th>
<th>SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>one-to-one matching was off and self-corrected without prompting</td>
<td></td>
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<td>in</td>
<td>1</td>
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<td>under</td>
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<td>under</td>
<td>1</td>
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<td>are</td>
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<tr>
<td></td>
<td>like</td>
<td>1</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>want</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Obs. = Observation  
E = Error  
SC = Self-Correction  
m = meaning cues  
s = structure cues  
v = visual cues
Katie had 14 self-corrections during familiar reading across her five observations (Table 6). These self-corrections varied by cues used, whether or not they were self-initiated or teacher prompted, and in what observation period they occurred. In other words, there was little consistency in Katie’s ability to self-correct until later lessons. She had no self-corrections in lesson 1 but during lesson 20, she self-corrected her one-to-one matching. During the second observation she had one teacher prompted self-correction. When asked what she would expect to see at the beginning of sister, she responded, c and then self-corrected to s. Katie had no self-corrections during the third set of observations.

In contrast to Zak, Katie had no self-corrections during familiar reading until the fourth observation period. A shift was seen during the fourth set when Katie self-corrected six errors on her own without prompting. The errors were all based on meaning and structure cues and Katie self-corrected based on visual information. During observation 5, Katie had six independent self-corrections during familiar reading. Four of the six errors were based on meaning and structure and self-corrected because of visual information, and two of the errors were meaning-based and self-corrected because of structure and visual cues.

On rereading of familiar text, then, Zak was making self-initiated self-corrections early in his program while unprompted self-corrections for Katie did not appear until her fourth observation. Zak was using multiple cue sources to self-correct. Katie needed more prompting to one-to-one match and to look at print. By the second observation and lesson 20, Katie self-corrected when one-to-one matching was off. In analyzing her self-corrections during familiar reading they were all high frequency words that she controlled in her writing.
She was beginning to make connections between what she knew in writing and what she could use as information in reading.

**Running Record Text.** As shown in Table 4, Zak began to self-correct based on visual information within his first five lessons. He was using all three cue sources in his reading. When reading *mother* for *woman*, he realized his error, returned to the beginning of the line and self-corrected his error. While it appears that Katie used meaning, structure, and visual cues in her first five lessons, the errors *mom* for *mommy* and *dad* for *daddy* were probably because of her use of picture cues and meaning rather than visual information. It appeared that Katie began to use visual information at approximately lesson 18.

**First Reading of New Book.** In analyzing self-corrections during the first reading of the new book (see Table 7), Zak’s six self-corrections were all self-initiated. His self-corrections were seen as early as the first observation. Zak used visual information to self-correct the earlier errors made based on meaning and structure cues. The three self-corrections he made in the last observation were errors due to over-relying on visual information, but then he self-corrected because of meaning and structure cues. For Zak, then, there was evidence of flexible use of cue sources in analyses of the relationships of self-corrections to errors.
<table>
<thead>
<tr>
<th>Obs.</th>
<th>Reader/Text</th>
<th>E</th>
<th>SC</th>
<th>E</th>
<th>SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>corn plates</td>
<td>1</td>
<td>msv</td>
<td>msV</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>the a</td>
<td>1</td>
<td>msv</td>
<td>msV</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>at an</td>
<td>1</td>
<td>msv</td>
<td>msV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I, I've</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I'll</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>big dig</td>
<td>1</td>
<td>msv</td>
<td>msV</td>
<td></td>
</tr>
</tbody>
</table>

Obs. = Observation  
E = Error  
SC = Self-Correction  

m = meaning cues  
s = structure cues  
v = visual cues
Katie's self-correction behavior during the first reading of the new book (Table 8) did not begin until the second observation (lesson 20). Of her three self-corrections one was teacher prompted when she read, “I can jump it,” and stopped. The teacher prompted, “Who's talking?” and then Katie was able to self-correct and read, “I can jump,” said the horse. The other two self-corrections were based on visual information, like for said. She was beginning to use all three cue sources during the reading of the new book during lesson thirty-nine.

Table 8
Analysis of Katie's Self-Corrections During the New Book

<table>
<thead>
<tr>
<th>Obs.</th>
<th>Reader/Text</th>
<th>E</th>
<th>SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>it (p)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>said</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>like</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>said</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>like</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>said</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>no</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 8 (continued)

<table>
<thead>
<tr>
<th>Obs.</th>
<th>Reader/Text</th>
<th>E</th>
<th>SC</th>
<th>E</th>
<th>SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>lambs sheep</td>
<td>1</td>
<td>ms</td>
<td>0</td>
<td>ms</td>
</tr>
<tr>
<td></td>
<td>little the</td>
<td>1</td>
<td>ms</td>
<td>0</td>
<td>ms</td>
</tr>
<tr>
<td></td>
<td>wake mom</td>
<td>1</td>
<td>ms</td>
<td>0</td>
<td>ms</td>
</tr>
<tr>
<td></td>
<td>moo oink</td>
<td>1</td>
<td>ms</td>
<td>0</td>
<td>ms</td>
</tr>
<tr>
<td></td>
<td>wa quack</td>
<td>1</td>
<td>ms</td>
<td>0</td>
<td>ms</td>
</tr>
<tr>
<td></td>
<td>Billy Harry</td>
<td>1</td>
<td>ms</td>
<td>0</td>
<td>ms</td>
</tr>
<tr>
<td></td>
<td>the breakfast</td>
<td>1</td>
<td>ms</td>
<td>0</td>
<td>ms</td>
</tr>
<tr>
<td>5</td>
<td>-- left</td>
<td>1</td>
<td>ms</td>
<td>0</td>
<td>ms</td>
</tr>
<tr>
<td></td>
<td>-- little</td>
<td>1</td>
<td>ms</td>
<td>0</td>
<td>ms</td>
</tr>
<tr>
<td></td>
<td>on one</td>
<td>1</td>
<td>ms</td>
<td>0</td>
<td>ms</td>
</tr>
<tr>
<td></td>
<td>-- little</td>
<td>1</td>
<td>ms</td>
<td>0</td>
<td>ms</td>
</tr>
</tbody>
</table>

Obs. = Observation  
E = Error  
SC = Self-Correction  
(p) = teacher prompted  
m = meaning cues  
s = structure cues  
v = visual cues
**Strategy Behaviors**

Strategies are problem-solving activities that take place inside the reader's mind. They are the tools that allow the reader to do the "reading work" to solve new problems. Strategies such as monitoring/checking and searching used by the two subjects during their intervention programs will be discussed. Data related to strategy behaviors are based on coded transcriptions. Tables 9 and 10 display frequency data for strategy use by the two readers across time. It should be noted in Tables 9 and 10 that the instances of monitoring did not include accurate reading. In this section, a presentation of findings related to linking behaviors will precede the presentation of findings for monitoring and searching.
Table 9

Evidence of Zak's Strategy Use Across Time

<table>
<thead>
<tr>
<th>Level</th>
<th>Text Rate</th>
<th>Acc. Rate</th>
<th>SC Rate</th>
<th>IR %</th>
<th>M %</th>
<th>S %</th>
<th>SC %</th>
<th>L %</th>
<th>R %</th>
<th>NR %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obs. 1</td>
<td>1</td>
<td>100%</td>
<td>1:nil</td>
<td>4:115</td>
<td>7:115</td>
<td>2:115</td>
<td>3:115</td>
<td>5:115</td>
<td>1:115</td>
<td>1:115</td>
</tr>
<tr>
<td>Obs. 4</td>
<td>9</td>
<td>100%</td>
<td>1:1</td>
<td>8:308</td>
<td>14:308</td>
<td>9:308</td>
<td>1:308</td>
<td>3:308</td>
<td>16:308</td>
<td>2:308</td>
</tr>
</tbody>
</table>

Note. The values are expressed as ratios of the frequency of strategy occurrence to the amount of text read.

Acc. Rate = Accuracy Rate  SC Rate = Self-Correction Rate  IR = Incorrect Reading
M = Monitoring Errors or Problems  S = Searching  SC = Self-Correction
L = Linking  R = Emerging Response on Way to Strategy  NR = No Response
Table 10

Evidence of Katie's Strategy Use Across Time

<table>
<thead>
<tr>
<th>Text Level</th>
<th>Acc. Rate</th>
<th>SC Rate</th>
<th>IR %</th>
<th>M %</th>
<th>S %</th>
<th>SC %</th>
<th>L %</th>
<th>R %</th>
<th>NR %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obs. 1</td>
<td>1</td>
<td>90%</td>
<td>1:nil</td>
<td>11:130</td>
<td>0:130</td>
<td>2:130</td>
<td>0:130</td>
<td>0:130</td>
<td>0:130</td>
</tr>
<tr>
<td>Obs. 4</td>
<td>3</td>
<td>100%</td>
<td>1:1</td>
<td>37:226</td>
<td>27:226</td>
<td>6:226</td>
<td>17:226</td>
<td>0:226</td>
<td>14:226</td>
</tr>
</tbody>
</table>

Note. The values are expressed as ratios of the frequency of strategy occurrence to the amount of text read.

Acc. Rate = Accuracy Rate  SC Rate = Self-Correction Rate  IR = Incorrect Reading
M = Monitoring Errors or Problems  S = Searching  SC = Self-Correction
L = Linking  R = Emerging Response on Way to Strategy  NR = No Response

Linking. Since reading is a meaning-making process, the child is encouraged to “actively search for links.” Children assimilate new knowledge with prior knowledge and experiences by linking their new information with the known. They interact with text through linking. They link meaning from the story with their world as evidenced by comments such as, “I have a baby sister.” and
"I'm six!" They also link with their experiences. "He's in the beauty shop." (barber shop) or "That water must be cold."

Clay (1979a) refers to linking behaviors of good readers.

They search for links between the items and they relate new discoveries to old knowledge. They operate on print as Piaget's children operate on problems, searching for relationships which order the complexity of print and therefore simplify it (p. 72).

The linking behaviors of children enable them to search for and use meaning, structure, and visual information when operating on text.

