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Informational books: Their instructional impact upon young children's writing

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The Ohio State University, 1992

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INFORMATIONAL BOOKS: THEIR INSTRUCTIONAL IMPACT UPON YOUNG CHILDREN'S WRITING

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
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By

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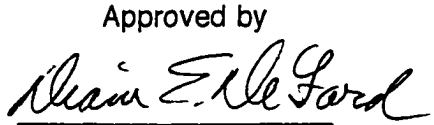

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For my Dad, L. E. Masterson

Fathering doesn't end with death --
the love and guidance last an eternity.

Thank you, Dad.

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To my advisor and friend, Diane DeFord, thank you for pushing and extending my thinking and for sticking by me when "the going got tough." To the rest of my committee, Janet Hickman, Barbara Lehman, Carol Lyons, and Rob Tierney, thank you for your support and guidance.

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CHAPTER I

INTRODUCTION

Children's literature offers children many rewards and benefits (Huck et al., 1987). Among the benefits attributed to reading children's literature are the pleasures and enjoyment it gives to children and the development of positive attitudes toward reading and learning, extending the imagination, and enabling children to vicariously experience other times and places.

There is evidence that children's literature facilitates language development and learning through its language patterns, story structures, and characterizations (Cazden, 1972; Ninio & Bruner, 1978; Chomsky, 1972). A significant positive relationship seems to exist between the use of literature and children's writing development. Loban (1963) discovered a relationship between good readers and writers; "Those who read well also write well" (p. 32). Also, it has been shown that the books children read influence their writing (Bissex, 1980). Eckhoff (1983), for example, found that the style of children's reading texts influenced their writing. DeFord (1981) discovered that children exposed to children's literature produced a wider range of literary forms (e.g., informational prose, songs, poetry).

The literature they read influenced the content of their writing and the language the children used in their texts.

A number of studies (McKenzie, 1986; Ninio & Bruner, 1978) demonstrate the benefits of learning language in a rich context filled with children's literature. These classrooms use children's literature as the foundation for reading programs, and focus on the learner rather than on the content.

Even though the use of children's literature continues to expand in elementary school classrooms, a majority of today's classrooms still use basal reading programs that may not draw on the advantages of "real" books. Bruner (1986) argues that one of the contributions of literature is its power for "generating hypotheses, for cultivating multiple perspectives or possible worlds" (p. 24). Children's literature uses rich language, text formats, phrasing that children hear and these have an influence on young learners' language development (Ninio & Bruner, 1978). Wells (1986) found experiences with stories to be a critical factor for children learning to read. "Experiences with literature help children build the sense of story they need to be able to recognize the conventions and patterns of language they will meet in their reading" (Hickman & Cullinan, 1989, p. 7).

Informational books are primarily nonfiction, but cross genre boundaries. Some tell a story and are presented to their reader in a

narrative format (e.g., The Magic School Bus: Lost in the Solar System). Others are alphabet (e.g., Eight Hands Round: A Patchwork Alphabet) or counting (e.g., Count Your Way Through China) books. Still other informational texts are written in verse (e.g., Winter).

Informational literature, however, is used less in today's elementary classrooms than is fiction. One could claim that children's writing should show the influence of informational literature in the same way it has been shown to be influenced by fiction, if children were provided opportunities to become familiar with the language and text structure and to experiment with informational books on their own. However, there is limited evidence to corroborate this claim.

Statement of the Problem

This study explored the relationship between first graders' experiences with informational children's books and their written compositions. Experts in children's literature suggest that literature experiences can be provided within any classroom learning context and there are many classroom contexts in which informational books may be used, such as by integrating informational literature across the curriculum. Children may also listen to shared read-alouds, read with classmates or older peers, and use literature when recording information in their journals or science logs.

Little is known about how teachers may be using informational books in other significant ways. How are first grade teachers using informational books with their young learners? In what learning contexts are young learners being provided experiences with informational literature? How are these experiences with informational books reflected in young learners' writing?

In recent translations of Vygotsky's (1978) work, it is stated that students' learning within a collaborative context, one that pairs experts and novices, furthers children's development in ways that rote learning cannot (Tharp & Gallimore, 1988). Within the decade of the 1980's, experts in literacy education have recommended a move away from dependence on basal reading programs and "skill-building exercises" that often depend on rote learning techniques. Therefore, there is a need for a study to be done that explores children's writing in a rich literature context, in a natural setting, where collaborative activity can be observed.

Background of the Study

Three areas of the professional literature are important in considering this problem. They are: (1) the importance of story in early literacy acquisition; (2) research and theory on the relationship that exists between reading and writing; and (3) the use of informational literature within classrooms for the purpose of promoting literacy.

Stories and Early Literacy Learning

The benefits of using stories with children to further their literacy development are documented in such research studies as The Bristol Study (Wells, 1986) and Heath's (1983) Piedmont Carolina Study of Trackton, Roadville, and MainTown. In both studies, children benefitted from shared stories (i.e., listening to stories being read aloud, engaging in retellings or oral story-telling) in the company of an adult or a more capable peer. Sharing stories with an adult or more capable peer provides a collaborative and supportive learning environment for young learners to actively construct their own knowledge. As active constructors of their own knowledge, children take more responsibility for their own learning (Vygotsky, 1978). With new experiences, young learners are constantly adding to and refining their existing knowledge base (Applebee, 1978; Wells, 1986; Vygotsky, 1978); they assimilate and accommodate this new information (Piaget, 1969) as they construct a theory of the world. As children's concepts of story and story structure become clearer, they use that knowledge both in their reading and writing.

This active involvement with stories promotes language development. Children become familiar with the elements of a story, the language used, and how stories build from page to page. They learn that stories relate to their own lives and experiences (McKenzie, 1986; Applebee, 1978; Wells, 1986; Clay, 1979). Through the

complexity of book language and the wealth of experiences represented in books, children build a rich language base (Strickland & Morrow, 1989; Ninio & Bruner, 1978).

The dual process of using language to learn and learning about language through social interaction is integral to a child's formal entry into school. Halliday (1975) believes language is used to build a picture of the world; children learn language, learn through language and learn about language as they "learn how to mean." In this way, sharing books with children contributes to their language development.

Ideally, school contexts should build on what children bring with them to the classroom learning environment (i.e., experiences with environmental print and knowledge of oral and written language). Stories provide an appropriate "bridge" for children between their everyday language-rich experiences of the home and the more formal literacy events of the classroom. Talk often accompanies the sharing of stories. Because learning is a socially mediated process, talk, then, is central to learning (Rosen, 1973). It is not the quantity of talk that is critical (Heath, 1983), however, but the quality of talk in which the young learner is engaged. Conversations built around books provide opportunities to guide the development of children's talk and learning.

When children are presented with a range of texts in meaningful classroom contexts, they learn about the features of oral and written language (Goodman et al., 1989). Contexts such as shared read-alouds, buddy reading, and peer conferences provide a scaffold for children to relate their past experiences and knowledge to current learning (Britton, 1970; Bruner, 1983; Cazden, 1988). This immersion into oral and written language provides young learners with necessary early literacy skills for school success (Snow & Ninio, 1986; Cochran-Smith, 1984; Cazden, 1972; McKenzie, 1986). King et al. (1981), studied kindergarten, first-, and second-grade children in a literature rich environment. King and her colleagues found that children learn how to make sense of language by utilizing the available patterns in their immediate environment. If children are introduced to a variety of children's literature genre, are their text patterns made accessible to young learners?

Reading Bridges To Writing

According to Heath (1987), teachers do *not* teach others to write, but *enable* others through modeling and opportunities to write: "Writing is like language -- children don't learn by rules and imitation, but through trying." Therefore, it is recommended that teachers provide working models for individual experimentation, by exposing children to both expository and narrative texts. As young writers encounter books to be used for different purposes, they learn the varying functions that print can serve (King, 1980), as well as how to

vary the writing process in response to the needs of a particular writing task (Langer, 1985).

Research investigating the reading-writing connection (Shanahan & Tierney, 1990; Tierney & Shanahan, 1991) indicates that reading instruction enhances writing ability and vice versa. DeFord (1981), working in three first-grade classrooms, found "writers borrowed from the contextual and instructional cues provided." She also found "if literature was emphasized, it was more likely that literature found its way into student texts. What children read, they used in their writing. The reading material emphasized in the reading program was the most influential factor in determining the form as well as the content of children's writing" (pp.18-19).

Burton (1985) conducted a study with third and fourth graders to explore the connections between children's literary experiences and their writing. Burton (1985) assumed that exposure to children's literature would affect the writing processes of the children in his year-long study. He discovered "child writers do borrow and improvise on what they are most familiar with from their literary experiences" (p.182). This relationship is referred to as "intertextuality" by Short (1986). In her study with first graders, she found that, when given many opportunities to read and to write, the children made connections to other texts, including those written by their peers.

Using Informational Books in the Classroom

The above research suggests that the make-up of the classroom (i.e., availability of materials, inclusion of centers) and what texts the teachers use for instructional purposes influences what children use from the texts. Providing young learners with literature within a stimulating classroom environment builds a positive attitude and broadens their experiences with writing, reading, and learning. Tierney et al. (1984) refers to research demonstrating the negative influence on writers and readers of stilted language and format most often found in basal readers. DeFord (1981) found that children in classrooms where they read from basals wrote "stiff," unimaginative texts. The children reading literature within their classrooms, on the other hand, wrote "alive," creative texts. Also the format of texts read within a child's learning context directly influences their writing formats (Tierney et al., 1984; DeFord, 1981, 1984, and 1985). However, none of these studies reported specifically on children's use of informational texts in their writing.

According to Shanahan & Tierney (1990), the benefits from this reading-writing relationship is most evident in a learning context where children are encouraged to unite reading and writing. A classroom context integrating reading and writing into a successful, collaborative, learning environment acknowledges the interplay of text, purpose, and reader (Rowe, 1986; Short, 1986).

The related literature confirms and emphasizes the importance of utilizing children's literature as a learning tool (Hickman, 1981). Young learners begin to incorporate book elements such as the language, the writing style, and the organizational formats into their writing. There is, however, a need to understand what happens to children's writing when they are regularly and purposefully exposed to informational literature in addition to fiction within meaningful classroom contexts. Most of this literature speaks to children's literature in general, or fiction more specifically. There has been a long held belief that younger children are not maturationally "ready" to read and comprehend informational materials. Newkirk (1989) points to the work of Moffett (1968) and Britton (1975) as typical experts in writing who see the young writers as being tied to expressive-narrative modes of writing. Analytic thinking and analytic writing are generally placed at the upper end of developmental models of writing, with young children's thinking being deemed qualitatively different from adolescents and adults. Newkirk (1989) provides evidence that even preschool children are capable of integrating expository text elements into their writing. Pappas (in press), in an ongoing longitudinal study of kindergarten children, provides evidence that children independently select expository texts once they are familiar with them.

Skillings (1990), in her study with third graders, found that following instruction children could name the expository text

organizers (i.e., compare and contrast), but were unable to use them in their own writing. There is conflicting information provided by current research studies as to whether young learners can distinguish informational text elements and then use them in their compositions. There is a need to know *what* children actually borrow from expository texts and *how* children incorporate those expository elements into their writing. The inclusion of informational literature within a child's learning environment seems to promote borrowing and integrating of various expository text elements into children's writings.

Research Questions

The purpose of this research study was to explore the relationship between first graders' experiences with informational children's books and their written compositions. The following questions were explored throughout the study:

Question 1: What experiences with informational literature, during the Language Arts and Science portion of the curriculum, are provided for the children in one first-grade classroom during language arts and science?

Question 2: How does the writing of three case study children reflect their experiences with informational books within the social context of the classroom?

Overview of the Study

Data were collected within one first-grade classroom. Two phases of study were initiated. Twenty-five children (11 boys and 14 girls) were observed to establish the classroom learning contexts in which informational literature was used and the nature of children's social interactions within those contexts. The study then moved into a case study investigation. These case studies provided an opportunity to analyze children's writing from informational books and to observe students during the writing process.

To explore how experiences with informational literature were reflected in children's writing, the study focuses on three children (two boys and one girl), at various stages within their writing development. Although the primary focus was on gathering case study data, observational data of the larger group provided a backdrop for the data collection and aided in the interpretation of case study data. This dual focus facilitated refinement and validation of the data analysis categories.

The selected teacher was a first-grade teacher for twenty years. Mrs. K. used a whole language, literature-based approach to learning. Mrs. K. provided the children with daily opportunities to interact with a variety of print sources, for a variety of real purposes, and they were supported by their peers and teacher. Mrs. K. and the children experimented with the relationship between reading and

writing. She collaborated and negotiated with the children in developing learning plans.

There are many forms and variations to a whole language, literature-based learning environment and Mrs. K.'s classroom represents only one. She was a teacher in transition. Mrs. K. continued to refine her understanding about language learning, the importance of experiences with children's literature, and ways to use children's literature across her curriculum.

Observations conducted in Mrs. K.'s classroom verified that this was an appropriate research context. She had expressed an interest in learning more about implementing and maintaining a whole language, literature-based program. Her learning environment encompassed much children's literature, including many informational books, and writing was an important element. In addition, she encouraged cooperation and interaction among the children. Daily observations in Mrs. K.'s classroom for several weeks showed that she used the most informational books and encouraged the most writing during language arts and science. Consequently, these instructional times became the focus of the study.

The research approach was qualitative. The specific method of investigation was case study research, chosen to gain depth of insight and detailed understanding. Case study research also offers threats of subjectivity and researcher biases (Patton, 1990). To guard

against researcher biases, the teacher provided member checks at various intervals throughout the study and provided the researcher with a means to verify interpretations. These member checks also provided the researcher with another perspective to address biases and a means of clarification.

Data were reviewed and interpreted through content and text analysis on the same day they was collected. All data gathered from interviews, classroom observations, audio recordings, and writing samples were coded and examined for emerging patterns. Teacher-talk, peer-social interaction, and the influence of fictional and nonfictional texts on the writing process and the written products of young learners emerged as categories.

Categories that emerged from the baseline data phase assisted in the focus and refinement of data collection and emerging categories within the case study research phase. In order to capture the specific elements from texts and teacher-talk that students used within their writing across the Language Arts and Science periods, the following procedures were used.

A text analysis was completed on the expository texts read and discussed during group book-sharing sessions. These book-sharing sessions occurred within two contexts: (1) language arts instruction, and (2) science instruction. A content analysis was completed on the

narrative and the expository writings of the children, the transcribed audio recordings, and on the researcher's field notes.

Definition of Terms

Following are definitions of terms that are central to this study. The terms are defined in the context of their use in this particular classroom and study.

Informational Books for Children. Informational books for children refer to texts using a variety of text structures, including narrative, with the main purpose of providing information to the reader ("efferent stance," Rosenblatt, 1978). A reader may, however, read an informational text for the pleasure and for the beauty it can provide ("aesthetic stance," Rosenblatt, 1978). These are terms used by educators in referring to children's books that are written for the primary purpose of conveying information. Alternative terms are nonfiction and expository texts. Not all books considered informational books for children fit the technical definition of exposition. It is the researcher's arbitrary choice to use the term informational books, since it is a commonly used term within the researcher's discipline.

Interactive Writing. Interactive writing is a writing event where the children and the teacher negotiate and collaborate in order to generate a written text. The children do most of the writing, with the

teacher acting as the facilitator and support mechanism when needed. The process is the valued element, not the product.

Writing Journals. In this study, the journals were notebooks used by the children for independent writing. Often, if invited to do so by the child, the teacher would read and make written comments within a student's journal, using the journal as a dialogue tool. The children usually wrote whatever they wanted within their journal, but occasionally the teacher would suggest a specific prompt. For a few of the children's journal writing events, the teacher assigned specific topics that the children were to address.

Science Log. This writing vehicle consisted of notebooks, index cards, and chart or graph paper used by each child in conjunction with an instructional event within the science portion of the curriculum. The science log provided a means of helping the children develop strategies for recording information about various phenomena.

Content Analysis. "An objective, systematic, and general description of the manifest content of a text" (Lincoln & Guba, 1985, p. 337).

I examined the children's writings for inclusions (e.g., language used within a particular text) from the texts they had been reading

Text Analysis. Meyers's (1981) expository text analysis levels (i.e., relationship within and between sentences; logical organization; and organization of text as a whole) were used.

Teacher-Talk. The verbal and nonverbal language explicitly and implicitly used by the teacher before, during, and after instruction.

Peer-Social Interaction. Two or more children engaged in the sharing of ideas, etc. either directly or indirectly, verbally or nonverbally.

Shared Texts. Both fictional and nonfictional literature used by the teacher for a whole-class read-aloud.

Fictional Elements. Fictional elements refer to the structural and stylistic elements featured within a narrative story (e.g., characters, motifs, story-like language).

Expository Elements. Examples of elements of expository text fall under five main categories. These categories are "accuracy and authenticity, content and perspective, style, organization, and illustrations and format" (Huck et al., 1987, p. 604).

Modeling. Modeling occurs when a teacher or peer demonstrates how to approach, work through, and complete a task. Modeling is an instructional tool.

Strategies. Strategies are processes employed by learners in order to accomplish a given task. Often strategies are learned through the use of modeling, peer collaboration, individual exploration, etc.

Shared Reading. The setting in which a teacher and children are engaged in reading a text together is called a shared reading. One

child or the teacher may be pointing to the words, but all of the children are actively engaged in the actual reading, which requires the print to be large.

Scope and Limitations of the Study

This research study explored one group of first graders' experiences with informational books and the influence of those experiences on their writing. Discovering and describing the influences of informational books on young learners' writing may provide instructional information for classroom teachers.

The limitations of this study revolve around issues of methodology. Methodologically, the concept of generalizability is not applicable to this study. Cronbach (1975) concluded that "social phenomena are too variable and context-bound to permit very significant empirical generalizations" (Patton, 1990, p. 487). Specific information obtained from this study directly applies, then, only to the first-grade classroom in which the study took place. The results and findings were interpreted from one classroom, one teacher, and 25 children, with an in-depth analysis of three children. However, the potential impact of shared informational texts on young learners' writing development may apply to other elementary classrooms where the learning environment resembles that of the first-grade classroom focused on within this research study.

The researcher's influence on the collection and interpretation of data must be considered. Measures were built into the design of the study (e.g., member checks) to guard against researcher biases. However, issues concerning the interpretation of data by a single investigator continue to be debated (Strauss & Corbin, 1990; Lincoln & Guba, 1989). Qualitative research is regarded as highly personalized.

Summary

The present study was designed to describe how one group of first-grade children's writing reflected their experiences with informational literature during language arts and science. A review of related theory and research, forming a conceptual framework for the study, is contained in Chapter II. Chapter III describes the methods and procedures implemented. Chapter IV includes relevant data analysis and findings from various aspects of the classroom. Chapter V provides an introduction to and an analysis of the case studies. Chapter VI discusses the findings, conclusions, and implications for classroom practice and makes suggestions for further research.

CHAPTER II

REVIEW OF THE LITERATURE

In order to address the posed research questions, it was necessary to review studies that focused on: (1) the extent to which informational books are used in the elementary classroom, (2) what children learn from their experiences with informational books, and (3) the nature of student/teacher interactions when informational books are used during reading and writing events.

Extent to Which Informational Books Are Used in Elementary Classrooms

In a comprehensive review of the literature that examined the use of informational books in elementary school classrooms (Hidi & Hildyard, 1983), it was found that informational books are the least used genre. The following studies examined how informational books are used during reading events.

Teachers use informational books to provide a range of experiences to young learners. Palinscar (1986) analyzed comprehension measures across grade levels (K-6), and reported that modeling had the greatest impact on students being able to

understand and use information presented within texts. This study suggests that students need experiences in observing teachers reading and using informational texts to understand how to access information from expository texts.

Hiebert and Fisher (1990) observed second and sixth graders in whole language, literature-based classrooms for more than 100 hours. Aware that literature-based classroom teachers model strategies and read aloud from narrative text, Hiebert and Fisher wanted to determine if strategies for reading informational books were also being modeled and if teachers were reading aloud from informational books. They found that during the 100 hours of classroom observation, teachers did not read from informational books or demonstrate to the children how to use and access information from expository text. Children cannot be expected to successfully use informational books unless they are given opportunities to observe an expert using the text and to experience the language and structure of the books through shared read-alouds.

Beck and McKeown (1991), investigating the match between children's background knowledge and the assumed background knowledge by the text, studied fifth graders during their reading about the Civil War. They found that students' knowledge was "vague and contained many inaccuracies" (p. 485). Classroom teachers may observe students having difficulty comprehending informational

books and, therefore, may determine informational books to be an inappropriate genre. They may not realize how much background knowledge is needed by the reader. Careful informational book selection, the building of appropriate background knowlege by the teacher, the learning context, and cooperation among the children may establish successful encounters with informational books. Teachers can prepare young learners for the encounter first, by determining if the children have appropriate background information and then providing the necessary background information as it is needed (Tierney & Pearson, 1981).

An examination of the literature revealed that informational books are more likely used during writing events. Loban (1963) conducted a longitudinal study of the reading and writing abilities of 220 students from grades K-12. He wanted to determine the relationship between reading achievement as measured by reading scores and the ratings of children's writing. He discovered that a significant relationship existed between reading and writing abilities: "Those who read well also write well" (p. 75). Loban's (1963) study suggests that there might be a relationship between reading informational books and writing ability.

Bissex (1980), in the case study of her young son, explored his earliest written forms in an attempt to follow his writing development. She found that he expressed himself competently in non-narrative writing through the writing of signs. Young learners, through

experiences with language and environmental print, adopt a variety of written forms. Logic suggests that children will also adopt a variety of written forms by experiencing informational books in their learning environment.

Research supports this reading-writing relationship. Eckhoff (1983) compared young children who read from a basal reader with those that read from trade books. She found that children modeled their writing after text they read or heard. The children that read from trade books wrote more complex sentences, elaborated on their ideas, and used more vocabulary words. The children that read from the basal reader, however, wrote simple sentences, had undeveloped ideas, and used only a few different vocabulary words. For young writers to become proficient and versatile in their writing capabilities, they need experiences with a variety of reading materials that present varied writing styles and language.

DeFord (1984) studied three first-grade classrooms to determine what young writers borrow and use in their writing. She found that "writers borrowed from the contextual and instructional cues provided." She also found "if literature was emphasized, it found its way into student texts. What children read, they used in their writing. The reading material emphasized in the reading program was the most influential factor in determining the form as well as the content of the children's writing" (pp. 18-19). DeFord's study implies that if children are exposed to informational books, for example, as a

part of their reading program, elements from those informational books will find their way into the children's writing.