Children also link with their knowledge about print. The child sees an f in a word and says, "That looks like a j." or "That's a letter in my name." Linking is a powerful tool for the child in the construction of meaning. Children learn that what I know counts and I can use what I know. Zak began making links with print in Roaming Around the Known, during his early lessons, and throughout his program. Examples of both subjects' linking behaviors appear in Tables 11 and 12. Zak made links with print and what he knows immediately and also made conceptual links. He saw bamboo in a picture for the first time, pointed to the bamboo and asked, "What's that, a carrot?" He knew what a carrot was and tried to fit bamboo into his schema for carrot. He continued to make links with print when he noticed the word, shorts, and said that "shorts starts like my sister's name, Shinmaney."
Table 11
Examples of Zak's Linking Behaviors

<table>
<thead>
<tr>
<th>Text/Situation</th>
<th>Linking</th>
</tr>
</thead>
<tbody>
<tr>
<td>to town</td>
<td>&quot;It got two o's.&quot;</td>
</tr>
<tr>
<td>The horses go down</td>
<td>&quot;This is one word.&quot; (pointing to the word horses to show that he must keep his finger there longer to make it match with the text)</td>
</tr>
<tr>
<td>I see the cat.</td>
<td>&quot;I know how to spell cat.&quot;</td>
</tr>
<tr>
<td>(Building the with ML)</td>
<td>&quot;I think I know how to spell another word.&quot;</td>
</tr>
<tr>
<td></td>
<td>(Then he wrote no with magnetic letters)</td>
</tr>
<tr>
<td>The potatoes</td>
<td>&quot;Does potatoes start with a 'p'?&quot;</td>
</tr>
</tbody>
</table>

Katie made no self-initiated links until lesson 20 when she commented about the baby kangaroo in the mother's pouch (I Jump) and about the water in Don't Splash Me!
In contrast to Zak’s links with print during his third lesson, it was during
Kelsey’s lesson 28 that she made her first self-initiated link with print. She said,
“Them are a question mark,” referring to an exclamation mark in the text, Don’t
Splash Me!

In lesson 39, Katie offered a link to text meaning about the book she was
reading, On a Chair. There were three little monkeys on a chair and she
pointed to one of them and said, “He’s going to be, the next one’s going to fall
out too cause them too big.” During that same lesson, she also began noticing
familiar words in print and pointed to or in the word, for. Again, this is in
comparison to Zak’s lesson 3 where he noticed and commented on familiar
words in print. The teacher introduced a familiar book by saying, this is a story
about a little boy who woke up and couldn’t find his glasses and Katie
spontaneously said, “He had them on!”

By lesson 66, Katie was reading Ten Little Bears and remarked after
reading, “Then six little bears were left at home.” “I’m six!” She also noticed
when reading about one little bear going to the barber shop that barber looked
a lot like her friend, Barbara’s name.
Table 12
Examples of Katie's Linking Behaviors

<table>
<thead>
<tr>
<th>Text/Situation</th>
<th>Linking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picture of a mother and baby</td>
<td>&quot;He had a baby down there.&quot;</td>
</tr>
<tr>
<td>kangaroo</td>
<td></td>
</tr>
<tr>
<td>Don't Splash Me!</td>
<td>&quot;That water must be cold.&quot;</td>
</tr>
<tr>
<td>Exclamation mark in text</td>
<td>&quot;Them are a question mark.&quot;</td>
</tr>
<tr>
<td>On a Chair</td>
<td>&quot;He's going to be, the next one's going to fall out too cause them too big.&quot;</td>
</tr>
<tr>
<td>for</td>
<td>&quot;There's or in there.&quot;</td>
</tr>
<tr>
<td>This is a story about a little boy who woke up and couldn't find his glasses.</td>
<td>&quot;He had them on!&quot;</td>
</tr>
<tr>
<td>&quot;Then six little bears were left at home&quot;</td>
<td>I'm six!</td>
</tr>
<tr>
<td>barber shop</td>
<td>&quot;That looks like my friend's name. Do you know Barbara?&quot;</td>
</tr>
</tbody>
</table>
There was a marked contrast in the linking behaviors between the two readers. Zak was making links with text beginning in Roaming Around the Known and all throughout his program. Katie, on the other hand, did not link with previous knowledge until lesson 20 and it wasn’t until halfway through her program that she linked with visual information. By the end of their programs both readers were interacting with text, making links and relating new knowledge with their personal literacy.

**Monitoring.** Monitoring is a highly skilled process that continues to be constructed over many years of reading (Clay, 1979). It is checking on oneself, and it can be observed in the beginning stages. One-to-one matching is an early behavior that fosters monitoring and helps emerging readers gain control of their visual attention to print. There was a difference between the two readers as they began to attend to print and a difference in the teacher’s response to the two readers (See Figure 1).

Katie behaved more passively than Zak and resisted close examination of print. She needed consistent prompting for one-to-one matching and consistent confirming of her successful attempts at matching. She was asked to “make it match” 68 times during Observation 1 and Zak needed to be prompted to one-to-one match only 13 times. The difference in the amount of text for the two readers was only 15 words.

By Zak’s second observation, one-to-one matching was mentioned by the teacher eight times, five times to confirm successful matching on his part and three prompts to “make that match.” Katie was prompted by the teacher to match six times and she received confirmation for one-to-one matching four times during Observation 2. Both readers had early strategies under control by the second observation.
Appeals are further evidence of monitoring by the child. Some appeals are ignored to encourage further reading work by the child and some appeals result in “tolds” by the teacher. In examining strategy use between the two readers for each of the five sets of data, differences between the two readers were revealed. The “tolds” were the result of the subject monitoring by stopping and waiting or by an appeal such as, “What’s that word?” or “I don’t know that one.” In the first 29 lessons the types of “tolds” given to Katie differed from Zak’s because she needed labels for unfamiliar concepts such as spaceship, steam shovel, chimp, and giraffe. As she moved farther along into lessons, the nature of “tolds” changed to high frequency words such as then, wanted, there’s or words like great and bet. Words told to Zak in beginning lessons were for first words of a sentence, such as are, and there, and later on in his program for unusual words like dear, horrible, along, and just.

In order to compare the appeals made by the two children that resulted in tolds across the five observation periods, each appeal was considered in relation to the number of words ready by each child during the lesson. The data in Figure 4 indicate the number of appeals per 100 words of text. (Actual frequency data are shown in Tables 14 and 15.)
The majority of Zak's and Katie's monitoring during Observation 1 was evidenced by one-to-one matching or appeals and tolds. Katie's behavior that indicated monitoring changed over time. During Observation 2 when she came to a word she didn't know she appealed or just stopped. She made no attempts to reread or try something meaningful. However, during observation 3, she was monitoring after a meaningful substitution and she began to reread regularly. For example, she read **hamburger** for **meat** and stopped because she knew the word was not **hamburger**. She monitored her reading in this manner seven times during this one lesson. After a self-correction and monitoring, the teacher said,
T: Would that match if you said "A monster ain't my friend?"
C: Shakes her head no.
T: No, it wouldn't match. So what would you have to do?
C: No response but her eyes start to tear.
T: You did super work - what did you do?
C: I gotta go back and check.

In observation 4, Katie's monitoring increased with eighteen instances of monitoring that resulted in a self-correction, and several instances of monitoring as evidenced by repetitions, stops, and appeals. The same behavior was noted in observation 5 with 22 instances of monitoring that resulted in a self-correction, repetitions, stops and appeals.

Accurate reading is also evidence of monitoring and was noted in all lessons across five observations. Zak's monitoring behavior included monitoring at the point of error with self-corrections, repetitions, hesitations with attempts before an appeal and stops from observation 1 across all five observations.

There was a difference in the way the two readers gained inner-control of monitoring. Zak used one-to-one matching and monitored his reading without prompting immediately into his Reading Recovery lessons while Katie needed much more prompting from the teacher to one-to-one match and to monitor. Katie also appealed more in the beginning of her program while Zak monitored and began rereading immediately to search for cues.

**Searching for cues.** Searching for cues (meaning, structure, and visual cues) is another important reading strategy to be developed in emerging readers. Good readers need to search flexibly for all types of cues in an integrated way.
Katie's searching behaviors in observation 1 included framing the words *can* and *I* (finding known words within text) after prompting by the teacher. In observation 2 Katie showed evidence of self-initiated searching for visual information when she began *number* by saying *nnnnnnn*. She also searched for meaning by checking the picture for the words *goat* and *grasshopper*. And with prompting, she located the word *horse* after predicting what she would expect to see at the beginning of the word. In observation 3 she had two instances of searching when she noticed the *d* at the beginning of *dad* and also checked the picture. There was also evidence from the increase in her rereading that she was beginning to search more on her own rather than appeal to the teacher.

During observation 4 Katie had one instance of searching when she said, “I wonder what's he named, Billy?” (Harry) The other four codings for searching by the child were in response to teacher prompting. The same was true in observation 5. Katie was reading, “Did you look ba, behind the TV?” searched and successfully read. The other three codings for searching were teacher prompted.

Zak's searching during observation 1 was all self-initiated compared to Katie's teacher-prompted searching. Zak read:

I see the, I mean, I see Mom.
The sheep, I mean, the goat
The ca, I mean the cow
The corn, I mean the plates.

During observation 2, Zak was searching for visual information when he read, “lllll-lady starts with I” and also he searched the pictures for meaning. “Is that a
leopard?” Zak continued his searching for cues. In observation 3, the teacher commented:

T: You went back and you fixed it.
C: Cause a bird can’t see a bird.
T: That was good thinking.
C: Cause there aren’t two birds.

In observation 4 there was evidence that Zak searched seven times, six for visual information. In observation 5 there was evidence of searching seven times, all them for visual information.

Differences also existed between the two readers in their searching behaviors. Zak was searching independently early in his program with rereading in observation 1 and in his comments as he searched the picture and the text for cues. Katie required more prompting and scaffolding from the teacher before she began to search independently.

End of Year Differences

Spring Diagnostic Survey. Both of the subjects received a full program (60 lessons) in Reading Recovery. Zak had 60 lessons and Katie had 67 lessons. The Diagnostic Survey was administered at the end of Zak’s program at discontinuing (March) and at the end of Katie’s program at the end of the school year (May).

Although letter identification, word identification, concepts about print, and dictation all have ceiling scores, both subjects made considerable gains within approximately 60 lessons (See Table 1). Three of Zak’s unsuccessful attempts during the word test were visually similar (run for ran, here for her, and don’t for do). Katie attempted four words in addition to the 11 she read correctly.
All four attempts were visually similar (roll for ride, that for this, while for with, and has for have).