Newkirk's (1989) study of his preschool daughter and several classmates supports the findings of both Bissex (1980) and DeFord (1984). Newkirk (1989) observed and documented that his young daughter expressed herself in non-narrative forms, such as lists and persuasion. Newkirk concluded that "as long as children have access to a variety of non-narrative forms, they will adopt them, just as they adopt other forms of adult behavior" (p. 24).

Two major general conclusions emerged from the review of research on the use of informational books in elementary school classrooms during reading and writing events. First, what children read influences what they write. Therefore, it is important to provide young learners experiences with a variety of children's literature including informational books. Through modeling and reading aloud, teachers familiarize students with the elements of informational books and give students a range of strategies for using and investigating informational books independently. Secondly, appropriate background knowledge assists students in using informational books. Through shared read-alouds, book discussions, interaction with peers, and independent exploration, young learners are provided with appropriate background knowledge to read, write,

and learn from informational books. Wittrock (1984) argues that readers and writers "create meanings by building relations between the text and what they know, believe, and experience" (p. 77).

Children's Learning from Experiences with Informational Books

After reviewing the related literature on using informational books in the elementary school classroom, it seemed productive to then look at what the children exposed to informational books were learning from their experiences. The following studies explored what children learned from their experiences with informational books.

Taylor and Beach (1984) hypothesized that students' expository reading and writing skills would improve if they were (1) provided with specific instruction geared toward understanding text structure and (2) given practice in experimenting with text structure following instruction. They studied 114 seventh grade students from three social studies-English classes and found that reading instruction focusing on text structure was effective in enhancing students' understanding of unfamiliar social studies material. They also found that awareness of text structure was important in writing expository compositions. It appeared to Taylor and Beach (1984) that "attention directed to text structure in students' reading of expository text, along with practice in writing structured summaries, helps students organize their own expository writing. The instruction and

practice, which focused on text structure in existing text, may have (a) highlighted for students the need to incorporate text structure into their own expository writing, or (b) indirectly instructed students in how to develop text structure in their own writing" (p. 145).

As teacher-researcher, Burton (1985) wanted to know the influence of the literature he used in his classroom on the students' writing. In his study of third and fourth graders, he found that young writers borrowed from and improvised upon that with which they were most familiar from their literary experiences. This supports the notion of providing children with experiences across genres. Burton (1985) discovered that his students borrowed from and improvised upon the "language of literature, literary formats, and on the traditional literary elements of literature" (p. 183) from familiar genres.

From the 26 prereading children in her study, Pappas (1990) focused on one kindergarten student, Andrea, through several reenactments of the same book in order to understand how a young learner becomes familiar with the ways in which written language is used as opposed to spoken communication. The text selected for Andrea's multiple reenactments was The Owl and the Woodpecker by Wildsmith. Pappas found that a young child's reading-like behavior "can not be explained in terms of rote memory. The ontogenesis of the registers of written language appears to be just as much a constructive process as we have seen in other areas of children's cognitive/linguistic development" (pp. 174-175). Young learners may

take on the book language of informational texts and make it their own provided they have many meaningful experiences with informational books.

Newkirk (1989) studied several of his young daughter's writing from ages 4-7 as well as other children's writing and drawing from three schools in New Hampshire and Hawaii. It was his assumption, which differed greatly from conventional views of writing development, that young writers were competent at analytic writing (e.g., lists, labels, signs, letters). Newkirk (1989) found that young writers were capable of using basic structures of argument and explanation. Through experiences with environmental print, their surroundings, and the people in it, children begin including what they have seen written into their own writing. They learn that lists, for example, have a sense of power to them. They learn that writing can go beyond time and memory limitations and so they begin writing everything possible in a list format (Vygotsky, 1978, p. 115).

Skillings (1990) wanted to know if in fact younger learners could identify and use elements of exposition in creating their texts. In a study of third-grade children, she initially found that the children recognized and identified elements of exposition, but were unable to use these elements in their writing. After specific instruction around expository texts, one teacher noted that her students used expository elements in their writing (p. 150). A number of factors contributed to Skilling's initial findings. The children that found expository texts

difficult to read lacked adequate experiences and practice with exposition. Once the children had appropriate experiences with exposition, however, expository texts were easier for them to read and they used expository elements in their writing.

In an ongoing research study of four kindergarten children by Pappas (in press), she set out to add to the body of knowledge of what we know about children and informational books. She described several of the distinctive discourse features of "typical" informational books written for children by comparing specific informational books to "typical" elements found within fictional narratives. This same study was eventually extended to a larger population of 20 kindergarteners (10 boys and 10 girls) selected from two kindergarten classes. From these studies, it is known that children draw upon what they already know and are familiar with in order to understand and make sense of stories. Through experiences with expository materials, children learn about and use information from informational stories in their writing.

Secondly, Pappas (in press) found that children learn about book language by hearing written language read aloud (Wells, 1986; McKenzie, 1986). When stories are read to children, they become familiar with every aspect of those shared stories (Holdaway, 1979; McKenzie, (1986) and engage in reading reenactment or simultaneous reading/retelling. Through watching children engage in reading reenactment, Pappas (in press) discovered children's

strategies for acquiring and using book language. "All of the young learners showed an increasing sensitivity to the aspects and book language common to informational texts across repeated reading reenactments" (p. 25). She also found that illustrations influenced and supported children's early reading-like behavior. With repeated readings, the children concentrate more on the printed word. "To become literate the child has to come to terms with certain important characteristics of written language" (Pappas, 1990, p. 19). Because informational books have unique characteristics, children benefit from experiences with informational texts, learning their format, language, and purpose.

It is argued that reading a "new" genre gives a young learner a new perspective just as reading a new author "can give a writer a new way of organizing their writing" (Purves, Rogers, & Soter, 1990, p.133). Young writers need to vary their writing in response to the needs of writing tasks (Langer & Applebee, 1983). In order for young learners to recognize and respond to the "needs" of a particular writing task, they need reading/writing experiences with both fiction and nonfiction reading materials. "The integration of both fiction and nonfiction helps children experience two ways of knowing literature" (Crook & Lehman, 1991). Huck et al. (1987) advocate the integration of fact and fiction across the curriculum as an "exciting and satisfying way to learn" (p. 618). Making informational material a part of the

early elementary school curriculum may have an impact on the so-called "fourth-grade slump" (Chall, Jacobs, & Baldwin, 1990).

The following studies reveal that what children learn depends partly on the nature of the student/teacher interaction around informational books. According to Dyson (1981), who found talk to be an integral part of children's early learning about writing:

> All that children write, your response to what they write, their response to each other, all this takes place afloat a sea of talk. Talk is what provides the links between you and them, what they have written, and each other (p. 29).

The talk surrounding a writing task moves children forward in their understanding of literature, which is "constructed as an experience between the reader and the text" (Lehman, 1991, p. 2). Talk also facilitates the child's construction of an understanding of what he or she wants to write about. It facilitates children's ability to express their current idiosyncratic understandings through writing. Talk provides a focus, a new understanding, and provides children with a sense of multiple perspectives. Multiple perspectives enable children to think critically; taking into account the perspectives and stances of others (Dyson, 1989).

Nature of Student/Teacher Interactions Using Informational Books During Reading and Writing Events

Recent researchers (Dyson, 1981; Galindo, 1990; Rowe, 1986; Short, 1986) have found that it is through the student/teacher interactions that children's learning is moved forward. First, research studies looking at talk will be reviewed, providing the foundation for each kind of talk that occurs within elementary school classrooms and its significance. Second, Vygotsky's theory will be discussed as it relates to the nature of effective student/teacher interaction in elementary school classrooms. Third, the social interactive learning models of Nystrand (1989) and Short (1986) based upon Vygotsky's theory will be explained.

Dyson (1981, 1985, 1989) explored the elements of literacy learning of inner-city preschool children in a metropolitan setting. Realizing that many factors influence and are interwoven into literacy learning, she wanted to discover what the major contributing elements were to young learners' literacy learning. Dyson (1981, 1985, 1989) determined that the interrelationships between the children's writing, drawings, and their social interactions with one another and the teacher were the major influencing factors on their literacy learning.

Talk between teachers and students is dynamic and possesses a significant influence on learning. Roser and Martinez (1985)

studied the talk of 4- and 5-year-olds. They wanted to determine the importance of talk in assisting young learners' construction of meaning. The children listened and responded to ten stories. Each story was read three times by their teachers. The children responded to the stories in ways similar to the adult role model, supporting the influence of talk and the notion that knowledge is socially constructed (Webb, 1989; King, 1990).

Rowe (1986) explored the nature of literacy learning of 3- and 4-year-olds in a day-care setting. She wanted to understand which elements of the context influenced young learners' literacy learning. Rowe (1986) found "two general types of 'intertextual' connections that are important. The first type is the formation of shared meanings through conversations and demonstrations. The second type involves linking current literacy experiences to past experiences" (p. 272). Children, through conversations with one another and the teacher, come to share meanings. Through the creation of shared meanings, children view one another's worlds through similar eyes. Once the children share meanings through their talk, they can then relate the new view of the world (i.e., shared meaning) to their previous view of the world.

Short (1986), observing first graders, wanted to understand and describe the influences of text on the thinking and learning of young learners. Short (1986) believed that the classroom learning environment was key to young learners' success. She also believed

that learners pursue the construction of text based upon their own experiences, interactions with others, and connections with other texts. Short (1986) corraborated Rowe's (1986) finding; a collaborative, meaning-centered learning environment engaged learners more fully and actively in learning and encouraged higher levels of thinking.

Galindo (1990), like Burton (1985), acted as a teacher-researcher and examined the social relationships and interactions among bilingual children. He focused his study on one type of literacy event -- dialogue journals. His study took place with the same group of children from grade one through grade two. Galindo (1990) believed that the social interactions among children and with a teacher were important to young bilingual children's literacy learning. He found that social interactions "assisted students in gaining experience in using oral and written language" (p. 274).

In all of these studies, social interaction between young learners and the teacher was paramount in facilitating students' learning. Although each study highlighted how important the influence of social interactions with peers and the teacher was, the studies also propose a certain kind of learning environment. These studies promote a supportive, interactive learning environment that encourages young learners to actively participate in order to build a socially productive community of learners. To accomplish this, it is

necessary to understand the underlying theories that inform and support a social interactive learning environment.

A social constructivist theoretical perspective, represented principally in the work of Vygotsky (1978), informed and influenced each of the researchers discussed in this chapter. Each of the reviewed studies asked "*how* children come to know" and "*what* influences that knowing."

Four principles undergird a social constructivist perspective. *First*, children are information users and use language to construct meaning. Vygotsky (1978) believed that speech played an important role in accomplishing any task. When a child is engaged in a new task, his or her speech accompanies that task, asisting the child in its completion. As the child gains control of a task, the child's speech actually preceeds the task (Vygotsky, 1978, pp. 25-26). Halliday (1982) argued that understandings concerning language are learned within meaningful contexts. He believed that as children use language they are simultaneously involved in three kinds of language learning. They learn language itself, they learn about language, and they learn through language. All three are happening at the same time and are dependent upon the social context.

Second, a social constructivist perspective implies that children's learning does not happen in a vacuum. Learning occurs with peers in a purposeful social context with conversational

interaction. As peers and the teacher share their discoveries, presenting one another with conflicts and anamolies, they learn from each other.

Third, the distance between a child's individual capacity and the capacity to perform with assistance (Tharp & Gallimore, 1988, p. 30) is key to Vygotsky's (1978) theory -- the Zone of Proximal Development. This Zone of Proximal Development describes and is dependent upon the social nature of learning and the learner. By proposing that learning in social situations is always in advance of independent activity, Vygotsky (1978) suggests a process of learning and firmly roots young learners' constructed meanings within the social reality of the child's overall learning community. For a Zone of Proximal Development to be created, a joint activity must be created, establishing a context for teacher and student interaction. Once the child approaches independent action, the expert (i.e., more capable peer, teacher) can use various means of assisted performance (e.g., modeling, questioning, small groups) to promote learning (see Figure 1).

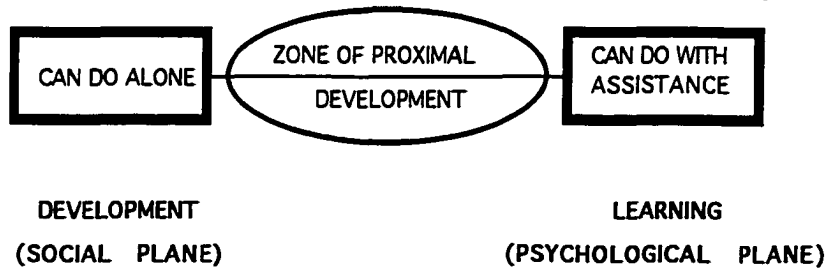

Figure 1. Vygotsky's (1978) Zone of Proximal Development

Fourth, a social constructivist view presents development as context dependent. Vygotsky (1978) believed that the context in which social interaction occurred was important and argued that a child's development cannot be understood by studying the individual. We must also examine the external social world of that child. The developing mind, then, is understood by studying the social interaction of teaching and learning (Tharp & Gallimore, 1988, p. 19). After the child performs tasks in cooperation with his peers and/or teacher in a socially interactive context, the child is eventually able to perform those same tasks independently. Vygotsky (1978) referred to the process of moving from the social to the psychological as internalization (Tharp & Gallimore, 1988, p. 29). During this process of internalization, the child is not a passive recipient, but is reinventing and restructuring information. Piaget (1969) said "to understand is to reconstruct" (Tharp & Gallimore, 1988, p. 29).

Nystrand (1989) and Short (1986) have used a social constructive perspective in developing their learning models.

Nystrand (1989) represents the social interactive theory of discourse through a model showing how meaning is negotiated between the writer and the reader with the text as the medium (see Figure 2).

Figure 2. Nystrand's (1989) Interactive Model

Short (1986) argued that the potential for learning and thinking are changed when the classroom environment facilitates intertextuality. Intertextuality includes experiences, ideas, language, and knowledge about objects and people--not just book-to-book ties. A collaborative and meaning-centered learning environment engages learners more actively in learning and encourages higher levels of thinking. Figure 3 is Short's diagram of the learning process.

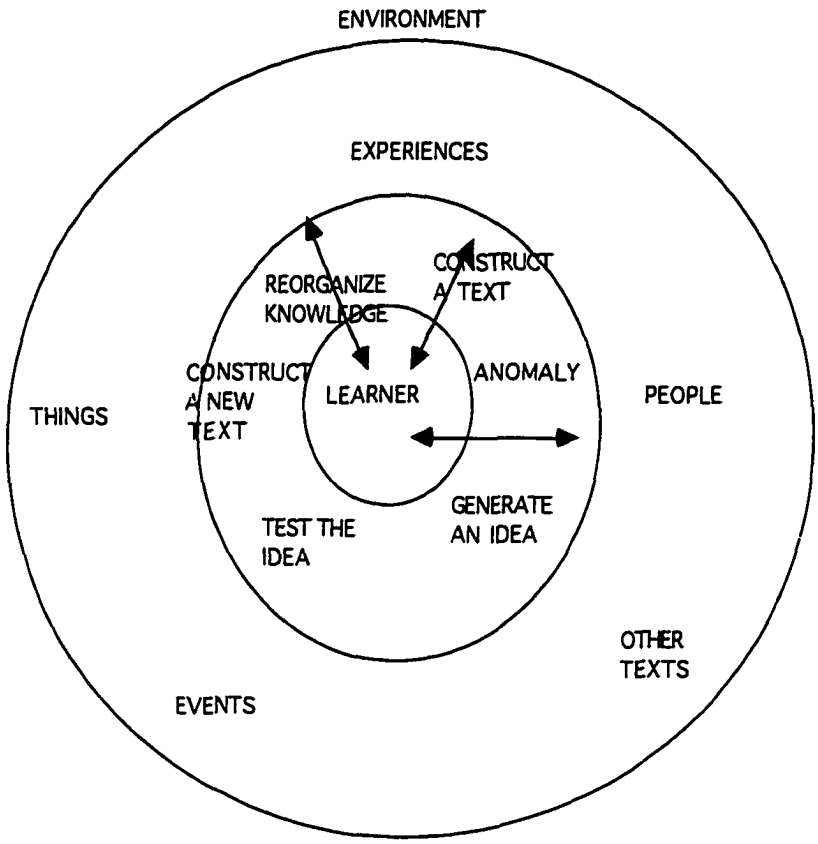

Figure 3. Short's (1986) Learning Process Model

For children to benefit from social interaction, the learning environment needs to encourage and promote spontaneous talk in the classroom. It is the teacher who "creates the possibilities for the network of relationships" (Rosen, 1973, p. 38) within each learning environment. For children to make "connections," they need to be actively involved in their learning. Making connections within a supportive learning environment, one promoting social interaction,

increases the children's learning potential. Social interaction among the members of a classroom encourages language users (Rowe, 1986) to see new connections and to expand their learning.

Summary

The purpose of the chapter was to examine and to discuss key research that influenced the design and analysis of the research study. Three areas of research were targeted: (1) the extent to which and how informational books are used in elementary school classrooms during reading and writing events, (2) what students learned from experiences with informational books, and (3) the nature of student/teacher interactions during reading and writing events in which informational books were used.

This literature review revealed the following: *First*, literature benefits a child's desire to read and stimulates a young learner to write. Children's literature is listened to and read for the sheer pleasure of the places it can take a child, for the people they will meet, and for the beauty of the language carefully crafted by the author. Rosenblatt (1978) states:

> The boundary between inner and outer worlds breaks down, and the literary work of art, as so often remarked, leads us into a new world. It becomes part of the experience which we bring to our future encounters in literature and in life (p. 21).

Informational books provide children access to new worlds and new interests. "By their very nature children are information sponges; they want to know about the real world" (Kobrin, 1988, p. 12). Informational books can satisfy that need to know and "offer children new perspectives on familiar topics" (Huck et al., 1987, p. 589). Most important, informational books give children an opportunity to be immersed in language used differently than in other children's books.

Second, language is one of the primary instruments we use to interpret and organize our experiences -- that is, to learn how to learn. Young children use language to make sense of their world. They "take over" familiar language and use it to create texts. Informational books presents the world in their own language and style. Young learners who are provided experiences with informational books become familiar with the language, style, and format of informational books and will incorporate those literary elements into their own writing.

Finally, social interaction is not only the mechanism through which children understand what it is they know, but also the device that pushes learning ahead. Hepler and Hickman (1982) proposed the idea of a "community of readers" in response to their observations about how children work together with peers and teachers in learning how to become effective readers. They noted that much of the talk occurred incidentally and it was the talk that helped the children negotiate meanings.

In conclusion, the literature reviewed in this chapter suggests that the classroom environment should encourage and support the dialogue among teachers and peers. The context should extend and enrich literacy events.

CHAPTER III

DESIGN OF THE STUDY

To examine the influence of informational texts on first-grade children's writing, a descriptive case study approach was used. Two important aspects of this research were the participant-observer records collected within the classroom and the multiple case studies of children, each aspect drawing on a variety of qualitative techniques. The procedures followed are described within two phases of the data collection section. The first phase was a baseline data phase implemented to select the teacher and to describe the use of literature within that classroom context.

Data were collected during the baseline data phase by means of audio recordings, teacher-response journal entries, teacher interviews, field notes, student read-alouds, and children's writing samples. Data were collected on all of the children within one first-grade classroom (n=25; boys=11, girls=14).

The second phase of the research study was a case study investigation (n = 3, 2 boys and 1 girl) providing an in-depth examination of three writers. They represented the range of student writing abilities available within this classroom. Data were collected

through audio recordings, teacher-response journal entries, teacher interviews, student read-alouds, field notes, and children's writing samples.

Across the two phases of the research study, the methods described next were used consistently.

Observational Data Collection

Teacher Focus

Teacher-to-student talk was an important factor of investigation within this research study. Due to such studies as Dyson (1981) and Burton (1985) it was determined that what the teacher talked about and focused on influenced the children's learning. The teacher-to-student talk was observed and recorded (1) before, during, and immediately following the sharing of children's literature, and (2) before, during, and after each accompanying writing activity. All of the literature was selected and introduced by the teacher.

Student Focus

Just as teacher-talk influences children's learning, peer-social interaction also influences children's learning. Student-to-student talk was observed and recorded before, during, and after the writing activity accompanying each shared read-aloud. Again, all of the stories were teacher-selected and introduced.

The children and their classroom behavior were observed and recorded (1) during and immediately following the shared read-aloud, and (2) before and during the accompanying writing activity.

Interactional Data Collection

The importance of collecting interactional data grew out of several previous studies (Dyson, 1981; Burton, 1985; Skillings, 1990; Short, 1986; Rowe, 1986). The researcher observed and interacted with the children in order to understand: (1) what the children were writing, (2) where the children's ideas for writing originated, and (3) how the children interacted socially while writing.

The researcher observed and interacted with the classroom teacher in order to understand: (1) the teacher's behaviors and focus before and during a shared read-aloud, and (2) the teacher's focus before and during a writing activity.

Site

The site chosen was one elementary school within a large suburban school district. The school served students from a broad spectrum of socioeconomic status, ethnicity, and abilities, and the first-grade classroom selected for study represented this same diversity. The school serviced children in grades K-5, four classrooms at each grade level, and a total school population of 542 children. During the 1990-91 school year, the teachers had been

involved in a university course taught in their district. This course focused on the use of children's literature across the elementary school curriculum.

Students

Although the primary focus for this research study was on gathering case study data, observational data of the larger group provided a backdrop for the data collection and aided in the interpretation of case study data. The availability of information about the broader range of student writing within this classroom also assisted the researcher in refining and validating the data analysis categories.

In exploring how experiences with informational stories are reflected in children's writings, three children (two boys and one girl) at various stages within their writing development were the subject of the case studies. Based upon teacher recommendation and an analysis of student writing samples by the teacher and the researcher, one child was determined to be an above average writer for a first grader, a second child "at grade level," and the third child "below grade level" in his writing performance. The teacher determined their writing capabilities by weighing factors related to their attitudes toward writing, the number of completed and in-progress pieces in their writing folders, and their overall performance. The classroom

teacher and the researcher collaborated in selecting the case study children.

Teacher

Mrs. K. was a first-grade teacher for 20 years and was completing her Master's degree in Early and Middle Childhood Education at The Ohio State University. She regularly attended professional conferences and had a commitment to and a strong conviction about the use of children's literature across the curriculum. She shared stories of fiction and nonfiction within an integrated curriculum design. Her interview responses indicated that she subscribed to Vygotsky's (1978) learning theory and wanted each learner to have adequate opportunities to succeed. She also saw the importance of supplying the information students were not yet capable of contributing on their own. Mrs. K. stretched and extended the children's learning potential, and viewed each of her young learners as both a teacher and a learner. Mrs. K. shared her perspective on learning in a personal interview on February 4, 1991:

> Each of my young people can do many, many things and do many of them very well. Giving each child the opportunity to share what it is they can do very well with their classmates has many far-reaching benefits. First, the child who is the acting mentor for a particular task, is assisting a less able classmate to excel in a whole new area. Second, playing the role of expert provides many of my children perhaps their first

> opportunity at feeling successful; at feeling like they have something worthwhile to contribute.