Both subjects' writing scores increased measurably from pre-assessment to post-assessment, but Katie's progress in writing was much stronger than her reading progress. She was more willing to take risks and was much more confident in her knowledge when approaching the task of writing. She was also willing to try all the words in the dictation sentence and she correctly recorded 23 of 37 sounds.

Zak made gains in text reading, moving from a non-reader status at the beginning of the year to a first grade reading level after 60 lessons. Katie's text reading did not parallel Zak's; however, she made continuous progress but at a slower rate. Beginning as a non-reader who needed teacher prompting for attention to text and for taking risks, Katie progressed to reading performance at the preprimer level, indicating an ability to self-monitor her own reading.

The text reading score from the Diagnostic Survey can be compared with the classroom basal reader levels. Table 13 displays both subjects' scores at the beginning and the end of the year.

Table 13

Correspondence of Diagnostic Survey Text Levels with Basal Levels

<table>
<thead>
<tr>
<th>Name</th>
<th>Text</th>
<th>Fall</th>
<th>Spring</th>
<th>Basal</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katie</td>
<td>A</td>
<td>5</td>
<td></td>
<td>Readiness</td>
<td></td>
<td>Preprimer</td>
</tr>
<tr>
<td>Zak</td>
<td>A</td>
<td>12</td>
<td></td>
<td>Readiness</td>
<td></td>
<td>1st Grade Reader</td>
</tr>
</tbody>
</table>

Reader
When comparing the final assessment performance of the two children, marked progress was noted for both children on four of the six subtests (See Table 1). The two areas which distinguished the two subjects were dictation and text reading. Although Katie made dramatic progress on the dictation test, Zak was able to hear and record 9 more sounds out of 37 possible responses. Even more obvious was the marked difference in text reading. Katie was reading at a level 5 (preprimer) and Zak was reading at a level 12 (1st grade reader). While Zak had a self-improving system well under way, Katie was making steady progress towards a self-improving system and independence.

Teacher Interventions for Strategy Use

Teacher interventions within the context of Reading Recovery lessons were examined in two ways. First, teacher behaviors were analyzed across time for the two subjects. Specifically, what is the effect of teacher prompting for reading strategies for students with different profiles of progress in a one-to-one intervention setting? Second, differences and similarities of teacher behaviors between the two children were explored. Specifically, what differences occur in teacher prompting for strategies across the programs of children with different paths of progress?

Teacher behaviors were essentially defined as verbal interventions and interactions with the children. The primary source of data for analysis of teacher interactions was the coding system described in Chapter 3 (see Appendix B). All teacher responses for five lessons for both subjects were transcribed and subjected to the coding system. Tables 14 and 15 display the frequency of teacher behaviors for both children across five points in their programs.
It should be noted that teacher behaviors in Reading Recovery are theoretically a reflection of the child’s behavior. It is, therefore, difficult to separate teacher behaviors from child behaviors in this section. Although much of the discussion will focus on the child, the perspective is that the child’s behavior led to the teacher intervention response.

The teacher’s behaviors were based on her records and her observations of the child’s “response repertoires” (Clay & Cazden, in print) or what Wood, Bruner, and Ross (1976) call “performance characteristics,” the observable aspects of the child’s reading and writing action system. The teacher was pushing the boundaries of a child’s zone of proximal development (Vygotsky, 1978). What the child can do with help today, he will do independently tomorrow. It is this consistent scaffolding by the teacher that enables the reader, while increasing awareness and use of strategies, to move closer to independence and inner-control of the reading process.
Table 14
Evidence of Teacher Intervention for Strategy Use For Zak Across Time

<table>
<thead>
<tr>
<th>Obs.</th>
<th>PMAT %</th>
<th>CMAT %</th>
<th>PM %</th>
<th>CM %</th>
<th>PS %</th>
<th>CS %</th>
<th>L %</th>
<th>PL %</th>
<th>CL %</th>
<th>T %</th>
<th>PR %</th>
<th>P %</th>
<th>C %</th>
</tr>
</thead>
</table>

Note. The values are expressed as ratios of the frequency of strategy intervention to the amount of text read.

PMAT = Prompt Matching  CMAT = Confirm Matching  PM = Prompt Monitoring  
CM = Confirm Monitoring  PS = Prompt Searching  CS = Confirm Searching  
L = Linking  PL = Prompt Linking  CL = Confirm Linking  T = Tells  PR = Praise  
P = Prompt  C = Confirm
Table 15

Evidence of Teacher Intervention for Strategy Use For Katie Across Time

<table>
<thead>
<tr>
<th>Obs.</th>
<th>PMAT %</th>
<th>CMAT %</th>
<th>PM %</th>
<th>CM %</th>
<th>PS %</th>
<th>CS %</th>
<th>L %</th>
<th>PL %</th>
<th>CL %</th>
<th>T %</th>
<th>PR %</th>
<th>P %</th>
<th>C %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obs. 1</td>
<td>68:130</td>
<td>11:130</td>
<td>15:130</td>
<td>0:130</td>
<td>9:130</td>
<td>0:130</td>
<td>4:130</td>
<td>0:130</td>
<td>0:130</td>
<td>5:130</td>
<td>46:130</td>
<td>106:130</td>
<td>11:130</td>
</tr>
</tbody>
</table>

Note. The values are expressed as ratios of the frequency of strategy intervention to the amount of text read.

PMAT = Prompt Matching  CMAT = Confirm Matching  PM = Prompt Monitoring
CM = Confirm Monitoring  PS = Prompt Searching  CS = Confirm Searching
L = Linking  PL = Prompt Linking  CL = Confirm Linking  T = Tolds  PR = Praise
P = Prompt  C = Confirm
Differences in Teacher Strategy Interventions for the Two Children

This section focuses on the teacher's interventions across the five observation periods for each child, answering one of the questions raised by this study. Specifically, what differences occur in teacher prompting for strategies across the programs of children with different paths of progress? Because Reading Recovery is based on the assumption that the teacher follows the child, is it also assumed that teacher behaviors are directly influenced by the behaviors of the children. Therefore, in this section, some discussion of teacher and child interactions are important.

Prompting Behaviors. Teacher prompting was operationally defined for this study as any comment by the teacher that directed the student to act in a strategic manner. For example, a prompt to monitor could be, “What did you notice?” or “Try that again,” or “Were you right?” The following example of a teacher/child interaction illustrates how the teacher prompts the child to go further in his use of strategies and continues to scaffold his use of strategies.

**Text:** Can you put a hen in a hat?
Can you put a pig in a pan?

**Child:** Can you put a hen in a pan?
Can you put a pig in a pan, I got them mixed up.

**Teacher:** Good noticing. What do you have to change?

**Child:** The hat and the pan.

**Teacher:** Good work. You fix it up then.

**Child:** Rereads correctly.

Prompting as a teacher behavior in Reading Recovery is again related to the concept of scaffolding. When providing appropriate and timely prompts, the
teacher makes it "...possible for the novice to participate in the mature task from the very beginning" (Cazden, 1988, p. 107). Cazden also emphasizes the importance of scaffolds providing support that is both "adjustable" and "temporary."

As shown in Figure 5, teacher prompting for both children decreased across the five observations. The teacher prompt index represents the number of prompts given in a single observation with the variable controlled for length of text allowing for comparison between children. The frequency of prompts was converted to a ratio, expressed as the number of prompts per 100 words of text read. (Actual frequency data are shown in Tables 14 and 15.)

![Figure 5. Teacher Prompt Index Across Five Observations (variable adjusted for length of text: number of prompts per 100 words of text read)](image-url)
Katie needed more prompting than Zak on all but one of the observation points. She was less willing to take risks and cried almost daily during lessons when faced with something new. The biggest change in behavior for Katie was her conscious effort not to cry during the reading of a new book. By observation 5, at the beginning of her lesson she said, “I’m not going to cry.” There was a visible effort on her part to hold back tears when she came to a challenge. She was gaining confidence and realizing her ability to read independently without prompting from the teacher.

Zak’s needs for prompting varied from the prompts to attend to print and to monitor his reading at the beginning of his program to more prompts to search and to cross check between two or more cue sources at the end of his program. There was a slight increase in the number of prompts during observations 4 and 5 because he was reading more difficult texts. Figure 5 supports the concept of scaffolding since both children’s need for prompting declined across five observations. Both readers were developing inner-control and increasing their independence in reading work.

Confirming Behaviors. Confirmations were confirmations of specific behaviors such as self-corrections, the effective use of a strategy, or a behavior leading toward strategy use. Examples of confirmations included “Good pointing,” or “You checked the word, what else could you check?” or “I like the way you went back to start over.”

As shown in Figure 6, there was a decline in the need for confirmations across observations except for Katie’s observation 2 which was an atypical lesson. The running record was abandoned because the text was too difficult. The text included numbers that Katie did not know. Katie needed more confirmations of strategies to read the text and to continue working during the
reading of the new book. The need for confirmations declined with each lesson as both readers became more independent in their strategy use as they gained inner control of the reading process.

Figure 6. Teacher Confirmation Index Across Five Observations (variable adjusted for length of text: number of confirmations per 100 words of text read)

In the first observations where both children were beginning to attend to print, they both received an equal number of confirmations for one-to-one matching: 13 for Zak and 11 for Katie. Katie received more prompting for one-to-one matching (See Figure 1). Zak, however, had other confirmations for strategy use that Katie did not: monitoring and searching along with confirmations of linking.

Zak's confirmations differed from Katie's confirmations in number during the second observation with confirmations for monitoring and cross checking
being the majority. The majority of Katie's confirmations were for rereading and monitoring. In observation 3, the confirmations for both readers, 26 for Zak and 18 for Katie, varied once again because of their needs during their particular lessons. Most of Katie's were for cross checking and most of Zak's were for monitoring. In observations 4 and 5, both readers had a decline in the number of confirmations, but both readers were working with more independence and less need for confirmation from the teacher.

**Monitoring.**

The successful reader who is making no errors is monitoring his reading at all times. Effective monitoring is a highly skilled process constructed over many years of reading. It begins early but must continually be adapted to encompass new challenges in text. (Clay, 1979, p. 72)

The teacher prompted for monitoring (see figure 7) with questions such as "Are you right?" and "Did that match?", encouraging the subjects to monitor for themselves. The teacher's attention to monitoring also included confirmations of behaviors such as "Yes, you're right," and "That was good work," and "Yes, you made it match."