Mrs. K. was a "kidwatcher" (Goodman et al., 1989) and flexible in meeting the children's needs, often finding what worked for one child did not work for another. She learned to modify her approaches in order to meet the children's individual learning needs, realizing that each child may learn something different from the same lesson.

Mrs. K. worked with the children as they engaged in independent tasks at centers and pursued individual interests. When the children wrote independently, following a shared read-aloud, Mrs. K. also wrote independently. As she wrote, she routinely glanced around the room and observed the children. After 5 to 10 minutes, she walked around the classroom assisting children and took notes on each of the children's writing behaviors and written products. Mrs. K. also conferenced with two or three children each day.

During independent reading time, Mrs. K. also read. After a few minutes, she called a small group of children to the Sharing Center for reading. These groups were flexible and heterogeneous. Mrs. K. recorded notes on each of the children's reading during this time, later recording the information in each child's portfolio.

Data Collection

Gaining Access

The researcher assisted in a district-wide children's literature course, which met for two and one-half hours twice monthly from January, 1990 through June, 1990. Class sessions were audiotaped and field notes were taken. Classrooms were observed and teachers were interviewed, establishing teachers' personal responses to literature, their instructional philosophies concerning the use of literature, and writing within their classroom learning contexts.

One teacher was selected to participate in this research study. Mrs. K. expressed interest in whole-language, literature-based learning. She integrated children's literature across the curriculum, using informational literature and expository writing tasks. Mrs. K. expressed a willingness to explore new approaches in her work with the children and to share her ideas, thinking, and classroom for this research project. In preparation to become a teacher, Mrs. K. had received extensive course work in science, history, and language arts. She revealed that she had limited experiences with math and was, therefore, not as comfortable teaching and experimenting with math. Her areas of expertise were displayed in her selection of children's books and in her willingness to be flexible with the curriculum. Initial observations and interviews indicated that the Language Arts and Science periods in this classroom provided the

richest sources of data to study the influence of informational texts on first graders' writing.

Baseline Data Collection

Initial baseline data were collected for a period of two months, January, 1991 through February, 1991. The baseline data phase served three major purposes:

(1) It established the teacher's stances towards children's literature, focusing on her personal responses to informational literature, and illustrated how these stances were reflected in her classroom practices.

(2) It enabled the researcher to observe the teacher's instructional practices and the students' written products, an outgrowth of shared informational literature.

(3) It gave an opportunity to examine the influence of informational literature on children's expository and narrative writing.

Data collected in the multiple case studies could also be validated against the larger sample of students, and categories developed for analysis of the data could be determined as reliable and valid.

Data were collected through audio recorded interviews and classroom interactions, teacher's journal entries, field-notes, and

student writing samples. Each of these sources of data are described below:

Audio Recordings. The teacher and children were audio-recorded during shared read-alouds within language arts and science, in writing activity discussions, and during teacher-researcher and researcher-student interviews.

Journal Entries. Mrs. K. wrote reflective journal entries following the sharing of selected informational literature with her students. These reflective journal entries documented teacher responses to group read-alouds, her thinking about the children's writing as a result of shared literature, and her interpretation of the children's responses to both the literature and the accompanying writing tasks.

Classroom Observations/Field Notes. Classroom observations were made a minimum of twice per week. Field notes were taken by the participant-observer during each classroom visit.

Student Writing Samples. Writing samples were collected for each of the writing activities corresponding with shared informational fictional stories in order to examine the elements of informational literature that children used in their writing.

Interviews. The teacher was informally interviewed. The interview questions grew out of previous studies (Dyson, 1981;

Burton, 1985; Skillings, 1990; Short, 1986; Christie, 1989, 1990a, 1990b). These interviews were spontaneous and the questions asked emerged from the specific classroom context being discussed (see Appendix A). Informal interviews were conducted whenever the researcher was curious about the use of a particular text or a particular accompanying writing activity.

This baseline data phase provided insights into how Mrs. K. defined and responded to informational and fictional literature, how children of varying abilities borrowed from and improvised upon these models of literature, and what range of student writing occurred within a classroom that was integrated around the use of literature. Three Case Study children were then selected from the class of 25 first-grade children. These case study children were selected through teacher recommendation, and a joint teacher-researcher review of several narrative and expository writing samples that accompanied shared read-alouds from language arts and science. The narrative and expository writing samples produced by the three case study children were then compared to narrative and expository writing samples completed by the 25 children within Mrs. K.'s classroom. The researcher wanted the case study children's writing to be representative of their classmates' writing. Mrs. K. talked about the research study with the children and their to participate in the study was considered by Mrs. K. and the researcher in the final selection of participants.

Case Studies of Children's Writing: The Use of Informational Literature

The major outcomes of the baseline data collection phase were to: (1) explore and describe the overall classroom learning context, (2) select case study students, (3) refine the methods for case study research, and (4) refine the data analysis techniques. Language Arts and Science were focused on throughout this research study because the greatest amount of informational literature was used within these content areas and provided the best potential for answering various facets of the posed research questions. The case study portion of data collection occurred between March 1, 1991 and June 13, 1991.

Portrait of the Case Study Children

The following portraits are a synopsis of information gathered from teacher interviews and researcher observations.

Anthony

Anthony wrote often and independently, many times preferring to engage in writing over other activities. Anthony had little difficulty developing an idea or direction, nor in completing any writing task. He clearly expressed his ideas and displayed a command of language. Anthony expressed himself in both expository and

narrative and was eager to share and discuss his written work with others.

Jamie

Jamie waited for specific directions from the teacher before engaging in writing. She was, however, capable of expressing her ideas and thoughts in writing and integrating illustrations. Jamie wrote informational and fictional pieces, and eagerly shared her writing with others.

Jason

Jason avoided writing. He asked, "Do I *have* to write?"; "How *much* do I have to write?"; or "Can I draw instead?" Jason had difficulty generating ideas and expressing his thoughts in writing, avoided sharing his work with his peers, and hesitated sharing his thoughts or written work with Mrs. K. Jason, however, willingly participated as a case study student.

Case Study Data Collection

Data collected on all 25 children provided comparative information about the case study children. Additional data collected on the case study children included audio recordings of student read-alouds, teacher journal entries about the specific children, classroom observations and field notes gathered as the case study children wrote, and their writing samples. Specific questions were asked of

each case study student in individual and small group writing settings. These questions and student responses allowed the researcher to explore how their ideas were generated and developed.

Analysis of Data

Data were reviewed and interpreted through content and text analyses on the same day they were collected. All data gathered from interviews, classroom observations, audio recordings, and writing samples were coded and examined for emerging patterns. Categories emerged from the baseline data collection phase that suggested specific interactions to be used as a focus during the case study data collection phase as each child was involved in the following settings: (1) teacher-talk, (2) peer-social interaction, and (3) shared stories.

The categories that emerged from the baseline data phase assisted in the focus, refinement, and analysis. Several procedures were used to identify specific elements that the case study children borrowed from shared texts, from their peer-social interaction, and from teacher-talk. A text analysis and content analysis were completed on the informational stories read and discussed during group-shared read-alouds. These shared read-alouds occurred during Language Arts and Science instruction.

Summary

A qualitative approach employing quantitative methods was used to explore the influence of experiences with informational stories on the writing of first-grade children. Before the study began, a staff inservice program was offered at a local school. The inservice program began in January, 1990 and was completed in June, 1990. The participants in the inservice program met every other week for two and one-half hours during that 6-month time period. A teacher from this inservice group was asked to become part of the research study. The study, conducted across one academic year, was divided into two phases. Phase I of the research study, the base-line data collection phase, began in January, 1991 and was completed in February, 1991. During Phase I, the researcher visited the selected classroom a minimum of two times per week for two months for a minimum of one and one-half hours per visit. These visits occurred between 9:00 a.m. and 11:45 a.m, when the children had Language Arts and Science. Phase II of the research project, the case study data collection phase, began in March, 1991 and was completed in June, 1991. During Phase II, the researcher visited the selected classroom a minimum of twice weekly for three months and for a minimum of one and one-half hours per visit. These visits occurred between 9:00 a.m. and 11:45 a.m., during Language Arts and Science.

The researcher's role was that of participant-observer, recording events through tape recordings and written field notes. The researcher also interacted with the children at their initiation.

CHAPTER IV
DATA ANALYSIS: THE CLASSROOM LITERACY ENVIRONMENT

This study explored the influence of informational books on children's writing through examining classroom contexts and three case study children. This chapter describes the classroom contexts, students and the curriculum, and the categories that emerged from the baseline data. The first section of this chapter provides a description of the classroom contexts and is organized around three topics: (1) the classroom, including the physical arrangement of the room, and the available resource materials; (2) the class members, the social community of learners with whom the case study children interacted; and (3) the curriculum, as it emerged from field notes, interviews, and audio tapes. The curriculum will be demonstrated by providing a narrative of a sample day, February 11, 1991 (OB #10). The day is broken into curriculum subheadings of morning business, interactive writing and shared reading, read-aloud during language arts, independent writing, free-choice time, science, and extensions.

Next, the data analysis categories are identified and discussed. This includes a discussion of how they emerged and their relevance

for the case study analysis in Chapter V. The information provided within this chapter will provide descriptive data to answer the following research question:

> *Question 1: What experiences with informational literature, during the language arts and the science portion of the curriculum, are provided for the children in one first-grade classroom?*

The Classroom

The front and center of Mrs. K.'s classroom was known as the Sharing Center. This area served as the center for shared read-alouds, interactive writing, and as a meeting place for groups and individuals to share. The majority of the days' activities began in this sharing center (see Figure 4).

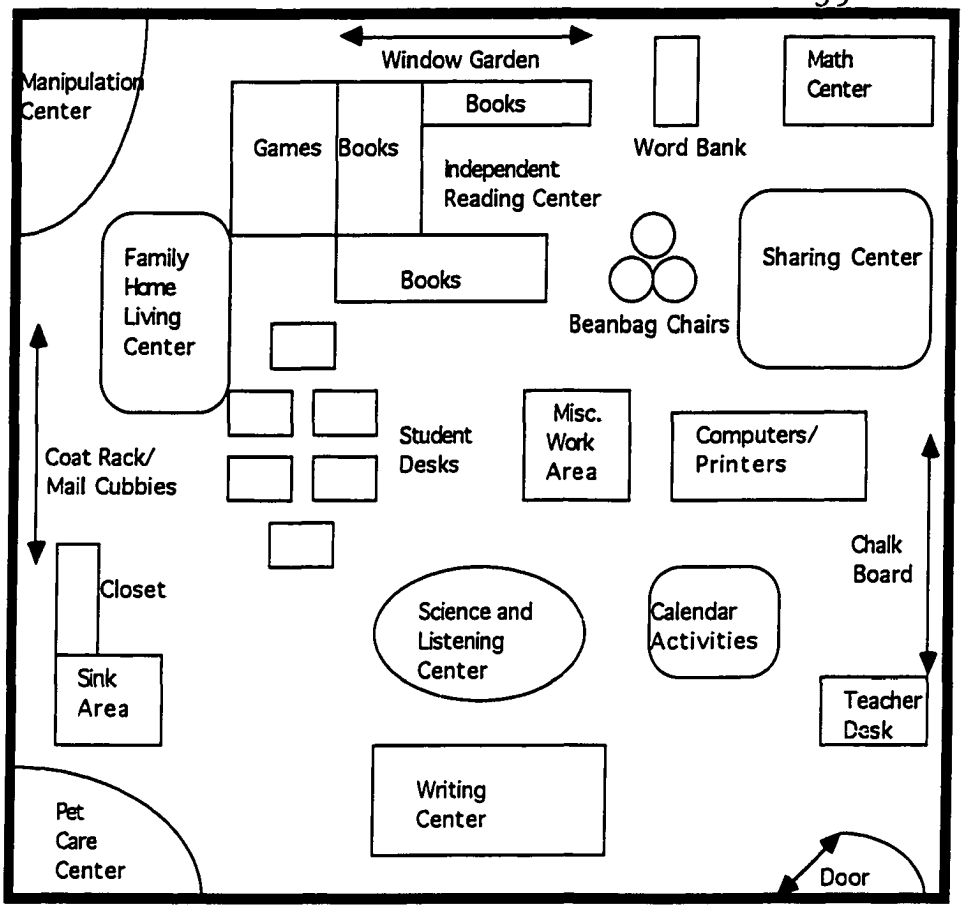

Figure 4. Diagram of Mrs. K.'s Classroom

In the rear of the classroom were clusters of three or four student desks. The configuration changed frequently, depending on the work and needs of the children.

The Independent Reading Center contained several large stuffed animals and a rocking chair that the children could sit on to read. The area had several low bookcases filled with a variety of genres. The bookshelves, arranged in a U-shaped configuration,

provided an inviting reading environment. The top of the bookshelves displayed books read during shared read-alouds or books written by the "Author-of-the-Month." The Independent Reading Center was a favorite gathering place. Children rotated in and out of the independent reading area during center and free-choice times. The word bank was located within the Independent Reading Center.

Next to the Independent Reading Center was the Math Center. The Math Center also contained low bookcases. These bookcases were filled with plastic dishwashing-tubs, each containing countables such as beads, blocks, beans, straws, and coins.

Behind the Independent Reading Center was the Manipulation Center. This area consisted of large and small magnetic letters, a variety of magnetic shapes, magnetic boards, games, large cardboard blocks, Leggos, and other conventional building materials.

At the back of the classroom was the Family Home Living Center. This area was used for dramatic play and group brainstorming.

In the opposite corner of the classroom from the Manipulation Center was the Science and Listening Center. The display and materials changed at this table according to the thematic unit of study. Books, audio tapes, and small manipulatives were available. The bulletin board housed in the area also reflected the current thematic unit of study. During the dinosaur unit, for example, there were three-

dimensional dinosaurs, trees, rocks, ponds, and smaller animals made from construction paper, representing a prehistoric environment. Each dinosaur was labeled with its scientific name.

Next to the Science and Listening Center was the Writing Center. The Writing Center contained supplies such as paper, pencils, crayons, markers, rulers, scissors, envelopes, and construction paper. The children's journals and portfolios were kept on a shelf in this area.

The classroom also had a Pet Care Center. This center contained a large aquarium with tropical fish, another smaller aquarium with goldfish, a small bowl with miniature water frogs, and a wire cage with a rabbit. These pets were the responsibility of the children and they rotated care for the pets just as they did other classroom jobs. Mrs. K. provided fictional and informational books on various kinds of pets and, periodically, held small group sessions guiding the children's observations and learning about their classroom pets. Paper and pencils were also provided for the children, encouraging them to record, share, and compare their observations.

Along the windowsill inside of the classroom and immediately outside of the window, the children had a garden. On the inside, they grew bean plants and flowers. On the outside, the children had planted a small tree, several bushes, and a variety of wildflowers.

Hanging from their small tree was a bird feeder. Mrs. K. had fictional and informational books available and provided the children with writing materials. On one occasion, the children were watching their bean plants grow. Mrs. K. had charts available for the children to record their data.

The children in Mrs. K.'s classroom were immersed in "environmental print." Children's work was displayed; it hung from the walls, doors, cabinets, and shelves. An alphabet chart, a calendar, a weather chart, and a job chart were displayed. Art work and poetry were also a part of this rich literacy environment. Most items throughout the classroom were labeled.

Each child was given an opportunity to work in all learning centers within a given week.

The Class Members

The informal tenor of the classroom enabled the children to move freely around the room, interacting with one another. The children rotated independently in and out of the learning centers as their individual tasks necessitated.

When problems arose within the learning environment, Mrs. K. expected the children to resolve their own conflicts. When this was not possible, she intervened, acting as a negotiator and enabled the children to reach a workable solution with adult guidance.

The Curriculum

Introduction.

Mrs. K.'s classroom was a self-contained learning environment. However, the children had separate periods and teachers for music, art, and physical education. The children's literacy environment was flexibly organized, allowing time for the different content areas. The children received daily instruction in language arts, mathematics, social studies, and science.

Mrs. K.'s learning environment was not segmented. The children engaged in several content areas at a time and children's literature was integrated throughout the day and across the curriculum. In order to provide the reader with a vivid picture of Mrs. K.'s classroom, the children, and their lively interactions, a sample day is presented in the following narrative constructed from researcher fieldnotes, interviews, and audio tapes (see Table 1).

A Day In The Life . . .

Table 1. Daily Schedule

Daily Schedule*

Event	Time
Language Arts	
Morning Business	9:00 - 10:20 A.M.
Interactive Writing & Shared Reading	
Restroom Break	
Read-Aloud: Language Arts	
Independent Writing	
Morning Recess	10:25 - 10:35 A.M.
A.M. Independent Work Time	10:35 - 11:00 A.M.
Free-Choice Time	
Restroom Break	

Table 1. (Continued)

A.M. Centers Math Science Extensions	11:00 - 12:00 A.M.
Lunch	12:00 - 12:35 P.M.
Specials (i.e., Art, Music, Gym)	12:40 - 1:00 P.M.
P.M. Centers Read-Aloud Communities (Social Studies)	1:00 - 2:25 P.M.
Afternoon Recess	2:25 - 2:35 P.M.
Restroom Break	2:35 - 2:40 P.M.
P.M. Independent Work Time Independent Writing/Writing Conferences Independent Reading End-of-Day Routine (i.e., preparation for home)	2:40 - 3:25 P.M.

*Mrs. K. was flexible in using this schedule; the order and time structures are approximate

Table 2 contains a list of codes that will be used throughout this document to indicate sources of data used to present findings related to research question 1.

Table 2. Data Codes

CODE	TYPE	DEFINITION
WS	writing sample	children's written products
FN	field notes	taken by researcher during classroom observation
PN	personal note	researcher comments about observations
TN	transcription	audio-recordings of classroom events
TR	teacher note	comments made to researcher by teacher
OB	observation	made by researcher
RJ	response journal	written comments made by teacher
IF-INT	informal interview	informal tape recorded discussion between researcher & teacher
F-INT	formal interview	researcher asks teacher predetermined questions; session tape recorded
{}		missing or inaudible word
[]		supplied by researcher

The following narrative uses selected excerpts from the daily curriculum that pertain to this research study. It is intended to provide the reader with a flavor of the classroom learning context and the social interactions within the overall learning environment. The first part of the day begins prior to the first bell, as each child enters on his/her own schedule.

[Excerpt from classroom observation FN, OB #10, 2/11/91]:

> It's 9:00 a.m. on Monday, and the children are arriving. Mrs. K. is standing in the doorway and greets the children as they enter.
>
> As the children go to the back of the room and put away their backpacks and lunchboxes, they begin interacting with one another. Mrs. K. uses this early morning time to organize herself for the pending morning routine, and she allows the children the same opportunity. [PN, OB #10, 2/11/91]
>
> "Guess what I saw?" Andy asks Corey, Eric, and Blake.
>
> "Teenage Mutant Ninja Turtles!" Blake yells out with a big grin on his face. The other boys stop what they are doing and look at Andy, waiting for a response.
>
> "Nope! Teenage Mutant Ninja Turtles II!" Andy giggles, the other three children giggle, and the three boys then involve themselves in a mini dramatic reenactment, each assuming the role of a Ninja Turtle. [FN, OB #10, 2/11/91] [PN: Assuming the character roles, the boys chase one another around the room.]
>
> In another corner of the classroom, Rachel, Ashley, and Alison gather in the Independent Reading Center. Rachel is comfortably seated in the overstuffed chair with Aliki's Digging Up Dinosaurs, holding the book so the pictures are facing Ashley and Alison, imitating Mrs. K. As Rachel reads the text aloud, she asks questions, points out aspects of the illustrations, and makes references to other texts and experiences. [FN, OB #10, 2/11/91]

> Rachel begins, but is interrupted by Alison. "The title is said again back here [reaching up, flipping through the pages, and pointing to the inside title page] and you're supposed to say it again."
>
> While the various morning conversations are under way, Mrs. K. checks her list to see which child is scheduled to take home the writing suitcase that evening.

The writing suitcase was a plastic case that contained a variety of writing materials. A different child took the suitcase home each night, writing and making anything he or she wanted. Its purpose was twofold: (1) to stimulate writing at home, and (2) to get families interacting. When the children wanted, they shared what they made or wrote with their peers.

> All the while, Mrs. K. is making "mental notes" about which of the children engaged in which activities, which children interacted with one another. She later writes her observations down in her response journal.

[Excerpt from Mrs. K.'s Journal, Entry #22, 2/11/91]:

> Rachel, Ashley, Alison reading together. Rachel has come a long way in her reading and leadership skills. Alison getting along with her peers better; not so bossy. Encourage her to do more reading.

Interactions, negotiations, and reenactments occurred as the children awaited Mrs. K. to signal the official start of their school day. At 9:15 a.m., she began the formal school day.

Morning Business

The Morning Business enabled Mrs.K. and the children to collaboratively accomplish required record-keeping tasks. During the

Morning Business, Mrs. K. integrated what the children were learning within a meaningful task.

[FN, OB #10, 2/11/91]:

> Mrs. K. emphasizes various skills within an integrated learning context. For example, in order to keep track of who is buying and who is packing lunches for the day, the children have a chart on which they graph the lunch count.

Once the record keeping tasks were completed, the children and Mrs. K. said the Pledge of Allegiance, completed the daily calendar activities and weather chart, and engaged in an interactive writing and shared reading of the daily news.

Interactive Writing and Shared Reading

Mrs. K. integrated interactive writing and shared reading, facilitating individual learning through group support and cooperation. New concepts were introduced and familiar ones reviewed through interactive writing and shared reading. Mrs. K. summarized her reasoning in an informal interview:

[TN, OB, IF-INT #10, 2/11/91] (R=Researcher, T= Teacher):

> R: You use a lot of interactive writing and shared reading activities with the children. I'm just curious what your intentions or goals are?
> T: I believe most of the children in here are capable of doing lots of things. Some of them lack self-confidence, others aren't quite sure how reading and writing fit together. When I have them do tasks in whole or small group situations, some of my shy, less confident students are abie to use their literacy skills with great confidence. I get a chance to see what it is

> they each really do know. They are more apt to take risks in group situations than if they did the same activity with just me.

[FN, OB #10, 2/11/91]:

> Mrs. K. sits in the front of the room in a low chair with large sheets of paper clipped to a low easel off to one side. Several colored markers are lined up on the rack of the easel. Mrs. K. initiates the morning news by asking, "What should we start with today?" Callon says, "Today is Monday, February..."At this point Callon hesitates. Mrs. K. and the other children provide Callon with the courtesy of giving him time to think. After a reasonable length of time, Mrs. K. says, "Gosh, I've forgotten what date it is, too, Callon. M-m-m...how can we find out?" Rachel says, "Go back over to the calendar and look!" "Oh! That's a terrific idea!"