Although it appears that Katie had few teacher prompts for monitoring in the first observation (see Figure 7), she had 62 teacher prompts to one-to-one match (see Figure 1). Matching is an early strategy that signifies monitoring. Much attention was given to Katie to establish this early stage of monitoring which Zak internalized more quickly.
During the second observation, Zak had teacher prompts to monitor such as "Check and see," "Where do you start to read?" and "What would you expect to see at the beginning of ____?" However, the teacher gave Zak more confirmations of behaviors than prompts for monitoring. Confirmations included "Good checking on yourself," and "I like the way you noticed the hard part," and "You fixed that up all by yourself."

Katie had approximately the same number of teacher interventions as Zak during the second observation, but most of them were prompts to monitor and check on herself as opposed to confirmations of successful behaviors. There were prompts such as "Read it through and check," "Do you think you're
right?" "Are you right?" and "What would you expect to see at the beginning of _____?"

During the third observation Zak had 12 prompts for monitoring and 10 confirmations for monitoring while Katie had almost no prompts or confirmations for monitoring. The difference in strategy prompts between the two students is reflected in the teacher's focus on searching (see Figure 8) for Katie's third observation.

In looking at observation 4, again about half of the teacher's interventions with Zak were confirmations of his checking and the other half were prompting him to monitor. Again, Katie's number of interventions is fewer than Zak's and most of them were prompting her to monitor. Only four of the eleven instances of teacher attention to monitoring were confirmations of Katie's strategy use. By observation 5 both students were monitoring with little intervention by the teacher to prompt or confirm monitoring.

Monitoring interventions, then, differed over time for the two children. The teacher behaviors reflected the needs of the children at given points of their program. Katie needed many prompts for matching early in her program and continued to need prompts more than confirmations throughout her program. Zak, on the other hand, required about an equal number of prompts and confirmations for monitoring. Evidence of the teacher following the child with strategy intervention is clearly noted in these data.

The end-point that the teacher always has in mind as she prompts for strategy use is the self-improving system. In the beginning of Katie's program, she had to be prompted often to attend to print and to monitor (See Figure 1). Towards the end of Katie's program, she provided increasing evidence that she was becoming independent in her strategy use.
Text: "Have you looked behind the TV?" said Peter.
Child: Have you looked ba, behind the TV? said (stops)
Teacher: Peter
You did super! Good work! He's moving the cat so he can
look behind the TV. Good reading!
Child: That was the hard--that's the front. (referring to the picture
because it looks like Peter is looking in front of the TV)

Again, the teacher provided scaffolding for the child as she used
strategies during reading. Katie monitored when reading "behind the TV."
She also monitored again when she stopped at the child's name that she didn't
know. The teacher chose to give her the name and then praised her for
monitoring by extending the meaning of the story.

Searching. Emerging readers need to develop abilities to search flexibly
for all types of cues (meaning, structure, and visual information) in an integrated
way. Examples of teacher prompts for searching are "Try that again and think
what would make sense," or "Does that look right?" As shown in Figure 8, Katie
invited more prompts for searching than did Zak at two observation points, while
the differences between the two were minimal for the other three events.
Again, when teacher interventions were broken into prompts and confirmations, Zak was offered more confirmations than Katie throughout his program. These data provided additional evidence that the teacher's intervention behavior matched the child's strategic behaviors over time.

During the first observation, the focus of the lessons for both children was one-to-one matching. Since Katie needed consistent prompting to attend to print and to match, her prompts to search were at a very early stage. Most of the teacher prompts were requests to locate known words in text such as "Frame the word can," and "Frame the word !."
Zak, however, began attending to print immediately and needed more sophisticated prompts to search further. During the first observation, most of his prompts (6) were to search for or confirm meaning, such as “Who are they?” (referring to the ducks in the story), and “What do they say?” He was also prompted to search for visual information during the first observation. During this observation, Zak searched for additional cues when he read as evidenced by, “I see the, I mean I see mom.”

During the second observation, Katie was reading a text level 3. She was monitoring her reading but stopped or appealed, leading the teacher to prompt her to search for cues. She needed many prompts because when text was new, she refused to take risks, rubbed her eyes frequently, and started to cry. Of 31 prompts to search, 20 were attempts to get her to search for meaning such as, “Is that a picture of a horse?” and “Who’s talking?” and “Well, the lamb asked the boy a question and what do you think he said to the lamb?” There were also 10 prompts to search for visual information. Six of these were for locating known words within text (said, me, you, yes) that she could write fluently and read from her writing but were problems in text reading. The other prompts for visual information were questions to get her to search text such as “Does it look right?” and “Could that be yes?” Katie showed evidence of self-initiated searching when she searched the pictures for goat, and grasshopper and also when she began number with nnnnnn. Zak was reading at level 5 during the second observation and needed fewer prompts than Katie to search for cues. His prompts were mostly to search for meaning.

In observation 3, Katie was still reading a text level 3 and in observation 4 she was reading levels 3-5. By observation 5, she was reading a level 10 and
was beginning to search independently. Therefore, she needed fewer prompts to search for cues.

Zak's prompts to search increased in observations 3 and 4 because he was moving into more difficult text levels (levels 7, 8, and 9). He was also reading much longer text than Katie.

Observation 5 was an anomaly for Zak. He required prompting to use strategies that he had been using independently for weeks. When reading The Pot of Gold, he monitored but then had to be prompted to search for meaning and to use visual information.

These data offered evidence of varied teacher response based on the particular needs of the children, the focus of the lesson, the point of the program, the difficulty of text, and any anomalies that may occur on a daily basis when working with children. Both children gradually took more control of the reading process with less intervention from the teacher over time. Zak made accelerated progress and functioned within the average of his class. Katie made slow, steady progress and also took control of her learning with less prompting from the teacher as compared to the beginning of her program.

Praise. Any general, positive response that was not specific to strategy use was coded as praise. Examples were "good," "super," "fantastic," and "okay."

The teacher offered a high amount of praise at the beginning of the program for both children (see Figure 9) to encourage them to continue to take risks. Zak was praised more often than Katie because he required more feedback to get him to take control of the book. He needed to be prompted and praised for turning the pages, for keeping both hands on the book, and and for
working independently. His need for verbal reinforcement lessened over the observations as he took more control of his own learning.

Figure 9. Teacher Praise Index Across Five Observations (variable adjusted for length of text: frequency of teacher praise per 100 words of text read)

Katie’s need for verbal reinforcement and encouragement was less than Zak’s. She did not respond to verbal reinforcement and acted as though it was an intrusion into the lesson. There was a slight increase in teacher praise for Katie during observation 4 because she was becoming frustrated during the reading of her new book, *Wake Up Mom*. Katie began to cry and was trying very hard to control the tears. The teacher said, “Okay, make it match -- don’t even start to cry because you’re doing super.” Katie was easily discouraged. When the teacher asked, “What do you think?” Katie replied, “I don’t think nothin.” Katie needed more praise to encourage her to continue working.
The teacher’s praising behaviors directly matched the needs and behaviors of the children. At different points in the program, each child required varying amounts of praise depending on a variety of factors, both textual and personal.

**Linking.** One of the tenets of Reading Recovery is knowing what the child knows, following the child, and building upon the child’s prior knowledge. The program, then, is different for each individual child. The teacher builds on the child’s knowledge and at the same time helps the child become aware of what he knows so the child can use that knowledge to get to what he does not know. The child is a constructor of his own knowledge and the teacher activates the process through linking. Through the teacher’s questioning and prompting, she encourages the child to link new information to prior knowledge.

By linking and scaffolding, the teacher is pushing the bounds of the child’s zone of proximal development, wanting the child to become more independent and make appropriate links on his own. The teacher promoted linking behavior in two ways; she made links and she prompted the children to make links. Some of the links she provided were for the main idea of the story such as: “This is a story about all the different animals that go down to town,” and “The little ghost goes all through the house and the story is about all the things she sees.” The teacher also asked the child to connect with the text as the teacher prompted, “Help me,” because that’s what she’s asking, isn’t she?” Links of the known to the unknown were made such as “You know can (building can with magnetic letters), then you add t for can’t.

Links were also prompted to relate new information with the child’s knowledge: “What’s happening in the story?” or “What word do you know that starts like that?” Links were made to writing: “You know how to write no.”
Confirmations were given to the child: "Yes, it does have two o's." The teacher also extended those links the child made such as, "The beginning of town looks like to."

The Effect of Teacher Prompting for Strategies

What is the effect of teacher prompting for reading strategies for students with different profiles of progress in a one-to-one early intervention setting? By analyzing the findings reported in the preceding section, one can infer that strategy intervention is dictated by student behaviors, previous history with the child and choice of text. It is difficult to determine a one-to-one correspondence between teacher prompts and student behaviors.

Clearly, Katie needed more prompting to attend to print during the beginning of her program than Zak, and the teacher, in following the child, adjusted her prompting and focus to meet those needs. Katie consistently needed more prompting to use strategies in her reading while Zak was using strategies more independently and, thus, received more confirmation for strategy use.

In examining teacher prompting for the more and less able children there were no clear differences between the two children's program quantitatively since both children were operating at a level of difficulty where they were using strategies to gain control of the reading process. Gradually the amount of teacher intervention shifted to encourage more control by the child.

Additional support for these findings was provided by interaction chains. The interaction chains, showing teacher and child behaviors interactively, showed that each lesson should be examined independent of others. The
teacher prompting followed the child's behaviors and teacher scaffolding was directed at the child's particular needs at the given point in time. There was no evidence of predictable patterns in a traditional sense. However, there was strong evidence of the pattern of the teacher responding to the child, providing needed scaffolds until the child was able to supply the needed behavior for solving the problem.

Although it seemed possible that interaction chains would change dramatically for each child across time, that was not the case. The problem solving process, with teacher support as needed, was applied on increasingly more sophisticated text. The type and level of the intervention, then, became factors during later lessons.

When comparing the frequencies of teacher interventions with the frequencies of student response, the numbers did not change significantly over time. However, again, these findings must be considered relative to the increasing text length over time. Although the number of events (interventions and responses) did not increase over time, the amount of text processed did increase. Therefore, as noted in frequency data earlier, when controlling for text length, there were fewer teacher interventions needed for student success as the program progressed.

When examining the individual interaction chains for each child, again, the most visible finding was the individual nature of each chain standing alone. The strategies for which the teacher prompted varied according to individual needs. The effect of the strategy prompt was seen as a series of scaffolds to which the child responded with behaviors unique to him/her at that point in time.