The children contributed their individual news item and wrote what they could. Mrs. K. always went back, had the children point to the words and read aloud. These News Charts were then displayed for the children to read.

As the children created the daily news chart, Mrs. K. used the opportunity to teach and review skills in context. For example, Mrs. K. left the S off of d-u-c-k-s. By having the children read and reread the entire message, they discovered the mistake and explained why the word needed an S on the end.

Read-Aloud: Language Arts

Mrs. K. engaged the children in shared read-alouds for several reasons, including to introduce new stories. She also engaged the children in the story line, challenged them to think about the language

of the story, and encouraged them to predict. Through the use of shared read-alouds, Mrs. K. focused the children's attention on specific aspects of the text, such as pictures supporting the text, the dedication page, and concepts about print.

[FN, OB #10, 2/11/91]:

> Mrs. K. picks up a stack of books from the corner of her desk and goes to the Sharing Center. All eyes are on Mrs. K.
>
> Mrs. K. picks up the first book, turns it so the children can see the front cover, and with great enthusiasm begins introducing the first book from her stack, Shadow Magic by Seymour Simon.

First, Mrs. K.'s introduction focused the children's attention on the cover of the story. Then she read the title, author, and illustrator of the story. Shadow Magic was introduced within the context of a thematic unit. During language arts and science, Mrs. K. read and re-read many texts about shadows; therefore, the children had background experiences and knowledge upon which to draw and to predict when shown the cover of Shadow Magic.

[FN, OB #10, 2/11/91]:

> Mrs. K. turned each page of the story in anticipation of things she either wanted to point out to the children or to give the children time to focus on things for themselves. As she was reading the title of the book, the children, without hesitation, read the title and the author's name along with her. Reaching the page where the story begins, Mrs. K. continued pointing out as many aspects of each page as she noticed and the children, also, pointed out some aspects of each page.

Mrs. K. proceeded with reading the text aloud to the children. As she read, the children were free to interrupt and interject their thoughts, comments, and opinions as she shared the story. Mrs. K. also stopped frequently to talk with the children about what they had just read and engaged them in making a variety of connections about shadows and the concept of how shadows are made.

During these connective activities, the conversations and questions were challenging. Each time Mrs. K. and the children read Shadow Magic, different elements were discovered by the children.

Mrs. K. read aloud many books, fictional and informational, to the children throughout the course of this research study. Each text was shared and read aloud multiple times. Table 3 indicates how many books of what type were read aloud to the children between March 1, 1991 through June 13, 1991.

Table 3. Read-Aloud Chart

Total # Books Read Aloud*	Informational	Fictional
32	20	12

*All texts were read a minimum of 3 times

Independent Writing

Independent writing time provided the children with the opportunity to explore the concepts and ideas presented during

whole or small group work. It also provided Mrs. K. with the opportunity to praise each child's attempts and successes and to make necessary notations in their portfolios.

Many writing activities accompanied the morning read-aloud. Mrs. K. began the writing time by briefly mentioning the options.

Writing Journals. Two types of journals were used in Mrs. K.'s classroom. One journal the children used as a dialogue journal with Mrs. K. The children were encouraged to write poems, stories, questions, problems, etc. Mrs. K. read what they wrote and responded. In the second type of journal, the children also engaged in a variety of writing, but often would not share the writing in that journal. These journals were read "by invitation only." Neither journal was evaluated in any way.

Writing Folders. The children had two kinds of writing folders available to them, Permanent and In-Progress Writing Folders. The permanent folders contained completed pieces of writing. The children, with Mrs. K.'s guidance, decided which finished pieces to include. Pieces in this folder were kept throughout the school year, were evaluated to determine progress in writing development, and were used to demonstrate skill mastery during parent-teacher conferences. The children were to put one piece of completed writing in this folder each week. The items in the in-progress folders were pieces of writing that the children considered incomplete. The

children had several pieces of writing that were in-progress at any point in time. Mrs. K. requested that the children have no more than three in-progress items at one time. Writing conferences centered around the writing in this folder.

Writing Contexts. The writing in Mrs. K.'s classroom occurred in two contexts. The first context for writing consisted of structured writing expectations. Following the unit on Arctic Communities, for example, Mrs. K. wanted the children to write something about a specific aspect of the Arctic Communities. The children were evaluated on their finished product. Within this "assigned" framework for writing, however, the children had a wide range of writing choices. The children selected which aspect from Arctic Communities to write about, what kind of written product they would generate, and if they wanted to work independently or in a "buddy" or small group situation. The second type of writing context was totally self-selected. The children decided on their format and topic.

Writing Conferences. (1) Formal. During formal conferencing, the teacher met with specific children on designated days, and at predetermined intervals. Each child (five children per day) was assigned a day of the week to conference with Mrs. K. (2) Informal. During informal conferencing, Mrs. K. walked around the classroom assisting children with their writing.

[FN, OB #10, 2/11/91]:

> Today's writing, accompanying the reading aloud of Shadow Magic, consists of the children being given a directive by Mrs. K. She asks the children to demonstrate what they have learned about shadows. She provides them with the silhouette of either a boy or a girl and several sheets of paper cut into the shape of the silhouettes. Anthony, on the other hand, chooses a very different format. He decides to list several facts about his shadow on one page and illustrate those facts on another.

[WS, OB #10, 2/11/91]:

[PN: first page]

Story

Hi! My name is Anthony.
I like to play tether-
ball. especially
with my shadow.
We play all day

[PN: second page]

Fact Sheet

1. Shadows are made buy
something blocking the
sun.
2. They are stuck to you.
(Thats obvious.)

Concluding this writing time, Mrs. K. asked if anyone would like to share with the group. If there was no one that wanted to share, this was the time when the child who took the writing suitcase home shared what he/she did.

[FN, OB #10, 2/11/91]:

> Anthony waves his hand and says, "I do! I do!" Mrs. K. invites Anthony to come up to the sharing circle and take his place in the Author's Chair. The rest of the children gather n the sharing center. As he begins reading, the children gradually move closer. From the back of the circle, Kent bellows, "Read louder! I can't hear!" "And I can't see your pictures," says Lisa. Anthony reads louder and holds his book higher so everyone can see. Making these adjustments, he says, "Can everyone

hear me o.k.?" Anthony continues reading only to interrupt himself a few minutes later when he notices Jenny craning her neck to see his work, "I'm holding them as high as I can. [adjusting one more time] *Now* can everybody see my pictures?"

Anthony is finished reading and Mrs. K. asks Lyndsey to share her work from the writing suitcase. Lyndsey comes to the sharing center and shares her writing.

Free-Choice Time

Free-choice time provided the children with the opportunity to independently select their materials and the children with whom they wanted to work, and to either collaboratively or independently practice various learning tasks.

[TN, IF-INT #15, 2/11/91]:

> Mrs. K.: Providing the children with self-selected learning opportunities helps the children discover what they can do on their own, what they can accomplish with a peer or with my help and guidance. I have found that this time for practice and discovery then pushes each child forward in their individual learning in small and/or whole group learning situations.

[FN, OB #10, 2/11/91]:

> It's now time for math, but, realizing the children have sat for a very long time, Mrs. K. suggests they all get up and move about the room for a few minutes. When the children are given free-choice time, such as this, the children engage themselves in a range of activities. For example, Corey, Blake, and Matt go to the math center and begin gathering their materials. Ashley, Alison, and Kent take the opportunity to walk around the room and talk with friends. Anthony, Amish, and Jenny go to the independent reading center.

Science

Scientific concepts were introduced to the whole class through the reading of a literary work. For example, when the children studied dinosaurs, Mrs. K. introduced the children to the concept of a hypothesis as they discussed the possible causes for the dinosaurs' extinction. Mrs. K. further involved the children in science and its many concepts through independent and collaborative investigation at the Science and Listening Center.

[FN, OB #10, 2/11/91]:

> Having read several books, fiction and nonfiction, about shadows, Mrs. K. leads the children, first, in a discussion about shadows. She wants them to recall any interesting fact they can remember about shadows from the stories they read. She continually refers back to the texts, shows various related illustrations from the stories as the children respond, and encourages the children to revisit the language of the texts. The hands-on science activities begin inside of the classroom.

[TN, OB #10. 2/11/91]:

> Mrs. K. first wants the children to understand and be able to talk about what *is* a shadow. Mrs. K. says, "Oh! So if I see Anthony's shadow . . . I'll know it's Anthony!" Anthony says, "You might not know it's me, but you'll know it's a person!" Wanting to take this point another step further, Mrs. K. says, "And if I do this [makes shadows with her hands on the chalkboard], now what does the shadow tell you?" The children guess the various animals the shadows represent. Next, Mrs. K. extends the children into thinking about the sizes of shadows. She gets a flashlight, puts her hand in front of the light beam so a shadow is reflected onto the chalkboard. "Look at my hand [moves her hand closer to the flashlight]. What happened to it?" Several of the children yell, "It grew!" "Now watch when I pull my hand away [slowly moves hand away

> from flashlight]. Is my hand actually getting bigger or smaller?" Again, the children respond in unison, "No!" "Well, what's happening? Why does it look. . ." Before Mrs. K. can finish her question, Anthony says, "It's getting closer to the light." "Right, and when I get closer to the light, like this [models again], I'm blocking out more of the light and my shadow appears bigger." "Mrs. K.? Go up to the light more," requests Anthony. Mrs. K. says, "All the way up? [moving her hand towards the flashlight]. What's going to happen if I block all the light completely?" "No shadow!" responds a couple of the children. This line of discussion continues with such provocative questions as "Can there be shadows in our classroom when the sun isn't in here?"

Extensions

Because each child in her classroom had different needs and curiosities, Mrs. K. realized that extensions helped the children explore a familiar subject, such as plant growth, in a new way.

The children and Mrs. K. went through many other facts and concepts about shadows. She demonstrated shadows with a globe of the world, extending the children into the concepts of night and day. Next, Mrs. K. and the children went outside to explore and experience shadows from a different perspective. The children engaged in several experiments with shadows. They stood in the shadow of the school building, representing a cloudy day or nighttime. The children moved into the sunlight and experimented with making their shadows taller and shorter. They experienced these hands-on opportunities with a buddy. While one child did the experiments, the partner recorded their observations in their science logs. The children then switched roles. Throughout the scientific activities, Mrs. K. recorded

what the children did and placed the information in their science portfolios.

Mrs. K. made a large number of books available to the children across genres -- 218 different informational books were made available to the children (see Table 4). Many of these books were read aloud to the children, used in small group investigations, or were added to different learning centers.

Table 4. Informational Books in Learning Centers

Number of Informational Books in Centers* 218	
Math Center	46
Writing Center	24
Science and Listening Center	63
Pet Care Center	7
Family Home Living Center	16
Manipulation Center	8
Independent Reading Center	54

*Number of books in each learning center varied according to theme. Table 4 was constructed during April, 1991, when the theme was "Structures."

During an integrated unit of study on structures, Mrs. K. filled the children's centers with fictional and informational stories about structures. During the structures unit, the children had a total of 218 informational books available to them.

The research study focused on language arts and science to observe the interaction with informational books and influence on writing. Table 5 illustrates the writing activities that the children engaged in during Language Arts and Science.

Table 5. Ways Language Arts and Science Revolved Around Writing*

Science	Language Arts
Stories	Stories
Retellings	Retellings
Lists	Alternative Texts
Note Taking	Recipes
Record Keeping	Poetry
Drawing	Comparison Charts
Labeling	Story Maps
Journal Entries	Webs
Interview Summaries	Lists
Letters	Drawing
Instructions	Speech Bubbles
Mini Research Reports	Journal Entries
Recommended Readings	Letters
Mini Surveys	Favorite Book Lists
Skits	Skits
Words for a Wordless Book	Words for a Wordless Book
Book Jackets	Book Jackets
Posters	Posters
Speeches	Advertising Campaign
Newspaper Stories	Newspaper Stories
Newspaper Headlines	Newspaper Headlines
Summaries	Summaries
Timelines	New Story Endings

*Not all children engaged in every writing event. Some writing tasks were collaborative & small group accomplishments.

The children wrote often during Language Arts and Science and the writing the children produced varied. Table 6 demonstrates the written products the children produced during a one week period.

Table 6. Number of Written Products for the Week of May 6-10, 1991

NAMES	NUMBER OF WRITTEN PRODUCTS
Alison	10
Amish	10
Anthony*	19
Ashley	4
Blake	9
Callon	8
Corey	7
Eric	11
Erin	11
Jamie*	14
Jason*	4
Jennifer C	5
Jennifer H	13
Jenny D	7
Kelley	6
Kent	7
Lindsay S	9
Lisa	10
Lyndsey W	9
Matt	10
Peter	4
Rachel	8
Ross	5
Shannon	7
Tara	7

*Case study children.

In order to fully emphasize the diversity in learning opportunities, it is important to mention the range of science-related themes that the children explored. Because children have varying interests and needs, the science curriculum included different topics. During 20 weeks, 10 areas related to science were explored by the children. These 10 science themes are listed in Table 7.

Table 7. Science Themes from January, 1991 to June, 1991

THEMES	CONTENT
1. ANIMALS	
	a. domestic
	b. farm
	c. wild
	d. arctic
	e. endangered
2. WATER	
	a. sea life
	b. uses
	c. elements
3. SHADOWS	
	a. causes
	-indoor
	-outdoor
4. STRUCTURES	
	a. shapes
	b. uses
5. BUGS	
	a. dangerous
	b. helpful
6. DINOSAURS	
	a. kinds
	b. extinction
7. WEATHER	
	a. kinds
	b. causes
	c. places
8. PLANTS	
	a. corn
	b. beans
9. SPACE	
	a. planets
	b. stars
10. JOBS	
	a. kinds
	b. who

Summary

The narrative of A Day in the Life . . . provided an overview of the opportunities the children had to interact with literature and to engage in writing, and answered research question 1:

> *Question 1: What experiences with informational literature, during the Language Arts and Science portion of the curriculum, are provided for the children in one first-grade classroom?*

Data Analysis Categories

Data analysis categories emerged while observing, interacting, and collecting writing samples from the larger group of participants (n=25) and from the case study children (n=3). Data analysis revealed that four learning environment factors influenced the children's writing: (1) books (textual properties), (2) peer/social interaction, (3) teacher interaction, and (4) classroom context. From an analysis of writing samples, these factors influenced specific elements of the children's writing: (1) focus, (2) language, (3) format, and (4) illustrations. These factors and writing elements were then used as the basis for looking at the writings of the case study children.

In Chapter V an analysis of the individual case study children is presented. Those data answers research question 2.

CHAPTER V

DATA ANALYSIS: THE CASE STUDIES

This chapter presents three case study (n=3) analyses. The general research question guiding the individual case studies and cross-case analyses dealt with the influence of informational books on first graders' writing during Language Arts and Science.

In this chapter, background information is detailed, teacher and researcher observations are given, and each case study child is discussed within the classroom learning contexts. This chapter addresses research question 2:

> *Question 2: How does the writing of three case study children reflect their experiences with informational books within the social context of the classroom?*

Case Study Children: Their Literacy Learning Contexts

To provide a sense of the community established in the classroom, the major learning contexts that related to Language Arts and Science instruction were used to analyze the case study children. These contexts, selected from Phase I, are: (1) Morning Negotiation,

Interaction and Reenactment, (2) Morning Routine, (3) Interactive Writing, (4) Shared Reading, (5) Independent Writing, and (6) Science. Each of these contexts establishes a framework for the case study children's experiences with informational books, and how those experiences influenced their writing.

Anthony

Teacher Observations

Mrs. K., referring to Anthony in her response journal [RJ, 2/15-22/91, Entries #24-26] and in an interview [FN, 2/22/91, IF-INT #25], described Anthony as capable in all content areas outlined in the first-grade course of study. Anthony's home environment had provided him with rich literacy experiences (i.e., read to on a regular basis as a very young child, had an adequate supply of printed materials available to him). Anthony had developed advanced language skills and possessed problem-solving and critical thinking skills. He had a curiosity for learning about new phenomena and enjoyed reading and writing.

Researcher Observations

Anthony discussed the origins of his ideas for writing, why he chose to develop them in a particular way, and what influenced his writing. On 3/4/91 a transcription of a conversation between Anthony and Mrs. K. revealed what influenced his writing. Anthony had written in his journal about war, during independent writing, and drew

a picture with a label of a bomber attacking Saudi Arabia. It was Anthony's writing conference day.

[TN, OB #25, 3/4/91] (T=Teacher, A=Anthony):

T: [sitting down next to Anthony] That's some picture you've drawn there, Anthony. Would you like to read to me what you have written?
A: I guess, but I'm not done yet. Do you want me to tell you about what I have so far?
T: Sure! I like hearing your stories while you're still writing them. [At this point Anthony reads his journal entry to Mrs. K.]

[WS, OB #25, 3/4/91, Journal Entry #106]:

I like WAR as long as it is for a good reason. (At least as good as war gets because of invasion. Invasion is bad.) [PN: parentheses were Andy's].

[TN, OB #25, 3/4/91]:

T: You even have a nicely labeled picture to show me what you are writing about. Where did you get the idea to write about war, Anthony?
A: Cause we're *in* a war. That's all that's in the paper so I just think about it most of the time.

Anthony volunteered to be the leader in most small group and collaborative learning situations, removing himself from the group when that was not possible. When writing, Anthony worked independently and was protective of his work, not wanting others to copy or borrow ideas. Anthony and Mrs. K. worked on his group interactional skills throughout the year as a way of helping him engage in the literacy environment with his peers. The following

teacher/student interaction illustrates how this basic goal influenced Anthony as a reader and writer.

Anthony had definite ideas on performing a task. Mrs. K. and Anthony worked to help him work within the parameters of the classroom and to make decisions for himseif. On 3/8/91 researcher field notes indicated the following interaction.

[FN, OB #28, 3/8/91]:

> Mrs. K. wants the children to spend the next 15 or 20 minutes reading. During this independent reading time, Mrs. K. is working her way around the classroom, in an attempt to observe each of the children. She asks various children to read-aloud to her from a book of their choice. When she gets to Anthony, he isn't reading a book. He is just sitting on a stuffed animal fiddling with a pen. After a lengthy conversation, Mrs. K. learns Anthony refuses to read during independent reading time because he feels "all these books are dumb and for babies." Even though there were books within the independent reading center appropriate for the advanced, more sophisticated reader, Mrs. K. asked Anthony, "Well, what can we do to solve this problem so you'll have something you will *want* to read and that you'll *enjoy* reading during independent reading time and during free-choice time?"

Mrs. K. and Anthony devised a plan for Anthony to bring books from home to read during independent reading. Table 8 illustrates the books that Anthony brought for independent reading during March, 1991. When given the opportunity to self-select, Anthony read an equal number of fictional and informational texts and spent more time reading each book.

Table 8. Books Brought by Anthony from Home for Independent Reading During March, 1991

	Fictional Texts	Nonfictional Texts
Week 2 Day 5		A Picture Book of George Washington
Week 3 Day 1		This Place is Wet
Day 2	Encyclopedia Brown	
Day 3		
Day 4		
Day 5	Abel's Island	
Week 4 Day 1	Abel's Island	
Day 2		Galaxies
Day 3		
Day 4		Insect Metamorphosis: Egg to Adult
Day 5		
Week 5 Day 1	Where the Sidewalk Ends	
Day 2	Random House Book of Poetry	
Day 3		Arctic Explorer
Day 4		
Day 5		
Total	5	5

The preceeding interactions between Anthony and his teacher established that Anthony is a competent reader and writer. The teacher used home and school resources to direct his interests and provide challenges. The ways in which experiences with informational books have influenced Anthony across literacy events is described below.

Literacy Learning Contexts

Morning Negotiation, Interaction, and Reenactment

This daily period was a routine established to allow the children to reenter the school environment. This time of the day was as much a social time as it was a literacy event. For Anthony, social interactions with his peers were difficult. This independence influenced his writing as well. He tended not to work collaboratively

and was concerned about the uniqueness of his work. The following interaction reflects this personal aspect of his writing.

[FN, OB #78, 5/24/91]

Today, Anthony enters the classroom, hangs up his backpack, and goes to the writing table. He gets a small booklet [PN: these are made by Mrs. K. so children could make own books], pencil, and sits down to write. He gets right back up; gets Rooster's Off to See the World by Eric Carle and brings it back to the Writing Center [PN: text had been read aloud yesterday; Anthony seemed interested in the text]. Corey [PN: classmate and friend of Anthony] joins Anthony at the Writing Center.

[TN, OB #78, 5/24/91] (C=Corey, A=Anthony, K=Mrs. K):

C: What ya writin?
A: Nothing, yet. What you gonna do?
C: Watch you . . . maybe write . . . I don't know.

[FN, OB #78, 5/24/91]:

Boys writing and chatting as they work.

[TN, OB #78, 5/24/91]:

A: Mrs. K.? Stop that or I'm gonna tell! Erase that . . . erase that right now! Mrs. K.?
C: How do you know I wasn't thinkin 'bout the same thing as you? [PN: Anthony's upset because Corey's writing is similar to what Anthony has written; Anthony accuses Corey of copying]
K: What's the trouble over here? You are so loud the other children and I can't hear ourselves think. [PN: Mrs. K. comes to discover the problem and help them resolve it themselves . . . if possible]
A: Corey's copying my story! I was here first and now my story is his!
C: No it's not!
A: Mrs. K., he always does this . . . even at our desks [PN: Corey and Anthony are currently sharing a seating cluster]. I want you to make him stop . . . tell him that's not right! [PN: Anthony speaks to Mrs. K., but looks at Corey]

[FN, OB #78, 5/24/91]:

> Mrs. K., after a conversation with the boys about being friends and good helpers, redirected Anthony and Corey's interests.

Morning Routine

Morning Routine was the transition from the social negotiation of the day into the work of the day. Again, Anthony tended to create a distance between himself and his peers.

During the morning routine, Anthony busied himself in other ways; he drew pictures and took apart pens. He listened, but remained a noncontributing member. He made comments, however, and mumbled responses under his breath.

Interactive Writing

The daily news provided Anthony with his first writing event of the day. This took place in the Sharing Center. The children sat on the floor, a comfortable viewing distance from the easel. Anthony waited until all of his classmates were seated and then he brought his chair to the sharing center. Testing several locations for his chair, he settled on a spot.

As with the morning routine, Anthony busied himself digging in his pockets, coloring the sides of his shoes with markers, and pulling his sweatshirt hood over his entire head -- leaving only his nose exposed. When he shared a news item or assisted a classmate,

Anthony was attentive. He enjoyed helping his peers locate where to write a word, hunt for compound words, or locate "-ing" endings.

An interactive writing event often followed the shared read-aloud. When the children studied Arctic communities, Mrs. K. read a variety of stories, the children brainstormed, and then they created a list of Arctic communities. During the Arctic Unit, a range of books was shared and made available to the children (see Table 9). Some of the books were read aloud to the children, while others were accessible for independent or small group investigation.

Table 9. Books Available During Arctic Thematic Unit of Study

Fictional	Informational
What Spot	Whale Song
A Puppy Named Gih	Polar Bear Cubs
On Mother's Lap	Arctic Animals
Eric in Alaska	Wonderful World of Seals and Whales
Hannah's Alaska	Animals of the Polar Regions
Song of Sedna	A Caribou Alphabet
The Enchanted Caribou	Eskimo Boy Today
The Snow Queen	Eskimos
Whale in the Sky	Eskimos the Inuit of the Arctic
Half a Kingdom	The Arctic
Which is Willy	Eskimos of the World
Funny Feet	Whales
Penguin Day	The Arctic Land
Sammy the Seal	Eskimos
Ootah's Lucky Day	The Penguins Are Coming
Iglook's Seal	Penguin
Very Worried Walrus	Namu
A Fishy Color Story	The Whales Go By
A More or Less Fishy Story	Penguins
A Fishy Shape Story	Penguins Live Here
A Funny Fish Story	Penguins

Table 9. (Continued)

	The Little Igloo	Penguins
	The Giant Fish and Other Stories	Penguins
	Inuk, the Eskimo Who Hated Snow	
	Walpole	
	Winston, Newton, Elton, and Ed	
Total	26 Fictional	23 Informational

Anthony verbalized his thoughts and opinions during brainstorming sessions and participated in interactive writing tasks revolving around children's literature. Anthony was especially attentive when the interactive writing activity surrounded an informational text.

Following is an excerpt of the typical dialogue surrounding an interactive writing event focusing on an informational text.

[TN, OB #32, 3/14/91]:

T: This morning we are going to read an exciting book about the caribou. Does anybody have any idea what a caribou is?

A: It's . . . its something . . . I mean it's an animal that's related to the reindeer that lives in the Arctic.

T: Right! The caribou is a relative of the reindeer.

A: I know where the caribou live, too. I mean where they live at in the Arctic. They live on the tundra. I read that the tundra is a dry, barren place. What do the caribou eat if they live where it is so . . . you know, if they live where there isn't anything?

Shared Reading

The children simultaneously engaged in interactive writing and shared reading. Anthony selectively participated in shared readings. Most of the interactive writing and shared reading events in which Anthony became an participant involved a significant number of informational books. Following is a chart demonstrating the kinds and frequency of Anthony's interactional dialogue. Mrs. K. read aloud Animals of the Polar Regions [FN, OB #42, 3/28/91]. Table 10 is based upon an analysis of a 20-minute transcribed interactive writing activity.

Table 10. Anthony's Whole Group Interactional Dialogue

Type of Involvement	Number	Category %	Overall %
Questions	**6**		**12**
Directed at Mrs. K.	5	83	
Directed at Peer(s)	1	17	
Statements	**12**		**25**
Directed at Mrs. K.	8	67	
Directed at Peer(s)	4	34	
Connections to Texts	**17**		**35**
Fictional Text(s)	3	18	
Nonfictional Text(s)	14	82	
Connections to Experiences	**9**		**18**
In-School	0		
Out-of-School	9	100	
New Discoveries*	**5**		**10**
Teacher Stimulated	2	40	
Peer(s) Stimulated	0		
Text(s) Stimulated	3	60	
Total	**49**		

* First time awareness.

Table 10 depicts Anthony as a learner. Anthony was an active learner in whole group situations. He offered many statements (25%)

within the group discussion, and made many connections to books (35%). Anthony directed 67% of his statements and 83% of his questions to Mrs. K., compared to only 34% of his statements and 17% of his questions to his peers. This may be directly related to the fact that Anthony viewed Mrs. K. as the expert. Anthony indicated a preference for informational books over fictional stories, making connections to nonfictional texts 82% of the time. Anthony made many new discoveries as an active learner. Anthony's discoveries were stimulated by text 60% of the time; 40% were stimulated by Mrs. K.; no new discoveries were recorded as being stimulated by peers.

Read-Aloud: Language Arts

Anthony typically became engrossed in the shared read-alouds. He made connections to other books, situations, and experiences, sparking insightful questions and comments from his peers.

[FN, OB #88, 5/10/91]:

> Mrs. K. begins rereading The Four Elements of Water to the children. Anthony takes off with all that he already knows about water when Mrs. K. is only a short way into the text. For example, Anthony makes statements to the entire group and Mrs. K. like: "Humans are made up of water." After the group had been listening to Anthony for quite some time, one of the quietest children in Mrs. K.'s classroom stands up, puts his hands on his hips, and says, "I know something about how water is used that I'll bet you haven't thought of [pauses only a second]. . . . to mold a mouth guard!"

Anthony's absence from a shared read aloud resulted in a different interactional pattern. Fewer connections were made by the children to other stories or personal experiences.

[TN, OB #30, 3/12/91]:

[PN: Mrs. K. introducing Winter and about to read-aloud for the first time. Anthony is present.]

T: [reading the inside of the jacket cover after reading and showing the children the cover of the text] Winter by Ron Hirschi, photographs by Thomas D. Mangelsen. [pauses a moment] Photographs . . . why do you think it says photographs and not illustrated by?
A: Well, that's simple . . . cause the book has real pictures of real things in it. If it said illustrated, then the book would have drawings.
T: [Showing the title page to the children and reading the title and credits again] What do any of you notice about this scene? Look carefully.
A: What is it you want us to tell you? Do you want to know what kind of animals are running across the snow or do you want us to notice that everything is winter just like the title says?
T: Well, both of those things are great things to notice about this page. I just wondered what sorts of things each of you would see when you looked at this page.

[TN, OB #49, 4/15/91]:

[PN: Mrs. K. rereading The Magic School Bus: Lost in the Solar System. The children are very familiar with this particular text. Anthony is not present.]

T: [reads "going to the planetarium."] A planetarium is like a museum. The class is going there to see . . . what do you think they will learn about at a planetarium? [Mrs. K. waits a few moments, showing the pictures in the book, and then

answers her own question] Mrs. Frizzle's class will learn about different planets.

T: [continues to read "the Earth spins like a top as it moves in its orbit. The spinning of the Earth makes night and day."] How does the earth spinning [Mrs. K. picks up a globe and slowly spins it as she talks] make night and day? [Pauses for a few moments.] Remember when we talked about shadows and did an experiment with the globe and our flashlights when we read Shadow Magic?

S: Oh! I know! [Pauses] I know it, but I can't think how it's suppose to be said!

T: I'll bet if I read the rest of this [pointing to book] you'll remember. "When one side of the Earth faces the sun it is daytime on that side. When that side turns away from the sun, it is night."

S: Oh Yeah! The side getting no light is in the shadows and makes it night!

The first excerpt demonstrated a whole group discussion during a shared read-aloud with Anthony present. Anthony's contributions seemed to influence Mrs. K.'s questions. The second excerpt represented a book discussion during Anthony's absence; Mrs. K. lead the book discussion.

Independent Writing

General. Following read-alouds, Anthony generally began writing. The read-aloud period provided Anthony with "rehearsal time" (Graves, 1983). He formulated his thoughts into a coherent message ready to be put to paper even before the group moved to their seats. Anthony usually worked silently during independent writing. Often his only social interaction occurred if he was asked a

question by one of his peers or if Mrs. K. informally conferenced with Anthony about his writing. Anthony disliked being disturbed during writing, but willingly shared his completed written products.

Anthony's writing most often reflected the influences of shared informational books. Anthony rarely wrote fictional stories, but his writing often contained fictional elements. When Anthony wrote a fictional piece, it was usually assigned by the teacher. In these instances, his fictional pieces often contained expository elements. He could, however, produce purely fictional text as the sample in Figure 5 illustrates.

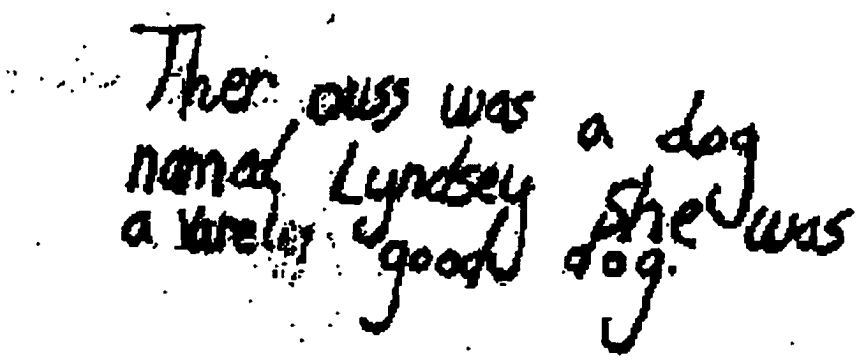

Figure 5. WS, OB #44, 4/8/91 [There once was a dog named Lyndsey. She was a very good dog.]

When modeling a particular book, Anthony referred to the text to duplicate the language, writing style, organizational pattern, and the spelling of words.

Anthony's writing reflected his experiences with informational books. He made connections to other informational texts through

format or style. Much of Anthony's writing made a generalizing statement with an itemized list supporting his general statement, a typical informational text format. See Figure 6.

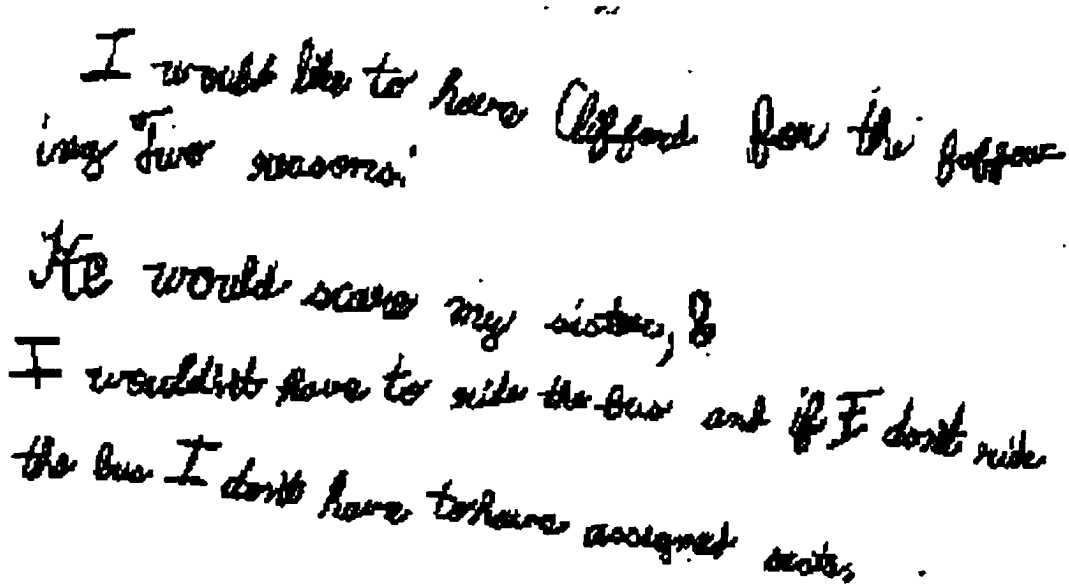

Figure 6. WS, OB #38, 3/22/91

Anthony wrote his text first and then illustrated his work. He gave as much time and attention to the details of his pictures as he did to the written text. He paid close attention to the illustrations in the text he was using as a model, revisiting the text many times throughout the illustrating process. Anthony created his illustrations realistically so that they were similar to the illustrations in the modeled text. See Figure 7.

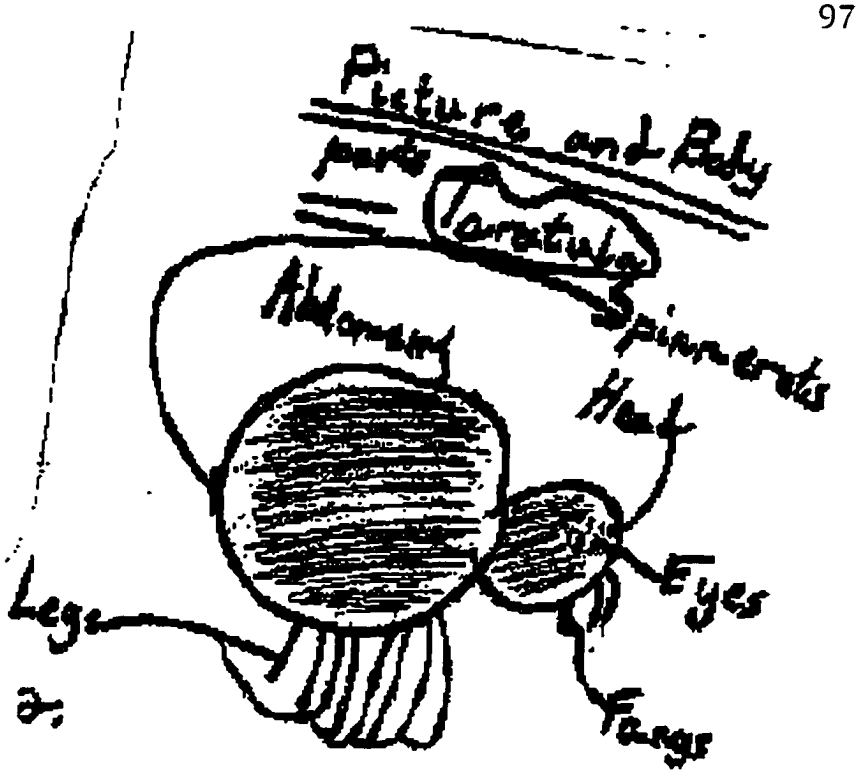

Figure 7. WS, OB# 90, 6/12/91

If the pictures were labeled in the text, Anthony labeled his illustrations. Even the colors of the text's illustrations were reflected in Anthony's illustrations.

Journals. During Independent Writing time, the children often elected to write in their journals and at other times Mrs. K. specifically asked the children to write in their journals. Anthony wrote thank you notes, letters, descriptions, lists, and alternative texts and drew pictures in his journal. His journal writing reflected

experiences both in and out of school and his perception of those experiences.

[WS, OB #1, 1/29/91, Entry #81]:

> This week I learned to play Tether Ball Alot Better. Callon wasn't very good about giving turns though. I don't like being where there's only one Tether Ball and Alot of us.

[WS, OB #27, 3/7/91, Entry #104]:

> Mrs. K., March 7, 1991
>
> Today we studyed water (actally what makes-up water). I had something to tell every body and you never called on me. I'll tell you now.
>
> I know clouds form, they are filled with mostur. When they get too full the rain falls out. If it rains too much there are floods. The water goes back into the sky (that is evaperaton) and it happens all over again.
>
> Anthony

[WS, OB #88, 6/10/91, Entry #129]:

> My Camping Trip
>
> I went camping Friday and Saturday (part of Sunday to) with my cousins and my Dad. The scarest thing happened! There were bushes all by the tent. I looked over and there looking back at me were 2 eyes. I ran and got my dad (he was fishing). When we got back to the bushes, a rabbit was running away. Guess those were the eyes that were watching me. I told my dad it was just like the story Just Me and My Dad.

Although the children had the option to keep their journal entries private, Anthony seldom did. He used his journal writing time to express personal concerns to Mrs. K.

[WS, OB #3, 1/31/91, Journal entry #83]:

1-31-91

Dear Mrs. K.,
Will you talk to Callon? I would like you to talk to him because he thinks I have to do what he wants, where he wants, how he wants.
Please talk to him.

Anthony

Anthony used journal writing time to express his feelings about himself, both as a person and as a learner.

[WS, No OB, 9/17/90, Journal Entry #1]:

ANTHONY SEPT. 17, 1990
I LIKE SCHOOL BECAUSE
OF
1. DRALING
AND
2. RESSECSE

[PN: drew a picture of himself sitting at a desk. On the desk was a pencil next to a picture of himself drawn on paper]

[WS, No OB, 10/1/90, Journal Entry #10]:

Anthony [PN: middle and last name was written also; all three were written in cursive]

10-1-90
In September I learned to rite in cursive.

[PN: drew picture of himself sitting at a desk. On the desk was a piece of paper with "Anthony" written on it in cursive] See Figure 8.

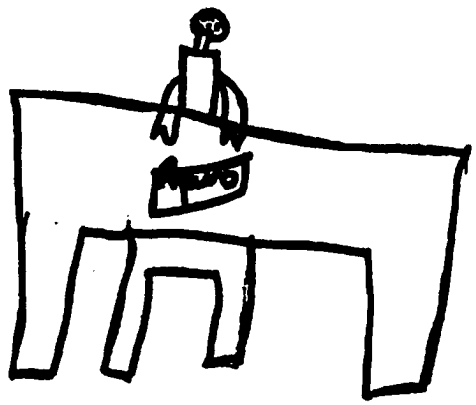

Figure 8. Anthony's Picture of Himself

Science

For Anthony, science represented a favorite area of investigation. Mrs. K. used informational books as the basis of the science curriculum. Each learner was encouraged to learn from the text, the read-aloud settings, and any hands-on experiences. She provided opportunities for the children to discover and manipulate new information.

Mrs. K. usually began the science period with a shared read-aloud of an informational book. The text usually complemented and extended the language arts read-aloud. The children studied one science theme for 4 or 5 weeks, including introduction and extension activities. This gave the children an opportunity to read and independently explore texts many times.

An important aspect of Mrs. K.'s instructional procedures was her use of literature during science. If she shared a read-aloud with the children for the first time, her introduction was different from subsequent shared read-alouds of that same text. For the first reading of a text, Mrs. K.'s introduction focused the children in on general features of the text, what they could expect the text to be about, who the author of the text was, and connections to other texts. Her general introduction enabled the children to draw upon existing background knowledge. The interaction among teacher and students established a common base of background knowledge.

Mrs. K. established an investigative environment for learning, doing so through instructional procedures that encouraged and supported peer/social interaction. Anthony often instigated a "friendly" debate with a peer about an aspect of the text. This peer/social interaction provided for multiple perspectives to be discussed among classmates. Mrs. K. remained the facilitator, allowing the children to lead the discussion.

Following the read-aloud, discussion, and hands-on activity, the children wrote in their science logs or journals or engaged in other self-selected writing tasks. Early on in the study, Anthony's writing following a science lesson reflected elements of the lesson, such as the focus of the discussion, the children's conversations, and the text. Near the close of the study, Anthony's writing following a science lesson reflected his use of the information, but he also

demonstrated that he was becoming an independent thinker. He was capable of taking what he had been engaged in one step further, thus creating a new perspective.

The following writing samples illustrate how Anthony was beginning to connect textual experiences with personal experiences to create texts that served his needs and purposes.

[WS, OB #2, 1/30/91]:

[PN: Cover Page]

The Mitten
by:
Anthony

[PN: Anthony wrote the following story on four pages]

One day I was playing football with my friends James Brooks, Joe Montana, & Bo Jackson.

While I was playing football I dropped my mitten.

The next thing I know I had almost betten them. But just then I notest my mitten was gone!

Then Bo spied it. and someone had givin me a football singed Bo Jackson.
THE END

[WS, OB #44, 4/8/91]:

[PN: Anthony created a story about a football game between the Huskys and the 49ers]

49ers Vs. Huskys
Super
Rose
Bowl

by!
Anthony

49ers kick off in touchdown zone! What a kick by Joe Motana! "The crowd is really up for it huh Mike!"

49ers are ready for the fieldgoal. Joe Montana kicks ... It's good! 49ers are winning 11-0!

[WS, OB #57, 4/25/91]:

[PN: Anthony drafted a letter to Goldilocks expressing his feelings; he did so through the local newspaper]

To the Columbus Deshpach - I can't find Goldilocks address and I need to write to her. Plese put this in your paper.

Dear 3 Bears

I'm Goldilocks friend. She is not sorry for what she did. She wants to blow your house up with dynamite. (I don't agree) Be on the look out. You can write back to me through this newspaper.

Your friend,
Anthony

Jamie

Teacher Observations

Mrs. K., in her response journal [RJ 2/15-22/91, Entries #24-26] and in a follow-up informal interview [TN, I-INT #25] shared information about Jamie as a learner.

[TN, I-INT #25, 2/22/91]:

R: In your journal entries for February 15th through February 22, you gave some thought to possible case study children according to the guidelines I had previously discussed with you. You expressed that Jamie would be an excellent case study participant because of both her academic potential and her personality. Would you just talk to me about Jamie and why you would have her included in this research study?

T: Jamie is such a likable child that, for one thing, I know you would enjoy working with her. She is always happy and is very well liked by all of her peers. Since you are also looking to see what kind of impact the social aspect of learning plays on their writing, Jamie, being a very sociable child, would provide you with an interesting perspective. She is also a capable writer.

Jamie arrived at school with many end-of first-grade skills already mastered. Mrs. K. attributed this to Jamie's home environment. Jamie was routinely read to and surrounded by many books and other types of environmental print. Jamie also had experiences with environmental print through family outings to the zoo, parks, and family trips. She and her family traveled on family vacations several times throughout the year. As a result of her

literacy experiences, print, books, and word play were familiar activities to Jamie. Jamie had also developed competent oral language skills.

Researcher Observations

Jamie was curious about everything and everyone around her. Because of her curiosity, Jamie asked numerous questions, investigated many new and interesting phenomenon on her own through books, and observed her classmates in various learning contexts. Jamie read both fictional and nonfictional materials, but she was often discovered reading a familiar, favorite fictional story. When asked, she revealed that Goldilocks and the Three Bears was one of her favorite stories.

Jamie worked well in group activities. She willingly shared her ideas and strategies with others. Jamie was a conscientious young learner as well, completing assignments on time, taking pride in each assignment, and always doing more than expected. Jamie eagerly shared her work from the Author's Chair and listened respectfully when others shared their work.

Jamie was a capable young reader and writer. She wrote often and was always willing to share her work with her peers, Mrs. K., and the researcher. Initially, Jamie wrote mostly fictional pieces, regardless of the genre that was shared during a shared read-aloud.

For example, Mrs. K. shared Husky, an informational book. The children engaged in independent writing following the shared read-aloud. Here is what Jamie wrote:

[WS, OB #44, 4/8/91]:

The Husky Tim by Jamie
[PN: Jamie's title page]

Once upon a time thar were six husky dogs and thar oner was a littol girl namd Outa and the girl loved the dogs.
[PN: page 1 of Jamie's 5 page story]

Jamie knew where her ideas for a piece of writing originated and why she had chosen to write a particular piece in the way in which she did. Jamie was capable of sharing those thoughts and processes with Mrs. K. and/or the researcher.