These data fit into a Vygotskian theory of development. The readers were constructing meaning and developing strategy use through interaction
with meaningful text and through social interaction and scaffolding by the teacher. Their new learning pushes the boundaries of their zones of proximal development thus creating their ever-changing and expanding cognitive abilities.
CHAPTER V
SUMMARY AND IMPLICATIONS

Problem of the Study

Children enter school and begin formal instruction in reading with a wide range of strengths. Children who are identified as being at-risk of failure need more intensive instruction to bring them to an average level of literacy performance so that they can continue their learning in a positive way. Good readers use an effective range of strategies as they process text, but poor readers have used strategies unsuccessfully and have abandoned their use when they don't work (Clay, 1979a).

Reading Recovery is an early intervention program designed to identify a reader's strengths and match the level of text to the at-risk first grade reader's strengths so he can become successful in his strategy use. The program focuses on the reader as an active problem solver to develop the independent use of reading strategies.

The purpose of this study was to examine two emergent readers' strategy use during their Reading Recovery program and to examine the effect of teacher intervention on the acquisition of strategies for these two readers. Both readers were identified as being at-risk of failure according to Marie Clay's Diagnostic Survey and the classroom teacher's observations during the first two weeks of school.
Data were gathered by the researcher on four Reading Recovery students. The two students that were selected for this study were those who emerged during their programs as displaying two different profiles of development. Zak made accelerated progress and discontinued from the program within 12 weeks and Katie made slow, steady progress but did not discontinue. Strategy use by the two readers was examined to determine what differences existed over time between the high progress and the low progress reader. The teacher's prompting for strategy use for these two readers was also examined. A descriptive analysis was made of strategy use by the two children over time and of the teacher's prompting for strategy use over time.

Procedures

A case study approach was used for an intensive study of strategy use to contribute to an existing body of knowledge. The two at-risk children were taught by the investigator for 30 minutes daily for approximately 60 lessons. The data were collected over a period of an academic year. The collection of data included the Diagnostic Survey administered at the beginning and the end of each child's program. Audiotapes were made for each lesson, and videotapes were recorded and transcribed verbatim at five different points in each child's program: at the beginning, at the end, and at three intervals in between. In addition, five sets of daily running records were collected at the point of each videotape (including the videotaped lesson as well as two lessons before and two lessons after the videotaped one). These running records were analyzed for evidence of strategy use, cues used, and cues neglected.
All data were examined for an indepth study of strategy use. In addition to early strategies (directional movement, one-to-one matching, locating known and unknown words) the researcher focused particular attention to the strategies of monitoring and searching. Data were analyzed and findings were reported in Chapter IV.

Findings

Differences in Strategy Use Between the Two Children

Both children began to use effective strategies in their reading with the element of time surfacing as a major factor, as well as differences in the children's text reading ability. Interesting differences were also noted in the two children's ability to make links to prior knowledge, to print, and to text. One child made accelerated progress and the other child made slow, steady progress in strategy use. Both children maintained strategy use throughout their programs because appropriate text was chosen and the teacher was following the needs of the child. A number of factors likely influenced the acquisition of strategy use for the two children. An important factor was the uniqueness of the two learners at the beginning of reading instruction. The two children came to the learning process with their individual strengths and needs and with different early literacy backgrounds.

Although their Diagnostic Survey (Clay, 1979a) scores at the beginning of their programs looked similar, there were real differences in their text reading and in their print awareness. Small numerical differences at the beginning may, within the context of other data gathered, signal important conceptual and
strategic differences. An early profile of information hinted at Katie's likelihood of being a slow-to-accelerate child.

There was early evidence of conceptual differences in oral language use. Zak had a good memory for language and could repeat language patterns, while Katie had difficulty repeating a simple sentence pattern during text reading or after generating a sentence from her oral language for writing. Their control of oral language influenced reading behavior as well as writing behavior at the onset of their programs.

Katie's book handling skills differed from Zak's. She turned the pages very quickly, barely looking at the pictures and not focusing on the print. Zak studied the pictures and also noticed some of the words and letters that he knew in print. Although Zak was an eager participant during the reading, he had to be prompted to turn pages and to take control of the books. Katie showed more interest in writing than reading and enjoyed writing her own stories more than reading new books. She liked to write strings of letters and then wanted to read them.

At the beginning of the school year, Katie did not interact with peers in the classroom or participate in games and play during recess. Katie also communicated very little with the classroom teacher. Zak was a willing participant in the classroom, interacted well with his peers and communicated with the classroom teacher. Zak was more willing to take risks during reading and writing and was an eager participant in the tasks, but if Katie didn't control the task, she refused to try.

The differences between the two children, then, existed in their oral language development, their ability to repeat and hold language patterns, their awareness of print, their initiative in making links (to print, to text, or to prior
knowledge), their willingness to take risks, and their interactions with the teacher during their one-to-one program.

**Differences in Strategy Use Between the Two Children Over Time**

As stated earlier, although both children developed a strategic system for operating on print, the critical difference was related to time and the complexity of reading material they were able to handle at the end of the year. One child made accelerated progress and one child moved forward at a slower rate. There were differences between the two children in the the use of early strategies and in the way in which strategy acquisition emerged.

From the beginning, Katie needed more prompting to attend to print and to match spoken and written language with finger and voice, indicating control of one-to-one matching. Initially she turned the pages of a book so quickly there wasn’t time to focus on the print or for the teacher to read the text on the page completely in oral readings of books. The beginning of her program required frequent, consistent prompts to attend to print. Zak, on the other hand, began attending to print very quickly and began monitoring, searching, and cross checking immediately. He self-corrected some of his errors due to attention to visual information and began to reread to search for cues within the first five lessons.

Katie’s monitoring began with frequent appeals, and in the beginning the appeals were for labels she didn’t have. Zak’s monitoring began with hesitations, stops, and rereading. He would usually make an attempt before an appeal. Both children began to monitor their reading independently and consistently by the third observation period and were also more flexible with a variety of monitoring behaviors.
Zak also began searching immediately and commented on known words in print. He also searched pictures for meaning. He reread to search for cues from the very beginning of his program. Katie had evidence of self-initiated searching for meaning and for visual information by the second observation. By the third observation, she was rereading more frequently to search for cues. Again, by the third observation point, both readers were searching on their own and using strategies with less prompting by the teacher. Because appropriate levels of texts were provided for each child, both children were using strategies on text but at different levels of difficulty, although there were differences in the complexity of texts the readers were able to read.

There was a definite contrast in the evidence both readers provided for linking more information to previous information. Zak began to make links early in his program in text reading, with concepts, personal experiences, and print. He also made connections with print in his writing and his experiences. Katie made few links in the beginning in reading or writing. By the end of their programs both readers were interacting with text, making links and relating new knowledge with their personal literacy. Both readers relied heavily on meaning and structure in the beginning, but Zak quickly began using visual information both in his errors and in his self-corrections.

**Teacher Intervention for Strategy Use Between the Two Children**

The decrease in teacher prompting for both children across lessons signaled support for the concept of the temporary nature of teacher scaffolding until the child establishes intropsychological functioning (Clay & Cazden in press). Katie needed more consistent prompting to use strategies than Zak, but that decreased significantly with time. Because Katie was less willing to take
risks, she required more prompting and support from the teacher. Zak received more confirmations than Katie because he was using strategies more independently and the teacher made more confirmations for him.

There was a difference in teacher intervention for monitoring between the two children. Katie required more intervention to match one-to-one and to attend to print than Zak. She also required more prompts to monitor where Zak received more confirmations for monitoring. The prompts for monitoring varied among observations according to the child's needs. If the child was using strategies successfully, more confirmations were given.

Teacher intervention not only varied according to the child but according to the particular lesson for each child. Teacher intervention for strategy use differed between the two children based on the child's needs. Both readers were operating on text chosen specifically for their needs as readers at specific times in their programs. Their strengths and needs, along with the texts chosen were different, and therefore, teacher intervention was different.

**Effect of Teacher Prompting for Strategies**

What the teacher attends to in prompting for strategies, the child attends to in strategy use. The needs of the child directed the nature of the teacher intervention. Although there were not noticeable quantitative differences between the teacher/child interactions for the two subjects, each observation point was unique to the child and to the particular point in time.

For example, Katie was more resistant to attend to print early in her program, leading the teacher to prompt more frequently for one-to-one matching. The teacher had to physically hold her hand to model one-to-one matching seven times during one lesson. One-to-one matching is important
because this is where the child comes to control his visual attention to print. Zak, on the other hand, did not require the repeated promptings that Katie did because he was attending to print and using visual information to self-correct from the beginning. The teacher interventions for Zak were focused on confirmations of successful behaviors as well as a wider range of strategy prompts.

Katie also needed more prompting to monitor because she was willing to ignore the mismatch between her oral language and the print. Through consistent prompting she gradually began to monitor with more accurate reading and by the second observation period, Katie controlled one-to-one matching. Katie’s eventual independent use of one-to-one matching supports Cazden’s (1988) view of scaffolding that it is a “temporary framework for construction in progress.” The teacher provided the scaffold for Katie. When she no longer needed the prompting and was performing independently, the teacher discontinued the scaffolding. Bruner (1978) states that in our structuring of the learning for the child we must arrange the environment so the child can reach, “higher, more abstract ground from which to reflect, ground on which he is enabled to be more conscious.” In moving from one-to-one matching the teacher is again pushing the child’s zone of proximal development to encourage the child to use more highly skilled strategies such as monitoring and searching.

In each lesson there was evidence of teacher intervention that matched the child’s profile of progress. Each child displayed differing ranges of strategy use, but the teacher worked within their zone of proximal development to broaden their range of possibilities.
Discussion

Although discussion must be considered within the limitations of the study, findings in this study offer strong supporting evidence to a number of theoretical and research-based principles of early literacy and strategy intervention. Clearly, this study provides a model for the complexity of the process of acquiring literacy, and the process of teaching at-risk students to use reading and writing to learn.

Literacy acquisition is complex and dynamic. Children begin their literacy acquisition at birth and by the time they enter school they have a personal history of literacy learning. When they begin reading instruction, there is a wide range of differences among children. A number of studies examined the literacy differences among children (Clay, 1977, 1982; Ferreiro & Teberosky, 1979; Heath, 1983; Taylor and Dorsey-Gaines, 1987; Teale, 1986). Results of this study added to the growing body of knowledge relating to the differences in literacy acquisition among children.