[TN, OB #45, 4/9/91] (R=Researcher, J=Jamie):

R: I really enjoyed reading your story about the husky dogs [PN: researcher had obtained permission from Jamie prior to reading her story] It is so creative. How did you come up with the idea to write this story?

J: Well . . . [pauses for a moment] Well, Mrs. K. read us about the real Husky dogs. You know the dogs that pull sleds and stuff in the . . . Ant . . . no, in the Arctic. Over there [points to the independent reading center] I read another story about sleds . . . sled teams and sled dogs. That's what Husky dogs are sometimes called -- sled dogs. Anyway, that book . . . here [gets up out of chair] let me go get it. [retrieves the book Ootah's Lucky Day]. This one's a story, you know, it's not real. I took some things that are real about husky dogs and some things that Ootah did and made-up my own story! [tosses hands in the air] That's all I did!

Literacy Learning Contexts

Morning Negotiation, Interaction, and Reenactment

Each day Jamie bounded into the classroom with a great, big smile on her face and cheerfully greeted Mrs. K. Once at her desk, two or three children grouped themselves at Jamie's desk chatting with her while she put everything away.

After organizing herself for the start of the day, Jamie and several of her friends went to one of the learning centers. Most often, Jamie worked with a group of children at either the independent reading center, reading a favorite story, or at the news charts, re-reading the past several days' happenings. Jamie rarely assumed a leadership role. As a group participant, however, she provided direction and focus.

Morning Routine

Once Mrs. K. called for the official start of the school day, Jamie became attentive and an active participant. She recited the Pledge of Allegiance with her classmates and sang the transitional songs to move from one activity to another.

Interactive Writing

The children engaged in several interactive writing events throughout the day. The first interactive writing event of each school

day was constructing the daily news. Unless she was contributing an item for the news chart or was contributing to the shared writing of a word, Jamie usually sat perfectly still. On most days, Jamie raised her hand signaling she had a news item to contribute. She regularly volunteered to write the various letters, words, and phrases in creating the daily news chart.

Shared Reading

Jamie actively participated in the shared reading of the messages created during interactive writing. Shared reading provided the children with the opportunity to engage in lots of reading and rereading.

Other shared reading opportunities were presented throughout the day. After the children had read and reread several versions of Goldilocks and The Three Bears, Mrs. K. integrated several informational books about castles, forests, bears, and kings into the children's reading experiences. The children first engaged in an interactive writing literacy event. They generated and wrote lists for various purposes. One of the lists the children generated consisted of places to look for the missing Goldilocks. During the week-long interactive writing process of generating these various lists, the children also engaged in shared reading. Jamie, having the opportunity to experience fiction as well as nonfiction, became very involved with the informational books that accompanied her favorite stories. She talked with a peer about why a certain item should be included on their list of where to look for Goldilocks.

[TN, OB #50, 4/16/91]:

J: I think we otta be lookin at the bus station.
Girl: Why? [PN: looks at Jamie really confused]
J: [PN: shrugging shoulders] I don't know, but when people are lost, they always look there! Think I should say it? ...for the list?
Girl: [PN: nods head] I guess so!

Table 11 documents Jamie's interactional dialogue in a whole group setting. The table is based upon a 20-minute interactive/shared writing activity of the whole group generated list of "Where to Find Goldilocks."

Table 11. Jamie's Interactional Dialogue

Type of Involvement	Number	Category %	Overall %
Questions	**4**		**16**
Directed at Mrs. K.	2	50	
Directed at Peer(s)	2	50	
Statements	**7**		**28**
Directed at Mrs. K.	3	43	
Directed at Peer(s)	4	57	
Connections to Texts	**5**		**20**
Fictional Text(s)	5	100	
Nonfictional Text(s)	0	0	
Connections to Experiences	**6**		**24**
In-School	2	33	
Out-of-School	4	66	
New Discoveries*	**3**		**12**
Teacher Stimulated	1	33	
Peer(s) Stimulated	1	33	
Text(s) Stimulated	1	33	
Total	**25**		

* First time awareness.

Table 11 illustrated that Jamie actively participated in her learning on a moderate level; not talking as much as Anthony, for

example, but occassionally contributing to the whole group discussion. Jamie directed an equal number of her questions to her peers (50%) and to Mrs. K. (50%). She made more statements to her peers (57%) than to Mrs. K. (43%). These data suggest that Jamie was an active participant in peer/social interactions. Table 11 illustrates that Jamie made connections to other texts during this whole group learning activity; all of her connections were to fictional texts (100%). Jamie made connections to personal experiences throughout the group activity (i.e., 66%, out-of-school; 33% in-school). Jamie's new discoveries were equally distributed between teacher-stimulated, peer-stimulated, and text-stimulated, indicating that Jamie learns from all available resources.

Jamie was actively involved in this particular shared reading. The children responded favorably to the integration of genres during interactive writing and shared reading events. The integration of genres enabled Jamie to relate to elements from both genres.

Read-Aloud: Language Arts

Mrs. K.'s reading selection during the language arts read-aloud determined Jamie's involvement. When Mrs. K. shared fictional stories, Jamie was attentive. During the shared read-aloud of A Puppy Named Gih by Machetanz, a fictional story shared during the thematic unit about Arctic Communities, Jamie was entranced by the story, the pictures, and the language. Throughout the shared reading,

Jamie made several connections to other books, posed many questions about Arctic life, and questioned the language used by the author of the text.

[TN, OB #42, 3/28/91]:

J: Wish I'd a brought my book with Baldo.
T: Why, what's your book with Baldo about?
S: . . . a husky dog . . . and a sled . . . a sled he pulls.
T: Could you bring it tomorrow? [child nods yes]

[FN, OB #42, 3/28/91]:

Mrs. K. continues to read the story to the children. She reads that Gih can run 20 miles an hour as he pulls the sled along in the snow. Jamie gets a puzzled look on her face.

[TN, OB #42, 3/28/91]:

J: 20 miles an hour? How fast is 20 miles an hour?
T: You know how your mom slows down when she comes to a school? Well, she's going about 20 miles an hour. That's how fast a husky dog can travel. So, the next time you're in the car, ask your mom or your dad to go about 20 miles an hour so you can see how fast a husky dog goes. Then look outside and look how fast everything goes by.
J: Are you sure, Mrs. K.? That seems real fast!

[FN, OB #42, 3/28/91]:

Mrs. K. reads about the driver of a sled dog team being called a musher.

[TN, OB #42, 3/28/91]:

J: Musher? What kind of word is that? It sounds made-up. Is that a Eskimo word?

The following day, Mrs. K. reread A Puppy Named Gih. She followed this familiar rereading with the shared read-aloud of Eskimo Boy Today by Byron Fish, an informational book about modern Eskimo life. The illustrations were black and white photographs and several of the photos showed actual sled teams of husky dogs with accompanying text that provided the reader with facts about husky dogs, Eskimos, and sled teams. Having been provided with a working framework by listening to the fictional story of an Eskimo boy and his dog, Gih, Jamie was fascinated by the informational story Mrs. K. shared. At one point, Jamie's view was obstructed and she could not see the photograph Mrs. K. was talking about. Jamie moved from one position to another. Still unable to see, Jamie said, "Mrs. K? I like this book, but I can't see it. Can I move up front?"

Through the integration of story genres, Jamie eventually displayed enjoyment for informational stories. Also, through experiences with a patchwork of genres, the children learned to make connections between stories of fiction and nonfiction and connections to personal experiences. In one discussion with Mrs. K., Jamie revealed she usually did not like informational books.

[RJ, 3/4/91, Entries #29-31]:

> After the reading aloud today of Eskimo Boy Today by Byron Fish, Jamie annouced to me she didn't like books like that very much. When I asked her "Books like what?", she said, "You know, books that don't tell a story. I Asked her "Why not?" Jamie told me, "I don't know. Maybe cause it seems like I just have to learn something and so it seems boring."

Independent Writing

General. Various independent writing events accompanied the language arts shared read-aloud. Sometimes the children chose the topic and the format and sometimes Mrs. K. selected the writing topic and format. Both writing contexts enabled Mrs. K. to observe the children in different learning situations, to informally evaluate and document the children's progress, and to assist the children with their writing processes. Jamie, following a shared read-aloud of a fictional story, was typically excited to write. She returned to her desk or the independent writing center to write. As Jamie collected her writing materials and organized her thoughts, she talked and shared thoughts with her peers.

The children frequently reorganized their clustering of desks. This provided an opportunity for the children to work with each of their classmates. Regardless of the make-up of the working group, Jamie shared her ideas and writing with her group. Because of Jamie's willingness to share, the children needing support during independent writing often copied Jamie's writing. On one occasion, the children were to either write their own version of The Very Hungry Caterpillar by Eric Carle or do a retelling of the story. Jamie did a retelling of the text and included an unusual ending to her retelling. See Figure 9.

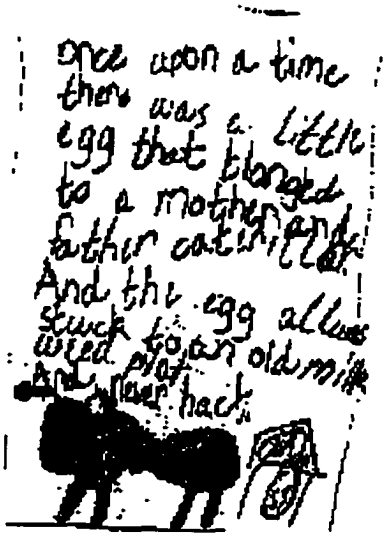

Figure 9. WS, OB #64, 5/3/91

Two children in Jamie's working group needed help in writing their stories. Both classmates asked Jamie questions, looked at her in-process writing, and asked how she was ending her story. Both children's writing resembled Jamie's.

Initially, during independent writing when the children chose topic and format, Jamie wrote fictional narratives, beginning with "Once upon a time" and ending with "and they lived happily ever after." Her story experiences had consisted exclusively of fictional stories. Relying on her experiences and background knowledge to guide process and product, Jamie was comfortable writing within a fictional narrative framework.

[WS, OB #10, 2/11/91]:

Cover	The Happy Shadow by Jamie
Dedication Page	For my mom and sister
Page 1	Once upon a time their was a girl named Amy and she had a happy shadow. Now haveing a happy shadow is a littol bit funny. But that is what she had.
Page 2	She plaed and plaed and plaed wheh her shadow.
Page 3	When she hopd her shadow hopd.
Page 4	And she loved her shadow. She wood get sade when she did not see her shadow. The end

Jamie exhibited some difficulty when the independent writing expectations were expanded beyond the fictional framework. For example, Jamie had difficulty writing a letter or a thank you note.

[FN, OB #14, 2/15/91]:

> Today Mrs. K. asks the children to write Eric's mom a thank you note for coming in every Tuesday and helping them with their reading. Jamie looks puzzled.

[TN, OB #14, 2/15/91]:

> J: [PN: comes up to where Mrs. K. is] Mrs. K., I can't do what you said. I can't . . . I can't . . . or don't know how to do a thank you note.

[FN, OB #14, 2/15/91]:

> Mrs. K. suddenly realizes there may be others that haven't had experiences with writing thank you notes. She decides she needs to model how to do a thank you note. She spends quite a bit of time working through the basics of a thank you note. She asks if there are any more questions. No one has any so she tells them to go ahead and write their thank you notes. Jamie sits staring at her paper for quite some time. Finally she begins to write.

[WS, OB #14, 2/15/91]:

Thaks for reading too me

Jamie's interest in informational books was first displayed in her reading behavior. Jamie began revisiting the informational books shared during read-alouds. Her experiences with informational books gradually appeared in her writing. Mrs. K. shared This Is the Way We Go to School: A Book About Children Around the World by E. Baer. The children then chose what they wanted to write. Jamie hurried to the independent writing center and selected a large sheet of white paper and a pencil then sat staring at her paper. After 5 to 7 minutes of silent preparation, she moved to the sharing center and retrieved a copy of the shared read aloud. Jamie closely attended to the text on the pages. Independently revisiting the texts, prior to writing, became a ritual for Jamie, as can be seen by comparing Tables 12 and 13.

Table 12. Books Jamie Revisited (Feb.)

Text	Informational	Fictional
Goldilocks and the...		X
If You Give a Mouse...		X
The Mitten		X
The Enchanted Caribou		X
That's What a Friend Is		X
Shadows	X	
Bear Shadow		X

Table 12 indicates that Jamie, during a one-week period, revisited a fictional text six of seven times during independent writing time and an informational text only once. This supported Jamie's claim that she did not enjoy informational literature.

Table 13. Books Jamie Revisited (May)

Text	Informational	Fictional
Bugs for Dinner?	X	
Dinosaur Bones	X	
Shadows/Reflections	X	
Amazing Spiders	X	
Peter and the Wolf		X
Encyclopedia Brown		X
Goldilocks and the...		X

Table 13 illustrates that after experiences with informational literature within the classroom, Jamie began revisiting more informational texts during independent writing time. During the week of May 9, 1991, Jamie revisited four informational books and three fictional texts. However, this increase in informational texts revisited may have been the result of Jamie's attraction to specific topics rather than to specific genre. But it does show a general shift across the year in Jamie's comfort with informational materials.

Jamie spent more time planning her writing instead of writing the first thoughts that came to her mind. At the begining of the research study, Jamie began writing immediately following the sharing of a fictional narrative. As the study progressed and Jamie had more experiences with informational books, she did not write

immediately. Jamie wrote her early thoughts on paper, made boxes representing a place for written text and illustrations, and drew lines calculating how much text on each page. This planning time often concluded with Jamie getting a fresh sheet. The preliminary page became her "blueprint."

Early on, Jamie's illustrations did not always support her written text. During one independent writing time, Jamie wrote about her mom's trip to the grocery store and drew a picture of a dog. After many experiences with different kinds of literature, Jamie's illustrations and text supported one another.

[FN, OB #30, 3/12/91]:

> Mrs. K. shared Winter by Ron Hirschi today during the language arts read-aloud. When it came time for independent writing, Jamie looked puzzled. Mrs. K., being observant and sensitive, went over to Jamie to see what was wrong. Jamie told Mrs. K. she was planning to write in her journal and now she couldn't. Mrs. K., confused, told Jamie she still didn't understand the problem. "Well, I'm going to write about a coyote and I can't draw a coyote!"

Jamie realized that the written text and pictures usually support one another.

Jamie was not overly concerned with the mechanics of writing. She was confident in her writing capabilities and rarely asked another peer for help. Jamie wrote independently, relying on the word bank, available texts in the classroom, environmental print, and other pieces

of her completed writing in determining the appropriate mechanics, punctuation, and spelling for her work. Jamie focused on *what* was to be written and not on *how* it was to be written. She had a foundational knowledge of letter/sound relationships. If words were not spelled conventionally, Jamie's invented spellings were still readable. As the study progressed, Jamie reread her writing. During her rereading, Jamie erased and wrote different words, attempted to correct misspelling, and replaced lower case letters with capitals where needed.

Jamie's writing reflected the influence of Mrs.K. During a shared read-aloud, Mrs. K. always read the title of the book, the author and illustrator of the text, and the dedication page. Initially, Jamie included each of these elements in her writing. Over time, she selectively included elements she viewed as appropriate to her writing.

Mrs. K. pointed out aspects of a text's illustrations such as color, placement in relation to the written text, and tiny details contained within the pictures that gave the reader additional information about the story. In order to demonstrate that elements are included in illustrations that are not discussed in the written text, Mrs. K. used The Magic School Bus: Lost in the Solar System by Joanna Cole. In each of Cole's Magic School Bus texts, interesting facts are featured in the illustrations that are not addressed in the written text. In one example a child on a scale demonstrates the difference in earth

weight from moon weight. After this, Jamie began incorporating elements in her illustrations not addressed in her written text.

Mrs. K. focused on the language in the texts she read aloud to the children. When she read aloud Ox-Cart Man by Donald Hall, she pointed out the repetition and expansion in the verses. Ox-Cart Man reads:

> He packed a bag of wool
> he sheared from the sheep in April.
>
> He packed a shawl his wife wove on a loom
> from yarn spun at the spinning wheel
> from sheep sheared in April.
>
> He packed five pairs of mittens
> his daughter knit
> from yarn spun at the spinning wheel
> from sheep sheared in April.

Jamie wrote her own version of Ox-Cart Man in her journal, using language to repeat and to build the story. In creating her text, she revisited Ox-Cart Man many times, and clearly used the elements Mrs. K. had pointed out to construct her own story.

[WS, OB #47, 4/11/91]:

> Sam packed a cart of apples
> she picked from the tree in April.
>
> Sam packed a apple pie
> from apples cooked on the stove
> she picked from the apple tree in April.

Focusing the children's attention on language, Mrs. K. read aloud We're Going on a Bear Hunt by Michael Rosen. After only a few repeated readings, the children read each of the repetitive phrases along with Mrs. K. During independent writing, Jamie began incorporating repetitive phrases into her writing. Initially, Jamie's written language resembled the phrasing in stories she heard. Eventually, Jamie invented her own refrains.

[WS, OB #54, 4/22/91]:

We're goin' on spring break
goin' to have a lot of fun
I'm excited
I'm excited
Wow! an airplane
a big noisey airplane
Varoom! Varoom!

Journals. Jamie wrote in her journal often. This is the kind of entry Jamie wrote early in the study.

[WS, OB #3, 1/31/91]:

> I liked the story about the weather (referring to What Will The Weather Be Like Today? by Paul Rogers). Did you like the story?

Mrs. K. answered Jamie's questions.

> Jamie, February 1, 1991
> Oh, Yes! I really like the story What Will The Weather Be Like Today. I especially liked the pictures. What did you like best about the story?
>
> Mrs. K.

Mrs. K. used the journal to model a new concept within a familiar context. Mrs. K. modeled how to write a friendly letter. After several journal entries, Jamie incorporated those elements, such as addressing her dialogue to Mrs. K., dating her journal entry, and an appropriate closing.

[WS, OB #9, 2/8/91]:

Dere Mrs. K. Febray 8 1991

I like you writing to me in my journal. I like writing back too. Cause then I have somthig to say agan back to you.

I like you,
Jamie your friend.

Jamie eventually used her journal to extend her own learning by expressing personal concerns or by asking questions directed to the teacher. During one thematic science unit, the children studied bugs. During Language Arts, Mrs. K. read aloud How Many Bugs in a Box? by David Carter and How Many Snails? by Paul Giganti; during science, Insects by Althea Braithwaite and Monarch Butterfly by Gail Gibbons. Jamie was fascinated with insects and read several other texts in preparation for a science project. Jamie independently read Bugs by Nancy Winslow Parker and Joan Richards Wright and Monarch Butterfly by Gail Gibbons and wrote the following journal entry.

[WS, OB #64, 5/3/91]:

March 15 1991

> Mrs K. What is the difference between the chrysalis and the larva they look the same. Jamie

Eventually, after many experiences with informational books, Jamie wrote on many topics, using both fictional and nonfictional frames. She wrote thank you notes to Mrs. K. and to the researcher, a documentary of sequential events about losing a tooth, a factual story about playing in the snow, her own version of The Three Littlee Pigs, a fictional story about Jack and the Beanstalk, a poem about going to the beach on vacation, a letter to Bill Martin Jr., and an account of a playground disagreement written in a list format.

Science

There was a designated science textbook, according to district guidelines, to ensure that all first graders received similar science instruction. Mrs. K. recognized that the children displayed a lack of interest in science when the textbook was used compared to when children's literature was used. She brought in many children's literature texts to support the science textbook.

When the children studied animals, Mrs. K. read aloud from the science textbook about animals and how they hide. The children, including Jamie, tuned out. The next day, Mrs. K. read aloud Can You Find Me? A Book About Animal Camouflage by Jennifer Dewey.

Jamie and her classmates were mesmerized. As a result, Mrs. K. followed the designated science curriculum by supplementing the textbook with children's literature.

During one science unit, later in the research project, the children studied water. Jamie, anticipating the accompanying writing event, took paper to her working group. Throughout the hands-on activity, she made notes and drew a diagram to represent what happened. Following the hands-on activity, the children wrote about their experiences in their science logs. Jamie included her notes and diagram in her log. She was unconcerned with sentences, grammar, or where to begin writing, rather, she recorded what was most important about how the activity was approached, what things were explored, and what was learned. Therefore, Jamie spent a great deal of time recording her experiences. She was beginning to function according to the demands of various writing tasks. Her written products took on a different form as can be seen in the following example.

[WS, OB #88, 5/10/91]:

water!! Jamie [PN: this line was written across the top of Jamie's paper]
1. tub of water groups [PN: 2nd line of Jamie's]
2. bottle with a top
3. paper for a note
4. little tube this so paper dry
5. more water
[PN: After the experiment, Jamie recorded the following observations in her log]
frst - Miss K. put water in tubs

secnd - 'we' [PN: Jamie crosses out we at this point as writes 'group'] my group writes a note
third - put water in bottle put on lid
four - it sinkd!

Jason

Teacher Observations

Mrs. K., in her response journal [RJ, 2/15-22/91, Entries #24-26] and in an interview with the researcher [FN, 2/22/91, IF-INT #25], described Jason as a young learner having difficulty in many areas of the first-grade curriculum and as being "in need of some additional encouragement and support." Jason was read to and was surrounded with many different kinds of books. He knew that letters and sounds made words and words created whole stories. Jason demonstrated difficulty in putting letters and sounds together to create words and messages. Jason often busied himself in other tasks, avoiding reading and writing tasks.

Researcher Observations

Jason displayed signs that he was not a self-confident learner, constantly glancing around the room to see if anyone was watching him. If Jason discovered one of his peers watching him write, he covered his work.

Verbally competent, Jason did discuss his writing with a peer, Mrs. K., or the researcher. Initially, he did not share his written work with the researcher and hesitated sharing his written work with Mrs. K.

Jason socialized with only two of his classmates. These classmates also displayed difficulty in successfully completing written tasks. In whole or small group activities, Jason rarely assumed leadershipor was appointed leader or spokesperson. Within these whole or small group activities, Jason contributed very little.

Literacy Learning Contexts

Morning Negotiation, Interaction, and Reenactment

Jason arrived at school 45 minutes prior to the start of school each day with his mother, a fourth-grade teacher in the building. If Mrs. K. saw Jason enter the room, she immediately acknowledged him.

[FN, OB #18, 2/22/91]:

> Mrs. K.: Jason! Well, you're here and I didn't even see you come in this morning! How would you like to be my helper this morning? [PN: Jason would always nod in the affirmative]

Mrs. K. asked Jason to take things to other classrooms, set out the books for reading, and place needed materials at each classmate's desk. As a result, Jason began talking to Mrs. K., laughing, and, by the time the other children arrived, Jason was relaxed and interacted with his peers.