There are several key elements to literacy acquisition. Oral language is a powerful base and support for literacy development. This study examined two very different emerging readers. One had a strong oral language and the other child had limited use of oral language. Perhaps Katie's limited use of oral language contributed to her slower progress in reading. Shifts were noted in her use of language during her intervention program. Her relative strength in writing may have been a reflection of her ownership of her personal use of oral language. However, when applying her personal language to the reading task, there was a greater mismatch between her oral language and the language of text. Katie began to see the mismatch between her oral language and what
appeared in print, and she began to attend to the differences. An example of
her shifting response to language in texts is shown below:

<table>
<thead>
<tr>
<th>Text</th>
<th>Child</th>
</tr>
</thead>
<tbody>
<tr>
<td>A spider is not my friend.</td>
<td>A spider ain’t my, na, a spider is not my friend.</td>
</tr>
<tr>
<td>A snake is not my friend.</td>
<td>A snake not, no, is not my friend.</td>
</tr>
<tr>
<td>A crocodile is not my friend.</td>
<td>A crocodile is ain’t my friend.</td>
</tr>
<tr>
<td>A monster is not my friend.</td>
<td>A, a monster is not my friend.</td>
</tr>
<tr>
<td>A dinosaur is not my friend.</td>
<td>A dinosaur ain’t na, is not (what is this word pointing to is) (teacher ignores appeal) A dinosaur is not my friend.</td>
</tr>
<tr>
<td>My friend is my friend.</td>
<td>My friend is (looks at teacher and teacher ignores) my friend.</td>
</tr>
</tbody>
</table>

The importance of oral language in learning to read is supported by the
findings in this study. Katie’s book language developed slowly because of her
use of a narrow range of oral language behaviors at the onset of literacy
instruction. Her case documents the work of many who have explored the
impact of language acquisition (Cazden, 1983; Clay, 1982; Holdaway, 1979;
Teale & Sulzby, 1986).

Another critical element in learning to read is the ability to attend to print.
“Ways of looking at print and searching for cues must be established” (Clay,
1979a). The two readers in this study began attending to print at different times.
One reader began using visual information almost immediately and the other
reader began to use visual information consistently approximately halfway into
her program. For example, in Zak’s first observation (lesson 3), he self-corrected using visual attention to print:

**TEXT**

I see mum and dad.

**ZAK’S RESPONSE**

I see the, I mean, I see mom and dad.

Katie, however, was attending to meaning and structure; attention to print seemed mainly limited to her attempts to match text with her finger. These observations support the importance of early print awareness on reading acquisition and offer a clear contrast between two children as they take on visual response to print.

Linking behaviors (to prior experience, to text meaning, and to print) are important factors in literacy acquisition. Zak made self-initiated links both to text and to personal experience from the beginning of his program while Katie took longer to make those links. Examples of Zak’s linking behaviors in observation one (lesson three) are shown below:

**TEXT**

Down to Town

(picture of cow)

**ZAK’S RESPONSE**

It got two to’s.

Is this (inaudible) a baby?

(referring to cow’s udders)

Zak was linking to print and to textual concepts while Katie was not doing so overtly. This study supports the potential significance of linking to prior knowledge, including conceptual knowledge, world knowledge, and knowledge about the conventions of print.

It has been argued that in order to achieve inner control of the reading process, children must employ a wide range of strategies (Clay, 1972) that are potentially controllable (Brown, 1978). The present study provides exemplars of
one subject who takes on the control of a range of strategies early in the
intervention setting and one who displays a narrow range of strategies rarely
employed without prompting.

For example, in getting Katie to attend to print, there were numerous
instances of the teacher prompting for the use of early strategies. The following
example illustrates the difficulty Katie had in responding to the task of making
print match word-by-word.

C: (chooses the book, The Birthday Cake)
T: Point and make those words match, Katie.
C: A red cake (without pointing)
    A yellow cake (without pointing)
T: What I want you to do, Katie, is pick up your finger. So each time
you read a word, pick your finger up (modeling the matching).
A red cake (pointing to each word)
A yellow cake (pointing to each word)
Now, you do it.
C: A red cake (pointing on top of the words)
T: But under the word, Katie.
C: A red cake (pointing on top of words)
T: under
C: A yellow cake (pointing under)
T: That's good. That was under the word and you were
picking your finger up, weren't you? (modeling one-to-one).
You do it.
C: A blue cake (pointing)
T: Is that under the word? Check. Go back.
C: A blue cake (pointing)
    A pink cake (not pointing)
T: A blue cake
    A pink cake (holding Katie’s hand).
    It needs to be right under the word so you can see what
    you’re reading.
    A blue cake
    A pink cake
    Good.
C: A chocolate cake (text is “a brown cake”)
    The green cake
T: Did it match Katie? No. Go back and make it match.
    Watch. (holding her hand)
    A brown cake.
    You do it.
C: A brown cake (pointing)
T: Good! Good work!
C: A green cake (pointing)
T: Good, Katie.

In contrast to Katie’s difficulty in taking on the early strategy of one-to-one
matching, the following example shows Zak’s strategy behaviors at the same
point in time. Zak is reading The Party.
C: A doll?
T: Good. You’re right.
C: A chair.
T: Are you right, Zak?
Yes, you are. That was good work. Did it match? (models what she means by matching)

C: A table

T: It matches, doesn’t it? When you say the word, your finger’s under there. It matches with what you say, doesn’t it. A table

There is strong evidence in the literature (Clay, 1979a; Palinscar, 1986; Paris, 1986; Pressley, 1985) that successful readers monitor their reading so that they know when something is not right. The difference between the two subjects in this study in the time it took to take inner control of monitoring supports the critical nature of this factor/strategy to the process of learning to read. Clearly, Katie’s monitoring difficulties were directly related to other factors such as her lack of attention to print and her lack of experience with the language of texts. Again, the complexity of the acquisition of literacy is magnified.

As research efforts continue to contribute evidence for the importance of strategy control, there is growing attention to the role of the teacher in enabling a child to develop control of strategy use. Numerous studies have explored the teaching of metacognition (Paris, Cross & Lipson, 1984; Paris & Oka, 1986; Paris & Cross, 1988; Short & Ryan, 1984; Duffy et al, 1986; Duffy & Roehler, 1977). However, most studies of metacognition have focused on the overt awareness of the children and the explicit nature of teacher intervention. Also, most studies have been conducted with older children.

The present study sought to explore the effects of Reading Recovery intervention procedures on the inner control of strategy use without concern about the child’s ability to metacognitively articulate the process. Clay posits
that "... what is facilitating in learning to read is knowing where to attend, in what sequence, and how to perceptually or rapidly pick up information from print without necessarily taking that information to a level of cognitive analysis such as putting it into words" (Clay, 1985, p. 1). This focus appears to differ from many of the strategy studies in that it returns the emphasis to ways in which the teacher can hand over control of the problem-solving process to enable the reader to perform "naturally" as a successful reader.

Therefore, the teacher's role in the present study was an important one. Perhaps the strongest factor was the support the teacher can give through the way s/he interacts with the child during reading lessons. Literacy develops in a language-rich environment as a result of social interaction (Clay, 1963; Hall, 1987; Harste, et al, 1984; Holdaway, 1979; Sulzby, 1985; Teale, 1983).

Vygotsky proposed that any higher psychological function appears twice, first socially and then psychologically. It appears first between people as an interpsychological category and then within the individual child as an intrapsychological category (Vygotsky, 1978). An example of the interpsychological function was taken from Katie's data:

T: Don't Splash Me (reading title of book)
They don't want to get wet, do they?

C: Don't Splash Me (title page)
"Don't splash me!" said Amy. (Text is "said Dad")
Them are a question mark. (pointing to an exclamation point)

T: That's an exclamation point because he says, "Don't splash me!" (reads with expression)
You said, "said Amy." Go back and check.

C: Huh, uh, I said
“Don’t splash me!” said Dad (reads correctly)

T: Good. How did you know it was Dad? What two ways did you know?

C: It starts with a d and a a.

T: It starts with a d. What else did you know?

C: The d.

T: What else did you check?

C: the picture

T: Yes, ’cause he isn’t wet yet and it makes sense, huh?

C: Why’s he cold?

T: Must be cold -- the water must be cold.

An example of intrapsychological function in which Katie had inner control is shown below. The picture in the text clearly showed a boy looking in a mirror.

C: Have you looked under . . . have you looked in the mirror?

T: Super work, Katie. I like the way you fixed that.

Here you were reading “Have you looked under” and you went back and fixed it.

C: Have you looked in the mirror?

T: Good reading.

Katie was assuming control of the process by searching for cues to achieve a meaningful textual response. She seemed to be using all three cue sources and checking one against another to monitor and searching for further information. The two examples demonstrated the effects of scaffolding by showing that what the child does with the teacher can be done alone later.

Again support was given to Vygotsky’s (1978) zone of proximal development.
The teacher was pushing the boundaries of support toward accomplishment of inner control.

For both children, then, strategy use developed through teacher intervention in a one-to-one setting. With support and scaffolding, their strategy use developed psychologically as they became independent and took more control of their learning.

The progress of both children, then, offers support for Cazden's (1988) call for adult-assisted language development through scaffolding, modeling, and direct instruction. The examination of interaction chains gave evidence of the positive effect of teacher scaffolding on student response.

Left alone in a classroom with twenty other children learning to read, Katie and Zak's confusions could have become more tangled and more difficult to unravel. In the one-to-one setting with close observation by an informed teacher, the teacher was able to push the boundaries of the child's zone of proximal development. Learning creates the zone of proximal development (Vygotsky, 1978), and it is within this zone that the teacher interacts with the child to continually scaffold his learning so that the child gains a conscious awareness of his ability. As the child becomes aware of his ability and internalizes his new learning, he is able to use his ability in new situations and build on his new knowledge.

This study lends further evidence to Clay's emphasis on following the child. In order to "catch up" with the average peers in a classroom, the child must make accelerated progress. "Acceleration depends upon the teacher selection of the clearest, easiest, most memorable examples with which to establish a new response, skill, principle or procedure" (Clay, 1979a, p. 53). If accelerated, optimum learning is to take place, the teacher must provide the
scaffolding, knowing the child and where he needs to go next in his learning. This can only be done through close observation. Acceleration also depends on the teacher not attending to what the child already knows; the child already controls that knowledge and will use it independently. Rather, the teacher provides the scaffolding for pushing the boundaries of new knowledge.

In following the child, then, the teacher in this study created a curriculum to meet the child’s strengths rather than trying to fit the child into an already existing curriculum. The teacher and child “become co-informants as the reading and writing strategies of the one inform those of the other” (Taylor, 1989, p. 190). In functioning in the classroom often times the child must fit into the curriculum.

Both children began reading instruction in the low group but Zak quickly moved into the average group (November) and Katie remained in the low group throughout the year. There is evidence that the way children begin literacy instruction has a profound effect on their life-long view of learning (Meek, 1984; Wells, 1986). Numerous research studies have examined the effects of reading group placement (Allington, 1980; Eder, 1981; McDermott, 1976; Rist, 1970; Wuthrick, 1990) on the low reading group. Results of the studies indicate that readers received differential treatment, less reading time with more interruptions. However, because of the supportive classroom teacher for the two subjects, Katie and Zak’s treatment does not lend support to this body of research. Practically the entire class in this particular school, as well as a majority of the school’s population, was labeled at-risk. The teacher had special training for working with at-risk populations and exhibited many strengths in her teaching. Thus, the combination of a highly skilled, trained
teacher and the large number of at-risk children within one class may account for the differences in these findings.

Conclusions

Conclusions must be interpreted within the limitations of this study. However, a “case study leads not to well-established conclusions, but rather to what might better be described as empirically developed hypotheses” (Helmstadter, 1970, p. 50). Therefore, the conclusions offered in this section should provide hypotheses for potential future study.

One may conclude from the observations recorded in this study that there are multiple factors that may influence an emerging reader’s successful progress in literacy acquisition. The two subjects in this study differed in several important ways, any or all of which could be contributing factors in their different profiles of development.

The most notable factors observed were the influence of oral language behaviors, print awareness behaviors, linking behaviors, and risk-taking behaviors, as well as interactions with the teacher. Clearly, there is already research support for the contribution of some of these factors to literacy development. The persistent nature of these factors in the present study leads to the possible conclusion that any of these factors, and certainly a combination of them, can create critical obstacles or steppingstones for the beginning reader.

In spite of the factors that seemed to influence literacy acquisition, both of these children became more strategic in their approach to text reading. Based on the findings in this study, it seems that when children are provided with appropriate text materials, appropriate strategy intervention based on expert
teaching decisions, and one-to-one tutoring, they will make progress toward literate behavior. The rate and route of the progress may differ, again dependent on a number of variables. The point at which the child takes control signals a point at which a child begins to orchestrate a wide range of strategies. It is at this critical point that acceleration began to occur. For one subject, that control occurred rapidly. For the other subject, the control was slow in coming, not permitting time for rapid acceleration but allowing progress toward that goal. Factors that may have accounted for the different rates of acceleration were mentioned above. Teasing out these factors and examining their contributions to acceleration is a critical challenge for future research in early literacy.

A striking conclusion based on the close observation of these two readers was that, despite different ranges of behaviors and different trajectories of progress, both children made remarkable gains. Both children responded to the one-to-one intervention, though perhaps for different reasons. Katie needed to be held accountable for what she knew; she responded to the consistent expectation for successful performance. She needed the benefit of time -- both time with a noticing teacher and time to take on and assimilate new learnings. Zak required confirmations of his early literacy attempts which were more easily provided in the one-to-one setting. Meeting his needs for attention and praise seemed to affect his growth in literacy acquisition. The phenomenon of individual processing clearly merits further attention.

While the teacher offered different levels and types of interventions to two children at different points in time, the Reading Recovery teacher's theoretical model of intervention was consistent. Because the teacher decision making was based on the immediate needs of the child, the teacher's patterns of behaviors were similar for both children. A specific goal of the teacher was to
provide a scaffold for emerging reading behaviors. More scaffolding was needed at points of early learning, but when the children began to initiate responses, the teacher allowed them to perform independently and removed the scaffolds.

Cazden's descriptions of the features of scaffolds once again merit attention. Teacher scaffolding makes it "...possible for the novice to participate in the mature task from the very beginning" (Cazden, 1988, p. 107). She further stressed that the scaffolds should be "adjustable" and "temporary." The same features apply to Vygotsky's (1978) zone of proximal development. In the present study, the teacher noticed shifts in the children's behaviors, and these were presaged by the teacher scaffolding to promote appropriate and timely strategy use. Clearly, then, the nature of the intervention varied, but the response to student behaviors through careful and responsible scaffolding remained similar across children.

Clay's profile of a successful reader is one who

"... operates on print in an integrated way in search of meaning, and reads with high accuracy and high self-correction rates. He reads with attention focused on meaning. What he thinks the text will say can be checked by looking for sound-to-letter associations. He also has several ways of functioning according to the difficulty level of material. Where he cannot grasp the meaning with higher level strategies he can engage a lower gear and use another strategy such as knowledge of letter clusters or letter-sound associations, but manages to maintain a focus on the messages of the text." (1979a, p. 6)

Zak's progress in Reading Recovery led him to a profile that more closely matched Clay's profile of a successful reader. His placement in a higher reading group after five weeks of lessons provided further evidence of this accelerated profile. This placement seemed to support his acquisition of strategy use. Although there was no way to determine any cause-effect
relationship, Zak's placement in a group in which text was more meaningful and in which he was able to operate more strategically may have facilitated his accelerated progress. There is evidence in the literature that would support the impact of this shift in placement (DeFord, 1989; Eder, 1981; McDermott, 1976; Rist, 1970).

Although Katie did not discontinue from the program, she was moving toward a successful profile. In observing Katie's growth and development as a reader, she exemplified Teale and Sulzby's (1986) interpretation of "emergent." They define emergent as "forward looking," suggesting direction toward progress and contend

"... that even though development proceeds in fits and starts, with periods of vigorous growth and periods during which the child seems to be consolidating knowledge, children are continuously learning to write and read, moving toward the time during which they will do so conventionally." (p. 20)

Looking at the individual differences displayed by the two readers with different paths to learning stresses the importance of allowing and valuing differences among learners. Further, there is evidence for adjusting teaching to foster maximum growth and performance for all children.

Implications for Further Study

Two sets of implications are considered in this section: implications for future research and implications for educational practice.

Implications for Future Research

Results of the present study suggest that consideration be given to the ongoing analysis of factors that seem to contribute most significantly to lack of
success in early literacy experiences. Clearly, Clay's work (1979a, 1979b, 1982) provides the seminal work on these factors, based on her controlled and systematic observation of young children. Perhaps a close look at a number of identified at-risk beginning readers can add to the fabric of her work and the work of others.

Using research-based evidence of factors contributing to lack of literacy acquisition, careful research to explore means of altering the impact of these factors is needed. Longitudinal efforts to explore the effects of quality programs and procedures applied to pre-school and early school years. It would be important to tie the impact of interventions for these contributing factors, then, directly to the actual beginning reading process in regular classroom settings. It seems, for example, that the oral language development studies have often remained isolated from the implications for the real task of taking on reading and writing. Based on the findings of this study, continued research efforts should look at experiences that further oral language development in young children. A major research effort is also needed to continue the efforts in the exploration of ways in which Reading Recovery theoretical principles (text selection, text introduction, strategy engagement) can be effectively applied in classroom settings.

A major commitment must be made to the continuation of the study of Reading Recovery theoretical principles (1990) applied in classroom settings. Work at The Ohio State University through the MacArthur Foundation (1990) is providing a base on which other studies may build.

Relative to Reading Recovery, studies to examine the range of behaviors observed on the way to and at the point of acceleration would be useful to the field. For example, documenting specific child behaviors, teacher behaviors,
strategy profiles, the type and level of text, etc. would seem to warrant further study. Close analysis of the available data for large numbers of children seems called for. There is a need to investigate the development of teachers' theories about learning and the reading process within the Reading Recovery model.

The correlation of the role of linking in a child's success in learning to read and write merits examination. The present study showed very clear differences between the more and less successful reader in their self-initiated linking behaviors.

Implications for Educational Practice

Classroom implications coming from this study have already been touched upon. The importance of knowing and designing a program for a child rather than fitting a child to a curriculum is a clear implication. Teacher education, then, is also a clear implication from the present study. A trained observer of children is needed to recognize the differences among children and the potential interventions for those who are less successful in their literacy events. Means of teacher scaffolding merit increased attention in teacher education. Another critical component of the teacher training is the study of children's literature for texts that support beginning readers and writers.

The examination of grouping practices in many educational settings is an appropriate implication of this study. The creation of opportunities for children to interact with other children in a strategic way seems an essential element. Continued research into effective educational practices before formal reading and writing instruction begins is important.

The examination of the supportive classroom, both kindergarten and first grade, is an appropriate implication of this study. Providing opportunities for
children to interact with other children and adults to create a language-rich environment is essential to their oral language development.

Many other components contribute to oral language development. Read-aloud activities are critical, because it is through hearing stories that children become more accustomed to book language, develop their background knowledge and their sense of story structure, as well as acquire a love of reading. Children also need to begin reading with natural language texts to build on the strengths they bring to the reading process.

Shared readings allow children to become familiar with stories, to experience success, to attend to concepts about print, and to provide a classroom climate that encourages risk-taking. Time spent on rereading favorite books so that children will experience success often is critical in building confidence, fluency, and, self-esteem.

The supportive classroom also has a large variety of books, both fiction and non-fiction, with abundant time for independent reading. Although this study did not examine the critical role of writing related to reading acquisition, research clearly provides evidence of its importance in beginning reading instruction. A language-rich classroom with emphasis on a wide variety of reading and writing gives children the opportunity to expand their language and background knowledge.
APPENDICES
APPENDIX A
PARENT PERMISSION LETTER
September 6, 1989

Dear Parent,

With the cooperation of the school district, I am investigating the use of strategies by beginning readers and writers during their first year of formal instruction. As a teacher and a teacher leader in the Reading Recovery program and a graduate student at The Ohio State University, I am hopeful that the information I gather can help to increase our understanding of the reading/writing processes for beginning elementary students. Dr. Diane DeFord, Associate Professor at The Ohio State University will be the principal investigator in this research project.