[FN, OB #4, 2/4/91]:

> Jason: [Spoken as Kent enters the room] I know what we're gonna read today. Wanna know how I know? [Kent nods "yes"] I knowed cause I put them all out. Wanna see? [Again Kent nods "yes" and Jason rushes over to where he set up the books for Mrs. K.]

While the children organized themselves for their day, Jason drew pictures. When approached by a classmate and asked, "What ya doin, Jason?" he typically replied, "I don't know."

Kent often made an effort to include Jason in activities, but his involvement remained minimal. Jason used gestures, mannerisms, and his body language, interacting verbally only when asked a question.

Occasionally, Jason and his peers gathered in the manipulatives center. Jason appeared comfortable in this center, manipulating magnetic letters into the words displayed around the area. While the children manipulated the objects, the talk was casual and Jason was not expected to perform in any particular way. If the group wandered to either the independent reading or writing center, however, Jason returned to his desk.

Morning Routine

With the official start of the school day, Jason immediately joined the group in the sharing center. He usually sat in the middle of the group.

Jason actively participated in whole group activities, reciting the Pledge of Allegiance and singing the transitional songs as the group moved from one morning routine to another.

Watching Jason during the morning routine, as Mrs. K. asked the whole group questions, it was apparent that he usually knew the answers, but rarely volunteered. When Mrs. K. observed that Jason knew the answer, she often invited Jason to respond.

[FN, OB #20, 2/26/91]:

Mrs. K.:	Jason, I think you said the answer we're looking for! Would you like to repeat it for the class so everyone can hear what you said?
Jason:	[shrugging his shoulders and speaking very softly] I don't know.

Mrs. K. waited a few moments for Jason's response and then moved on.

Interactive Writing

In constructing the daily news, Jason devoted his undivided attention to the headline. The first line of the daily news was always

the date. Jason checked the calendar for the correct date. As the children said the date in unison, Jason joined in. After weeks of reciting the first line of the daily news, Jason knew the text should read, "Today is [then the month, day, and year]." He still did not volunteer to write any of the first line of text. Knowing Jason was capable of constructing the first line of text, Mrs. K. occasionally asked for Jason's help.

[FN, OB #6, 2/5/91]:

Mrs. K.:	Jason, I'll bet you can come up and get us off to the right start in our news today by helping us write the first word. First, let's all say what our first line will be again.
Children:	[in unison] "Today is Tuesday, February 5, 1991."
Mrs. K.:	[as she places several markers on the trough at the base of the easel, she says aloud again] Today is Tuesday, February 5, 1991. What is our first word going to be [looking at the entire group of children]?
Children:	T-o-d-a-y!
Mrs. K.:	Today . . . Jason, can you come up and write the first letter for us in the word "today" [says word carefully making sure Jason can adequately hear the "t" in today]?

Jason approached the easel to write the T in today. Picking up a red marker, he glanced at a previous day's news chart. Jason wrote a capital T on the top line at the extreme left side of the paper.

Realizing that he had successfully participated in an interactive writing event, Jason volunteered to make the T in Today. After several weeks, Jason wrote the entire word - Today.

[TN, OB #49, 4/15/91]:
[PN: occurs during the interactive writing of the daily news]

Mrs. K.: Okay, what's the first word in our headline going to be? [PN: Jason raises his hand; Mrs. K. calls on him]
Jason: Today is the first word,
Mrs. K.: Good, Jason. You're absolutely right. Today is the first word. What letter do we need to start with so we can write Today? [Jason blurts out the answer]
Jason: T! [Jumps to his feet and comes to front to write a T]
Mrs. K.: That's a good lookin T, Jason. What letter comes next and who wants to write it for us?
Jason: I can write all of it!
Mrs. K.: Well then, go ahead and let's get that first word TODAY written on our news!

If Jason volunteered a news item containing words he had not previously written, he wrote none of his news item. Mrs. K. then asked for volunteers to write his news item. Jason watched intently and, if a word was omitted, he blurted out the forgotten word. Realizing Jason wanted to participate, Mrs. K. thanked him for catching their error.

Shared Reading

Jason participated in the shared reading of the news, but was not reading in the conventional sense. Through repeated readings, he had memorized each news item. Once Mrs. K. and the group read the first word of each news items, Jason joined in the shared reading. Mrs. K. explained the importance of Jason's participation:

[Journal, Entry #16, OB #1, 1/29/91]:

Jason wasn't reading the news today, but he had memorized it. He still seems to be benefiting from "reading"

> the daily news in that way because he is closely watching each word on the news chart and, therefore, attending to print, beginning to make some one-to-one matching connections. With either myself or one of his classmates pointing to the words being read, perhaps Jason will begin to make more letter/sound connections, build his sight vocabulary and eventually really read, in the conventional sense of the word, during these shared reading experiences.

During other shared readings, Jason remained a passive participant. Mrs. K. and the children read Shadow Magic and Bear Shadow many times. They decided to compare the two stories in order to either write their own version of a shadow book or to do a re-telling. First, negotiating how to compare the stories, they decided to do a comparison chart and create it as an interactive writing event. Once the comparison chart was completed, the children engaged in a shared reading of their chart. Jason watched, but did not participate in the shared reading. Table 14 is based upon the 20-minute interactive writing activity [FN, OB #9, 2/8/91] and demonstrates Jason's group interactional dialogue during this activity.

Table 14. Jason's Interactional Dialogue

Type of Involvement	Number	Category %	Overall %
Questions	**2**		**15**
Directed at Mrs. K.	0		
Directed at Peer(s)	2	100	
Statements	**4**		**31**
Directed at Mrs. K.	1	25	
Directed at Peer(s)	3	75	
Connections to Texts	**2**		**15**
Fictional Text(s)	1	50	
Nonfictional Text(s)	1	50	
Connections to Experiences	**3**		**24**
In-School	0	0	

Table 14. (Continued)

Out-of-School	3	100	
New Discoveries*	**2**		**15**
Teacher Stimulated	1	50	
Peer(s) Stimulated	0	0	
Text(s) Stimulated	1	50	
Total	**13**		

* First time awareness.

Table 14 demonstrated several important factors about Jason as a learner. During whole-group interactional learning activities, Jason was an inactive participant. He usually sat quietly, letting others talk. Jason directed 100% of his questions and 75% of his statements to his peers, compared to 0% of his questions and 25% of his statements to Mrs. K. At this point, Jason did not demonstrate a preference for either fictional or nonfictional texts and made connections to both genres. Jason made new discoveries; 50% of his discoveries were stimulated by the teacher and another 50% were stimulated by the texts he encountered.

Read-Aloud: Language Arts

Jason attentively listened during the morning read-aloud, keeping his eyes on Mrs. K. and the text. His attentiveness and engagement level depended on the shared read-aloud. Jason preferred stories about certain topics and areas of interest. During the sharing of most folktales and fairy tales, for example, Jason tuned out. When Mrs. K. read aloud a folktale or fairy tale with a male protagonist (i.e., Jack and the Beanstalk, The Elves and the Shoemaker) or one

that featured adventure (i.e., The Three Billy Goats Gruff, The Three Little Pigs), Jason listened attentivley. During the shared read-aloud of Sleeping Beauty, followed by Sleeping Ugly, he voiced his stance:

[TN, OB #81, 5/29/91]:

Mrs. K: Which of those stories [referring to the two read-alouds mentioned above] did you like the best? [addressing the whole group]
Jason: I didn't like either one! [comment was blurted out and he tossed his arms up into the air as he spoke]

When Jason related to the story line, a character(s), or a place, he showed more interest in the story. Mrs. K. read aloud Andy and the Tire during a thematic unit about friends and friendship [FN, OB #38, 3/21/91]. Jason grinned, put his hand over his mouth to gesture shock, and made expressions of amazement at his peers. At one point during the read-aloud, he looked at Andy (a classmate with the same name as the main character in the story) and asked, "Andy? Why'd you do all that?" Jason made a connection between the story character and his classmate. Because of his expressed interest during the read aloud, later Jason was asked about the shared reading of Andy and the Tire.

[TN, OB #38, 3/21/91]:

R: Did you like the story Mrs. K. read aloud this morning?
J: Andy 'n the Tire? [looks away for a moment] Yea. [giggled and put his hand over his mouth as he answered]

R: Do you know *why* you liked that story?
J: ...'cause Andy [turns around, points to his classmate named Andy] got in so much trouble. It was funny!

On another day, Mrs. K. read aloud This Is the Way We Go to School: A Book About Children Around the World, an informational book. Jason expressed little interest in the text. Mrs. K. explained Jason's behavior.

[TN, I-INT #36, OB #37, 3/21/91]:

> Mrs. K.: The text was too difficult for Jason to process. I figured it would be when I selected it as a read-aloud to go with this unit. But it's not too difficult for most of the rest of the children. And there are some valuable things that Jason can glean from the illustrations and just listening to the language in the text *and* to the responses and discussion of the rest of the children. Especially since Jason is such an auditory learner.

On another occasion, Mrs. K. read aloud Dinosaurs, Dragonflies and Diamonds: All About Natural History Museums [FN, OB #39, 3/25/91]. The language was as difficult as the language in This Is the Way We Go to School: A Book About Children Around the World. Jason immediately demonstrated a greater interest in Dinosaurs, Dragonflies and Diamonds: All About Natural History Museums. He moved his head from side to side in order to see the text and repeated phrases from the text. Concluding the read-aloud, Jason actively participated in the whole group discussion and paid close attention to the talk surrounding the text.

Independent Writing

General. Jason's writing reflected the classroom learning environment--shared stories, talk surrounding book discussions, and his personal engagement with each event. Jason had a generally negative view of himself as a writer, and openly complained when asked to write:

[FN, OB #80, 5/29/91]:

> [PN: writing time following Goldilocks and The three Bears; the children were composing letters to the three bears from Goldilocks apologizing for the various things she had done]
>
> J: Mrs. K.? Do I *have* to write that? *I'm* not sorry!
>
> [PN: Jason does write a letter from Goldilocks to the three bears, but he wrote a letter explaining why he *wasn't* sorry for all those things Goldilocks did. The entire time he was writing, he was asking Mrs. K.: "Can I be done now?"]

[WS, OB #80, 5/29/91]:

> Dear 3 Bears,
> In not sory I whant to eat youforlunch in still not Sorry because i didn't do it.
>
> Love
> Jason

[FN, OB #61, 5/1/91]:

> [PN: Mrs. K. just finished reading-aloud A Tree Is Nice and the children were beginning to return to their seats or to where ever they chose to write]
>
> J: Oh! No! [hands on his head] not writing! Not again!

[PN: Jason complained for approximately 10 minutes before finally sitting down to write something.]

Jason rehearsed a long time before actually writing anything. He sat for extended periods observing a classmate. Needing the input from the other children, Jason asked peers to read their writing to him.

Jason did not use invented spelling; he wanted all of his words spelled conventionally. Therefore, he used the Word Bank. Aware of Jason's insistence on using conventional spelling, Mrs. K. turned each request to spell a word onto the Word Bank card into a teachable moment for Jason.

[FN, OB #42, 3/28/91]:

J: "How do you spell jump?" [Looking away as he speaks; he's not being inattentive, but feeling shy about needing to ask for the spelling of, yet, another word.]

T: Well, let's think. j-u-m-p [saying the word slowly so Jason can hear the sounds, especially the initial sound for j] Say that with me . . . [together they say j-u-m-p, but Jason says the word much too fast to be able to hear individual sounds] Now let's say it slowly and see what sounds we can hear. [Again, together they slowly say jump; when they finish Mrs. K. pauses . . .] Go ahead and put the first letter for jump. [Mrs. K. and Jason continue with the process until Jason has spelled, with support, j-u-m-p.

After weeks of direct support, Mrs. K. encouraged Jason to use the books and the environmental print within the classroom for

support. As a means of additional support, she established collaborative situations where the children were invited to work in pairs or in small groups.

After approximately 6 weeks, Jason began independently using alternative, supportive resources. As Jason felt more confident as a learner, had more strategies available to him as a writer, and successfully accessed and implemented those strategies, writing became less of a struggle.

The books that Mrs. K. shared with the children had an influence on Jason's writing. He was not engaged with the text The Enchanted Caribou and his writing (Figure 10) reflected his overwhelming challenge as a result of his lack of engagement.

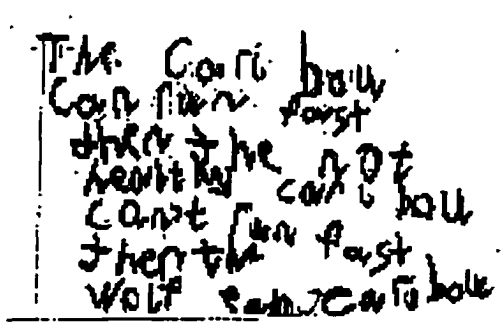

Figure 10. WS, OB #30, 3/12/91

When Jason was uninvolved with a text, his writing was either void of illustrations or the illustrations stood alone, having little

correspondence to his written text. He did not revisit the text or collaborate with a peer.

When Jason was engaged in a shared read-aloud, his writing reflected his involvement. Mrs. K. shared informational books about famous people (e.g., A Picture Book of George Washington, [FN, OB #14, 2/15/91]). Jason expressed immediate interest. Following the shared read-aloud he remained seated on the carpet in the sharing center. After only a few moments, he retrieved A Picture Book of George Washington from the small table beside Mrs.K.'s director's chair. First, Jason studied the cover of the text then turned to the first page of text. Using his finger, he scanned from word to word. When he reached the end of page one, he closed the book, returning it to the table. Looking very confident, he went to the writing center.

Following the shared read-aloud of A Picture Book of George Washington, Jason elected to write in the writing center for the first time. Realizing the significance, Mrs. K. walked over to Jason. Bending down next to his chair, Mrs. K. and Jason had a very revealing conversation.

[TN, OB #14, 2/15/91]:

T: You seemed to *really* enjoy the story today, Jason. That is one of my all-time *favorite* picture books.

J: [PN: Nods his head and grins, but doesn't make eye contact with Mrs. K.]

T: I'm glad you chose to write at the writing center today, Jason. There are so many neat things to choose from over here! What are you going to do today? Have you decided?

J: I don't know [shrugging his shoulders; Jason pauses a moment] I'm gonna make a picture of how he looked . . . how he looked when he was little. [still no eye contact and the whole time he is answering Mrs. K. he is lining up the colors of markers he'll use]

T: I'll just bet that's what you were looking for when you were flipping through the story, uh? I'll bet you were seeing exactly what George Washington looked like!

J: [looking right at Mrs. K.] Yea. I'm gonna make him look like the book so they'll know who he is. [signaling he is done talking now, Jason turns himself slightly in his chair, selects a black marker and gets into the drawing position]

T: [Aware Jason is done being questioned, she pats him on the back, stands up, and says . . .] I know it'll be great. I can hardly wait to see it when you're done.

Journals. At the beginning of the research study, Jason seldom composed in his journal. Mrs. K. reminded him that he had not written in his journal in a long time, hoping to prompt him to write. A casual invitation to Jason often stimulated him to write in his journal.

[TN, OB #23, 3/1/91]:

T: [quietly approaching Jason in order to keep their conversation between just the two of them] Know what I miss, Jason? I miss you writing to me in your journal! Do you think sometime real soon, when you have some time, you could write to me?

J: [nods his head in the affirmative, shrugs his shoulders, but is smiling] I don't know.

Over the course of the study, Jason wrote routinely in his journal. His journal entry dated 3/4/91 was evidence that he understood the purpose for the journal.

[WS, OB #24, 3/4/91]:

> 1-3-1-91
> Dear Mrs. K.,
> am I doeg good on my wrk.

Eventually, Jason's journal functioned as a catalyst for writing ideas. During independent writing, following the shared read-aloud of Color Zoo [FN, OB #28, 3/8/91], he elected to write in his journal.

[WS, OB #28, 3/8/91]:

> Mrs. K. Color Zoo is good. Is like a other book my mom read to my and my brother. I like more others.
> J

Mrs. K. responded to Jason's entry. First, she responded to the fact that he liked the shared story. Secondly, Mrs. K. asked Jason about the other book that he had mentioned. Lastly, she addressed his request for other stories similar to Color Zoo.

[WS, OB #30, 3/12/91]:

> Jason,
> I like the story Color Zoo, too. What was the name of the story your mom read to you and your brother? Maybe you can bring it in and we can read it to the class. There are other stories that are like Color Zoo. I have the book Fire Engine Shapes. I will bring it to you and you can share it with your mom and your brother.
> Mrs. K.

When Mrs. K. began a thematic unit about dinosaurs, she immersed the children in learning about dinosaurs. The children listened to fictional texts (The Dinosaur Who Lived in My Backyard) and informational texts (My Visit to the Dinosaurs) about dinosaurs during the Language Arts read-aloud. The children listened to fictional stories (Dinosaur Bob and His Adventures with the Family Lazardo) and informational stories (The Dinosaur Eggs) read aloud during Science. Mrs. K. extended their learning about dinosaurs into math. Extensions for the dinosaur thematic unit consisted of various activities and opportunities including the children's dinosaur projects.

Mrs. K. read aloud Dinosaur Bones during language arts. Jason was inspired to write in his journal during independent writing. He retrieved his journal and joined a small group of students (i.e., Amish, Jenny H., Kelley, and Callon) preparing to write, asking if he could join their group. [Pointing to a chair] "Can I sit here?" Amish, one of the group's participants, responded enthusiastically and with a smile, "Sure!" and Jason sat right down. Three of the group members (Amish, Jenny, and Kelley) had their journals, and another student, Callon, had a large sheet of unlined paper and crayons. While the children thought of what to write, they talked about the story. The children shared enjoyable parts of the story and facts about dinosaurs. These children unconsciously rehearsed their writing. Jason sat and listened. Callon talked about fascinating dinosaur facts. Suddenly, Jason joined the conversation.

[TN, OB #23, 3/1/91]:

J: I been to COSI and seen the dinosaurs. They're even bigger than I thought from the books. And look! I wore my dinosaur T-shirt. Me and my brother both got them.

Callon: I liked how they made 'em move! Wow! Did you see that? And Mrs. K.'s right . . . Tyrannosaurus Rex is the biggest!

J: Big? He's bigger than a house! Maybe bigger than this whole school!

Following this lively exchange of ideas, knowledge, and curiosity about dinosaurs, Jason wrote in his journal and did not attempt to keep his journal hidden from his peers. He remained an active group participant, engaging in meaningful dialogue with group members as he constructed his text. Earlier in the study, if Jason remained near another writer, his text resembled his peer's. During this journal writing event, however, Jason moved efficiently between collaborator and independent writer. Jason asked Callon if he was going to write about T. Rex, too, or just draw a picture. Callon informed Jason that he had not yet decided. Jason asked Jenny and Amish what they were going to write. Jenny told Jason she was making-up a story about a dinosaur named "Giant"; Amish told Jason he was going to talk about the books Mrs. K. had read. After listening to each of his peer's writing ideas, Jason told them: "I'm writing all the facts I know about T. Rex!"

Jason went to the dinosaur book display and brought Bones, Bones, Bones and Dinosaurs and Their Young back to the writing

center. He thumbed through the text finding information about T. Rex. Moving his finger across each letter, he copied the correct spelling of T. Rex for his title. Jason dated his entry on the same line as his title. He wrote about T. Rex without concern for spelling, sentence structure, and other mechanics. See Figure 11.

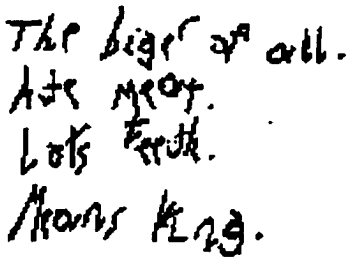

Figure 11. WS, OB# 23, 3/1/91

On the back of his written text, Jason drew a picture of his dinosaur, coloring and labeling it. Above his picture, modeling a text, Jason wrote T.Rex broken into syllables for pronunciation.

Science

Subjects that Jason was interested in such as animals, experiments, and nature were areas included in Mrs. K.'s science curriculum. Therefore, Jason enjoyed science. The hands-on approach also made science accessible to Jason.

Writing was integrated with the science curriculum. Initially, Jason avoided the writing activities in science. When Mrs. K. asked

the children to take notes, Jason was unable to express his observed experiences in written language. Most of Jason's science log pages were blank. As the school year progressed and Jason felt a part of the learning community, he attempted to write his observations in his science log. Again, he became too entangled in the mechanics of writing (i.e., the correct spelling, location of the text on a page, what words get capitals), paralyzing him from putting his thoughts on paper. Mrs. K. observed Jason's writer's block and documented it in his science portfolio.

[RJ, 2/8/91, Entry #21, OB #9]:

> I don't think the writing that Jason did today during science reflected all that he learned about shadows. We read several books about shadows and then did a couple of experiments with shadows. Jason was able to do the experiments, was excited about the experiments, worked well in groups to do the experiments, and, most of important of all -- was able to talk about what he had learned and to share his ideas. When it came time to record what he had been involved with in his science log, Jason worried about spelling, which words should get capitals and didn't record anything very important about shadows and what he had learned.

Mrs. K. assisted Jason in writing his ideas and observations. She paired Jason with classmates successful at expressing themselves across writing tasks. When the children studied various communities (i.e., Arctic Community [FN, OB #32-44, 3/14-4/8/91]), they selected an aspect of that community to study such as animals, people's jobs, or weather. Wanting the learning experience to be collaborative and supportive, Mrs. K. divided the children into working

groups. It was not necessary that all children in one group work on the same aspect of the Arctic Community. In fact, Mrs. K. recommended that each group have members investigating different aspects of the larger community. Mrs. K. encouraged Jason to work with two specific children. She placed Jason into a group conducive to his individual learning needs. Working in a group learning situation provided Jason with new ideas and multiple perspectives. He participated as a passive member of this group for several days. Finally, Jason, felt comfortable and interacted with his group members. Group dialogue gave Jason appropriate language to talk about his area of interest. On the 10th day of group participation, he recorded in his science log. Everyone was busy and not paying attention to Jason's spelling, enabling him to focus on what he wanted to write in his log. When the groups displayed or presented their work, Jason still did not want his work displayed.

Cross-Case Analysis

The learning environment gave Anthony, Jamie, and Jason many varied experiences with informational books. Informational books were read aloud to the children, were integrated with stories of fiction to provide experiences across genres, and were available at the centers for independent reading and writing. The majority of experiences with informational books occurred during Language Arts and Science. Three main elements emerged as influential factors on

Anthony, Jamie, and Jason as writers -- the texts, teacher-talk, and peer/social interaction.