With your permission, your child will have an opportunity to participate. He will have 30-minute daily Reading Recovery lessons for approximately 12-20 weeks and regular classroom reading and writing instruction throughout the year. Some of his Reading Recovery lessons and some classroom reading group lessons will be videotaped. Participation or non-participation in this study will have no effect on the children's status in the classroom.

The videotapes will accomplish two goals. One way in which the videotapes will be used is for training teachers and teacher trainers in the procedures and strategies used in the Reading Recovery program. The second use of the videotapes will be to allow the researcher to look at strategy questions asked by the teacher and strategy use by the student as he learns to read and to write. No grade or evaluative judgment will be assigned to your child's responses.

The data collected by the researcher will be presented in a dissertation. Information will be obtained from the children's records. To assure the protection of each student's privacy, the name of the student, the school, and the school district will not be recorded in the written manuscript.

Please help by signing the attached permission form. You may return the form to me in the enclosed envelope as soon as possible. Please feel free to contact me at home (867-8634) or at work (783-8610) if you have any questions or would like additional information.

Thank you for your help.

Kay Reynolds
Principal

Dianne Frasier
Researcher

Angela West
Teacher
PARENT PERMISSION FORM

I give my permission for ______________________ to participate in the early reading study as described in the attached letter. I understand that my child’s participation is voluntary and that he/she may withdraw at any time. I also understand that participation or non-participation will have no effect on my child’s status in the classroom.

Date ______________________

Parent Signature ____________________________________________
APPENDIX B
CODING CATEGORIES
CHILD-RESPONSE CATEGORIES

M  MONITORING/CHECKING

Stops
Pauses
Appeals
Self Corrections

S  SEARCHING (same subscripts as for teacher coding)

Searches for a cue source (single or multiple)
(i.e., n-n-n-number, searches picture)
Locates known or unknown words

RR  REREAD

Rereads or repeats one word, phrase, sentence, or text
[When child reads = (c); when teacher and child read = (t&c)]

AR  ACCURATE READING (analyzed in single sentence units except when teacher intervention is followed by additional accurate reading to continue the text)

Oral reading is exact match to text.
(Assumes matching and monitoring are taking place even though those categories are not also marked)
Appeal is made, appeal is ignored, and child reads correctly.

IR  INACCURATE READING (analyzed in single sentence units except when teacher intervention is followed by additional inaccurate reading for the same text)

Production of any response that does not match text

L  LINKING (same superscripts possible as for teacher coding)

Child linking to what (s)he knows (letter, word, prior knowledge, text)
CHILD RESPONSE CATEGORIES (PAGE 2)

R  RESPONSE
Imitates teacher's reading
Student response that indicates early stages of strategy use (a behavior on the way to strategy use but not necessarily there --- either correct or incorrect response)

SC  SELF-CORRECTION
Corrects error to match expected response (also includes coding of monitoring when SC is self-initiated)

O  OTHER
Side comments
Directions
Uncodable responses
TEACHER RESPONSE CATEGORIES

**MAT MATCHING**

Point and make it match.
Clapping
Under the words

**M MONITORING/CHECKING**

(Include M, S, V as subscripts when clearly evident and appropriate)
Checking on oneself, or making no errors or showing signs of uncertainty
(hesitation, frowning, shake of the head or stopping)
Did that match?
Point to each one.
Direct child’s attention to meaning, visual information, or structural
information.
Can you find the hard part?
Was that OK?
Why did you stop?
What did you notice?
Were you right?
What would you expect to see at the beginning, at the end?
How did you know?
Try that again.

**CCH CROSS CHECKING**

Check one kind of cue against another following an error.
It could be... but look at...
Check to see if what you read looks right and sounds right to you or
makes sense and looks right.

**P PROMPT**

Request to do or consider something
(Always followed by behavior for which teacher is prompting)

**C CONFIRM**

Specific confirmation of a behavior such as a SC
Repeating a correct response or a question
(Always followed by behavior for which teacher is prompting)
S SEARCHING

Searching for all types of cues such as language structure, meaning, or visual or sound information.
(Includes m, s, v as subscripts when clearly evident and appropriate)

You said... Does that make sense, sound right or look right?
Can you say it that way?
What's wrong?
You almost got that page right.
See it you can find what is wrong.
Locate a known word

L LINKING

Prompting the child to use something he knows (including known words with ML)
Linking to story meaning
Helping child to construct meaning by calling attention to or providing information to help with story understanding

May be followed by these superscripts as appropriate:
  Lpk=prior knowledge
  Lni=new information
  Lw=writing
  Lml=magnetic letters
  Lt=text

(May add m, s, or v as superscripts after linking)

P PRAISE

General, positive response such as yes, ok, uh huh, good, super, fantastic (not specific to a behavior)

F FLUENCY

Shared reading
Read it like your talking.
Read the punctuation.

RR REREAD

Read that again.
Shared reading
When teacher reads=(t)
When child and teacher read together (c&t)
TEACHER-RESPONSE CATEGORIES (PAGE 3)

T  TOLD
Supplies correct response whether or not it follows an appeal

(r)  REPEATED INFORMATION
Directives repeated

O  OTHER
Side comments
Directions
Uncodable responses
## READING ANALYSIS MATRIX

**KATIE**

<table>
<thead>
<tr>
<th>Text</th>
<th>Child's Response</th>
<th>Teachers Response</th>
<th>Child's Codes</th>
<th>Teacher's Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have a horse (pg. 2)</td>
<td>I have a horse.</td>
<td></td>
<td>AccRdg 1</td>
<td>Match 1</td>
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<td>Other Monitor</td>
<td>Resp.</td>
<td>Linking 1</td>
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<td>Reread</td>
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<td>InAccur</td>
<td>Praise 1</td>
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<td>I do too (pg. 3)</td>
<td>I do too.</td>
<td>Read it like you're talking.</td>
<td>AccRdg 1</td>
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<td>5</td>
<td>Oh, Z. Let me tell you one thing you did fantastic. You started to say the and you went back and you fixed it. What did you say?</td>
<td>Other Monitor Search CrossCh SC</td>
<td>AccRdg Resp. Linking Reread InAccur</td>
<td>Match Monitor Search CrossCh TOther</td>
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<td>6</td>
<td>Help</td>
<td>Other Monitor Search CrossCh SC</td>
<td>AccRdg Resp. Linking Reread InAccur</td>
<td>Match Monitor Search CrossCh TOther</td>
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<tr>
<td>7</td>
<td>Help me. Because that's what she's asking, isn't she? Does it make sense? Does it look like it could be help? Starts like her, doesn't it? So it looks like help and it made sense. You found two ways to check.</td>
<td>Other Monitor Search CrossCh SC</td>
<td>AccRdg Resp. Linking Reread InAccur</td>
<td>Match Monitor Search CrossCh TOther</td>
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<td>8</td>
<td>Good work! That's what good readers do.</td>
<td>Other Monitor Search CrossCh SC</td>
<td>AccRdg Resp. Linking Reread InAccur</td>
<td>Match Monitor Search CrossCh TOther</td>
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<td>9</td>
<td>&quot;Help me,&quot; said the little red hen. (pg 4)</td>
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<td>AccRdg Resp. Linking Reread InAccur</td>
<td>Match Monitor Search CrossCh TOther</td>
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<td>10. &quot;No,&quot; said the cat. (pg. 5)</td>
<td>&quot;No,&quot; said the cat.</td>
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<td>AccRdg Resp. Linking Reread InAccur</td>
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<td>&quot;Help me,&quot; said the little red hen.</td>
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<td>AccRdg Resp. Linking Reread InAccur</td>
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<td>Read it like you're talking.</td>
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<td>3. &quot;Help me,&quot; said the little red hen. (page 2)</td>
<td>The, help me, said the little red hen.</td>
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<td>4. No, said the pig. (page 3)</td>
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<td>5 I have a lion. (pg. 6)</td>
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<td>6 I do too (pg. 7)</td>
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<td>7 I have a bird. (pg. 8)</td>
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APPENDIX D
SAMPLE INTERACTION CHAINS
**KATIE - OBSERVATION #1**

**FAMILIAR READING**

*The Birthday Cake*¹
1-25

*The Barbecue*¹
26-50

*I Can Fly*¹
51-78

*The Party*¹
79-95

**RUNNING RECORD**

*Building with Blocks*¹
96-112

**NEW BOOK**

*My Family*¹
113-137

*Shopping*¹
138-168

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PR PMAT [AR (6)] T [AR] [IR AR]

PR CMAT PMAT [RR AR] PR CMAT PMAT PMAT PMAT [RR AR] PR


KATIE - OBSERVATION 5

[AR (6)] {IR AR (7)}/

L1 [L1] [AR IR M SC IR M SC IR] PM [ ] PS [ ] PRR [IR] LpKV PR
[IR M SC] [IR M SC] CM CM [RR] PR/

[AR] (l) [AR] (l) [AR] (l) [AR] (l) [IR M SC] [AR (3)] RR [AR] RR PR/


[IR M] PSm [Sm] PSm RR [IR] T [AR IR M] PSv T [R] T PRR {{AR (c &t)}}
[AR M] PM [R] CM PSm [R] T [IR M] PSv [M] PM PM PS PSm PRR
M SC] PM {(c & t) RR} PSm PR [IR M SC IR M SC] LpK PSvm [R] T RR
Familiar Reading

The Party
1-22

Down to Town
23-75

The Ghost
75-90

Running Record

The Cat on the Mat
90-107

New Book

The Barbecue
108-167

ZAK - OBSERVATION #1


[AR (3)] [IR M S SC] [L1] [IR M S SC] [AR M RR AR] PR PR [IR AR]// PR PR CSm PR//


ZAK - OBSERVATION #5

**FAMILIAR READING**

Messey Bessy
1-40

Rosie at the Zoo
41-54

**RUNNING RECORD**

The Boring Old Bed

**NEW BOOK**

The Pot of Gold

PF [AR (3)] RR [AR (3)] PR [AR (4) Sv] [IR M] PM [R] PS [Sv] PS


[IR IR M S SC IR] T [IR IR] T [IR M SC] [IR IR M AR] [IR IR] T [IR]
T [AR]// PF CM CLpv PSm PR CSv CSv T PL!//

PSs [R] PSv [IR] PSv [Sv AR] PSm CSm RR [AR] RR [AR] RR PR [AR (2)
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