The Text

Anthony

Experiences with informational stories influenced Anthony's thinking about what he wrote and the writing he produced. Seymour Simon's New Questions and Answers About Dinosaurs was one of the texts read aloud to the children. It made a broad, generalizing statement such as "Most dinosaurs were giant animals." This was then followed by a generalizing statement with factual evidence, "Some, such as Tyrannosaurus, could have peered over the roof of a house." This was one format from expository texts that Anthony used in his writing.

[WS, OB #24, 3/1/91]:

Anthony's generalizing statement	People like scientists have lots of ideas about how the dinosaurs disappeared.
Anthony's supporting statement	A meteor crashed down to the earth and made it hard for the sun to shine. All the animals died (well, not all, but the dinosaurs did).

Other informational stories (i.e., Russell Freedman's Dinosaurs and Their Young) contained a coherent, progressive factual storyline with a distinct beginning, middle, and end. When Anthony modeled that style of expository writing, his story had a beginning, middle, and end.

[WS, OB #33, 3/14/91]:

An excerpt of Anthony's beginning	Scientists found dinosaur bones. This helped them know more about when they lived on earth.
An excerpt of Anthony's middle	Scientists studied the bones and found dinosaurs are not like reptiles we know.
An excerpt of Anthony's ending	Scientists want to find more bones and learn more and more about dinosaurs.

Another important and powerful device in certain informational stories such as Joanna Cole's The Magic School Bus Inside the Human Body, is labeling and "bubble talk." These devices became important inclusions in Anthony's writing as well, as can be seen in Figure 12.

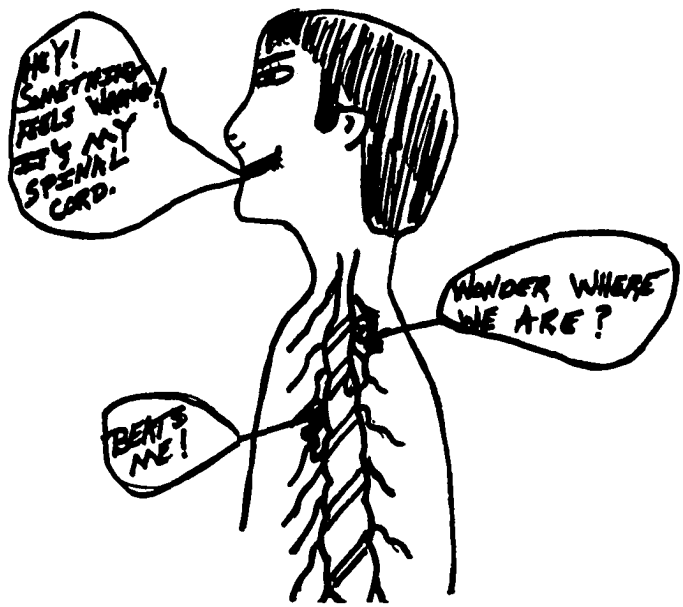

Figure 12. WS, OB #53, 4/18/91

Illustrations were vital to many informational texts, such as Gail Gibbons's Monarch Butterfly, and, consequently, illustrations became a focus for Anthony. He made detailed drawings and used labels to provide information. See Figure 13.

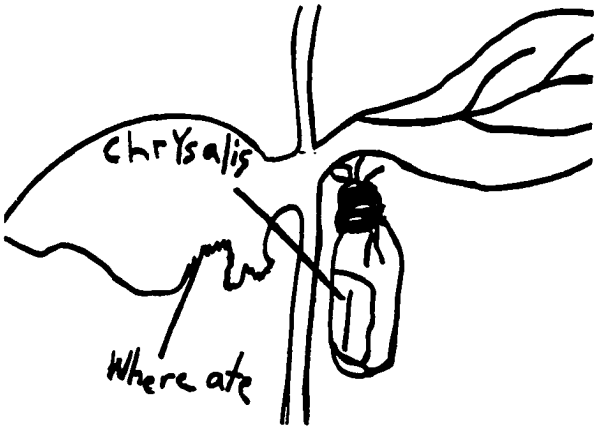

Figure 13. WS, OB #64, 5/3/91

The language and phrasing Anthony chose to incorporate into his writing reflected the genre-specific language of informational texts. Informational books often include such terminology as "the following, because of, for the following reasons." After daily experiences with informational stories, Anthony's writing included such phrases. [WS, OB #70, 5/13/91]:

> I like the following football players:
> 1. Joe Montana,
> 2. Boomer Esiason,
> 3. and James Brooks.

When Anthony wrote a fictional narrative, he used language, phrasing, and sometimes the organizational structure found in informational texts as well. In the following example, he used "the following reasons" and a list format within a fictional text.

[WS, OB #81, 5/29/91]:

> Once upon a time Jack was to go sell Milky White (that's the cow). Cause they had no money for food. Jack got 3 magic beans for the cow. Jack's mom was mad for the following reasons:
> 1. She thought Jack got jipped.
> 2. She didn't think the beans would grow.
> 3. She thought Jack was pretty dumm.

For months Anthony observed Mrs. K. model strategies and writing from informational texts. Initially, Anthony's writing was imitative of Mrs. K.'s modeling; his writing seemed more like talk written down. Then, Anthony used the informational texts as his model for writing a text. Near the end of the study, Anthony became a risk-taker, using invented spelling and creating written texts that were different from the informational books. He incorporated his own vocabulary words, rather than using those in the text, created unique illustrations to represent his written text, and included and integrated fictional elements into his nonfictional pieces and vice versa. "Freeing pupils to take risks is a major concern of whole language classrooms. Whole language classrooms liberate pupils to try new things, to invent spellings, to experiment with new genre, to guess at meanings in their reading, to read and write imperfectly" (Goodman et al., 1989, p. 28).

Anthony created a total of 187 pieces of written text during the research study. A documentation of his written products is listed in Table 15.

Table 15. Written Products Created by Anthony

Kinds of Writing	N	%
Total Number of Writing Samples	187	-
Number of Informational Samples	141	75
Number of Fictional Samples	46	25

Of the 187 written products created by Anthony, 141 (75%) of these were informational pieces. However, many of the 141 informational texts contained elements or characteristics of fictional narratives, and 46 (25%) of Anthony's written products were fictional narratives. Again, many of the fictional narratives contained elements typical of informational texts. Anthony had taken ownership of his writing and had internalized the process of creating a written text for *his* purposes. Wertsch (1985), quoting Vygotsky, talks about the change in learners: "internalization transforms the process itself and changes its structure and function" (p. 81).

Jamie

Jamie's experiences with informational books were reflected in her thinking and in her writing as well. Nature's Children, an informational book, began like a fictional story ("If you think that caribou look a lot like Santa's reindeer, you are right," p. 5) and then incorporated factual statements ("Reindeer is the name given to caribou that live in Russia," p. 5). Jamie's writing, after reading Nature's Children, modeled that text.

[WS, OB# 32, 3/14/91]:

Jamie's introduction modeling a fictional story beginning	I think my dog looks just like a Sled Tim Dog!
Jamie's factual statement about her topic	A Sled Tim dog pulls a sled with supplies thru the snow in the Arctic.

What Will the Weather Be Like Today? followed a question/answer format. The written text posed a question to the reader ("Will it be windy?" pp. 4-5) and the answer was given in the corresponding illustration. For example, to illustrate a windy day, the trees were bending, sails on sailboats were bowed out, and a man was holding onto his hat. Again, Jamie's writing modeled the format of this expository text.

[WS, OB #48, 4/12/91]:

Jamie's written text	Will it be cold?

Jamie then drew a picture illustrating "cold." She drew a picture of a small boy and girl dressed up for the cold. They wore coats, boots, mittens, and hats. She gave both children red cheeks. The girl was holding the rope to a sled and the ground was colored white, representing snow.

Labeling and "bubble talk," common elements included in many informational texts such as The Magic School Bus Inside the

Human Body, also found their way into Jamie's writing, as seen in Figure 14.

Figure 14. WS, OB #53, 4/18/91

After many experiences with informational books, Jamie integrated language and phrasing from informational books (such as "the following," "because of," or "for the following reasons") and from fictional narratives (such as "Once upon a time").

[WS, OB #82, 5/31/91]:

> Once upon a time there was a coragus man. His name was Lincoln. He wus our Presdent a long time ago. I know the following facts bout hem:
> 1. He did not like that the blak wear slaved peepol.
> 2. Abraham was a good president 2 times.
> 3. Abraham Lincoln was bone in Kentuky.
> 4. he had a mutter but she diyd when he was 7.
> 5. When Abraham's muther diyd he fother maryd a nuther girl.

For several months into the research study, Jamie's writing modeled familiar texts. During this imitative phase, she modeled her texts after familiar fictional narratives and informational texts. Next, Jamie began integrating elements of fiction and nonfiction into the same piece of writing. At the conclusion of the study, Jamie wrote both fictional and nonfictional pieces, integrated elements from one genre into another, and moved confidently between writing tasks and purposes. The lessons that Jamie learned from the texts she read were displayed in her writing (Meek, 1988). Vygotsky (1978) believed that "written language develops as speech does -- in the context of its use" (Moll & Greenberg, 1990, p. 323). Jamie gained control over her written language forms through her experiences with fictional and nonfictional books.

Jamie produced a total of 181 pieces of written text during the research study. A documentation of her writtten products is listed on Table 16. Approximately 54% of her written products (97 pieces) were informational and 46% (84 pieces) were written as fiction.

Table 16. Written Products Created by Jamie

Kinds of Writing	N	%
Total Number of Writing Samples	181	-
Number of Informational Samples	97	54
Number of Fictional Samples	84	46

Jamie wrote 97 informational pieces (54%), and 84 (46%) of Jamie's written products were fictional narratives. However, many of Jamie's writings included both informational and fictional elements.

Jason

Like Anthony and Jamie, Jason's experiences with informational books were also reflected in his writing. After hearing A Picture Book of George Washington [FN. OB #14, 2/15/91] read aloud and revisiting the text independently, Jason used the text to create his own picture of George Washington.

Jason's writing reflected textual influences when the topic interested him. He enjoyed learning about animals and his interest extended into dinosaurs. Mrs. K.'s unit on dinosaurs [FN, OB #23-35, 3/1-3/19/91] included both informational and fictional books. Jason gravitated to the informational books about dinosaurs. His writing reflected his new knowledge about dinosaurs.

[WS, OB #30, 3/12/91]:

[PN: Jason wrote the following after reading and rereading many, many times (Researcher counted 12 times) Digging Up Dinosaurs]

Title page	MY DINSORS
Dedication page	To Mrs. K. for helping me read bout thim.
Page 1	This gon to be bout dinsors. I read bout them I saw them to at cosi. This is whut i nowe. by Jason
Page 2	Dinosaurs lived miluns of years bak not all were gints. Some the size of birds.

[PN: Jason took the time to refer back to the word "dinosaur" so he could spell it correctly]

Jason also displayed an interest in books about space. His writing reflected several features found in some of the informational books Mrs. K. shared with the children about space and space travel. Jason was fascinated with The Magic School Bus: Lost in the Solar System and the various techniques Cole used to incorporate facts. For example, Cole listed important facts on a miniature piece of student notebook paper and placed it in the corner on each double page of text. Jason focused on this device and, during one re-reading, read only those "notebook pages." Later, he produced a piece of writing modeled after Cole's technique. See Figure 15.

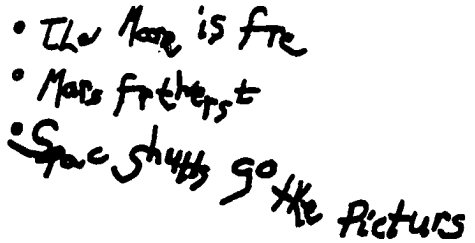

Figure 15. WS, OB #52, 4/18/91

Several texts that Mrs. K. shared with the children contained "bubble talk." Occasionally, Mrs. K. reinforced its use and had the children add "bubble talk" to their story maps and writing. See Figure 16.

Figure 16. WS, OB #80, 5/29/91

For months Jason observed Mrs. K. and his peers model strategies and writing from informational texts. Initially, his writing duplicated that of his peer's. Then, Jason joined small groups of his

peers and began sharing and working collaboratively. After he became an active group participant, he actively accepted and rejected peer ideas and writing. Jason borrowed from his peers, but his writing was very much his own creation. He then began using the shared informational texts as his model for writing a text and his texts resembled various informational texts. Near the end of the study, Jason used invented spelling, environmental print, and the texts to create his written texts. He borrowed and integrated elements from fictional and nonfictional texts into his writing. Jason's writing profile is represented in Table 17. Half of his written products were informational and half were fictional.

Table 17. Written Products Created by Jason

Kinds of Writing	N	%
Total Number of Writing Samples	93	
Number of Informational Samples	46	50
Number of Fictional Samples	47	50

Anthony, Jamie, and Jason each learned a variety of things by being exposed to informational books. A grid depicting what each of the case study children learned from their experiences with informational books and how those experiences manifested themselves in the children's written compositions is provided in Appendix C.

Teacher-Talk

Anthony

Anthony's writing was influenced by the nature and focus of teacher-talk. Initially, Mrs. K.'s focus during group read-alouds, conferences, and interactive writing guided Anthony's direction in both reading and writing.

[TN, OB#14, 2/15/90]:

[PN: Mrs. K. read and discussed a book about Abraham Lincoln. She focused on the facts about Lincoln; her focus appeared in Anthony's writing.]

T: Let's see, Lincoln was born on [writing it on the blackboard] February 12, 1809.
S: How many years ago was that?
T: That's a good question. How can we figure that out?
S: Put today's date on top and his date on the bottom and take it away.
T: Right! [subtracting on the board] That was 181 years ago, wasn't it?
S: Lincoln is 181 years old? Wow!

[PN: focus changes; it's time for the children to write about Lincoln]

T: I've made these little booklets for each of you [they are in the shape of Lincoln's head] since we are celebrating his birthday. You can come up and get one if you want to or you can write in your journals. It's up to you. You can write about anything you want to.
S: Do we have to write about Lincoln?
T: No . . . but you can if you want to.

[PN: Anthony wrote the following using a booklet]

Cover Abraham Lincoln

	by: Anthony
Page 1	He was born Feb. 12, 1809. He died Apr. 15, 1865.
Page 2	He was born in a little log cabin in Kentucky.
Page 3	Abraham Lincoln was a lawyer.
Page 4	He was the 16th president.

As Anthony gained more control over the process of creating written texts, he began moving away from writing according to Mrs. K.'s focus. On one occasion, Mrs. K. talked with the children about sled dogs and sled dog teams during their Arctic Communities unit. Mrs. K. read The Arctic Land and focused on fascinating facts about husky dogs and sled dog teams. Anthony did not write directly about what Mrs. K. had brought to his attention, but sought out other informational stories that gave him more information. Anthony's independent investigation about sled dog teams was later reflected in his written text.

[WS, OB#18, 2/22/90]:

Cover	Husky Dogs and Sled Dog Teams by: Anthony
Page 1	Husky dogs get really hot under all that fur (that's what keeps them warm)
Page 2	Huskey dogs pant (brethe hard) win they get too hot. My dog does that to.
Page 3	The netest thing is that they do not need food for a copil of days.
Page 4	Huskey dogs pull a sled as fast as 20 mile pie hawr. (My mom's car does that fast)

After several months, teacher talk still inspired Anthony's writing, but, rather than imitating Mrs. K., he pursued other informational stories and wrote about his discoveries. Eventually, Anthony developed into an independent reader, writer, and thinker, seeking his own interests and creating unique written texts reflecting his independent pursuits and growth as a learner.

An analysis of one transcribed 30-minute read-aloud and group discussion illustrates the diversity of language used in group interactions. Table 18 illustrates the use of questions, statements, instructions, and expectations by each category of teacher-talk.

Table 18. Whole group Teacher Discourse

Talk	Number of	%
Questions	**32**	**29**
one-answer	7	22
recall	3	9
connective	11	34
compare/contrast	4	13
invitational	-	-
prediction	6	19
defining	1	3
Statements	**43**	**39**
opinions	2	5
focusing	22	51
reinforcing comments	5	12
compare/contrast	5	12
invitational	2	5
prediction	2	5
defining	-	-
repetitive	5	12
Instruction	**28**	**26**
sequencing	7	25
compare/contrast	9	32
invitational	2	7
modeling	10	36
Expectations	**6**	**6**
directive	2	33
open-ended	4	66
Total	**109**	

When asking questions, Mrs. K. used connective questions the most (34%). In these instances, the teacher's questions were intended to assist the children in making meaningful connections to other stories and experiences. Statements were used more than any other form of classroom discourse, 43 times in 30 minutes and 51% of these statements were focusing statements. During the focusing statements, Mrs. K. introduced and reinforced textual features. It was found that 36 % of the instructional discourse modeled important features for the children. The instructional discourse helped the children with comparing/contrasting (32%) and with sequencing (25%) skills. Finally, 66% of teacher expectations discourse was open-ended, an instructional strategy inviting the children to take ownership and responsibility for their learning.

Teacher discourse, during the discussion following a shared read-aloud, encouraged and supported Anthony to explore, investigate, and make meaningful interpretations. At first, Mrs. K.'s questions probed his thinking. Soon, Mrs. K.'s questions became Anthony's questions, as he explored informational books through reading and writing. At the close of the study, Anthony was beginning to ask his own questions.

Jamie

Throughout the study, Jamie's writing reflected Mrs. K.'s talk to varying degrees. Initially, Jamie's independent writing reflected Mrs. K.'s focus during group read-alouds, conferences, and interactive writing. On one occasion Mrs. K. talked with the children all about dinosaurs. In order to bring certain fascinating and pertinent facts to the forefront for the children, Mrs. K. read many informational texts (e.g., Digging Up Dinosaurs, Dinosaurs and Their Young, and New Questions and Answers About Dinosaurs). Jamie's writings from the shared read-alouds of these informational texts included Mrs. K.'s featured elements (e.g., questions she posed, facts, illustrations). Over time, Jamie took control over the focus of her writing. The questions, language, and style became Jamie's and not Mrs. K.'s. Jamie selectively included elements that Mrs. K. focused on, taking on the decision-making role for her writing.

Jason

Jason's writing was influenced by the focus of Mrs. K.'s talk. He was an independent reader and thinker, but not an independent writer. Jason relied on Mrs. K. to direct his writing. Whatever Mrs. K. featured, Jason used in his writings. For example, the teacher read The Very Busy Spider and asked the children to do a retelling of that text or any of the other Eric Carle books. In reading The Very Busy Spider that day, Mrs. K. focused on various features within the text.

[TN, OB #84, 6/4/91]:

[PN: transcript will reflect only what Mrs. K. said in order to demonstrate her influence on Jason's writing; therefore, may appear to be gaps in discussion]

Mrs. K.: [PN: showing children title page] Look at this line that goes across the whole page. See it? Well, come up and feel this line. It feels raised. [PN: children rub fingers across the raised line]

Mrs. K: [continues reading story] . . . *and began to spin a web with her silky thread.* [Mrs. K. runs her fingers along the raised line as she reads] You know what? The spider feels just like the line feels. [children again take turns touching the raised spider]

Mrs. K.: [continuing to read] *"Neigh! Neigh!" said the horse. "Want to go for a ride?"* Who just said those words? [children answer] How do we know the horse is the one talking? [children answer] We know the horse is talking because of the quotation marks, don't we? Let's see if we can find others, okay?

Jason's retelling of The Very Busy Spider included raised lines to represent the spider's web and quotation marks indicating dialogue.

Peer/Social Interaction

Anthony

Early in the school year and in the study, Anthony avoided and was not directly influenced by peer/social interaction, but was indirectly influenced by surrounding peer talk. He was influenced by the questions peers asked. When a peer asked him a question,

Anthony's train of thought was redirected. Through listening and responding to his peers, Anthony became aware of his own knowledge. "Students are helped to know what they do know about language. Their intuitive knowledge about language is made more conscious not by direct drill and instruction but by helping them examine the real things that they do with language as they use language" (Goodman et al., 1989, p. 41). Anthony's new discoveries, an expanding knowledge base, and the language of social interaction found their way into his writing.

[TN, OB #37, 3/20/91]:

> [PN: The children are engaged in an independent writing activity after listening to Jim and the Beanstalk. They can write anything they want. Two of the children sitting near Anthony's work space are writing a retelling of Jim and the Beanstalk.]
>
> S: Anthony? What are ya goin to write about? I'm making up a story like that one [points to Jim and the Beanstalk]
>
> A: Not me! I'm writing a real story about Jack and the Beanstalk. I don't like that book [pointing to Jim and the Beanstalk and making a face]. I don't like how they made the giant look. [Anthony's conversational peer looks confused. Before he can say anything back to Anthony, Anthony goes and brings the text in question to their work space. He flips to one of the illustrations of the giant]. See? [Pointing to the giant] He looks dumb or somethin. [Anthony's peer stares at the picture of the giant for a few seconds; Anthony watches his peer and awaits a response; the peer merely pushes the book aside and begins writing].

Anthony's conversation with his peer focused attention on creating the giant for his text. He spent a long time illustrating his giant. In order to create his giant, Anthony retrieved and referred to a copy of Jack and the Beanstalk.

[TN, OB #62, 5/2/91]:

[PN: The children are writing after listening to another version of the Cinderella story; Cinderella by Marcia Brown. One boy sitting near Anthony is deciding what elements from each of the stories to include in his alternative text. Anthony has watched him for a long time.]

A: That doesn't look like much. What are you doing? You're suppose to write something . . . something that says something. Don't you know that?

Boy: Well of course I know that. I have to figure it all out first. Nobody just writes. It comes out jumbled up if you do that!

A: [Still watching Matt organize his thoughts into columns.] So . . . what is that? [Points to Matt's paper.]

Boy: I'm figuring out who goes in my story and what I want them to do. See, over here I am writing who to put in my story, this stuff is what they do, and this is my ending!

[PN: Anthony watches for a few more minutes. He throws away the paper he had started. He gets a large yellow sheet of paper and begins to make a list of characters, a list about those characters, and possible endings. Following is an excerpt of what Anthony composed after observing and interacting with his peer.]

[WS, OB# 62, 5/2/91]:

My characters	About them	The End
1. prince	1. saves Cinderella	1. marry
2. step mother	2. mean	2. dies
3. sisters	3. ugly	3. dudgun
4. fairy godmother	4. nice	4. missing
5. Cinderella	5. pretty	5. happy

[TN, OB #86, 6/6/91]:

[PN: Anthony and two other peers read several informational and fictional texts about dinosaurs. Following is part of their conversation.]

C: Which did ya like most?
E: This one. [Holds up Dinosaur Eggs by Mosley.]
C: [Giggling] I liked this one! [Holds up The Dinosaur Who Lived in My Backyard by Hennessey.]
A: Those are both dumb. This one is the only one that makes any sense. [Points to Dinosaurs by Gibbons.]
C: I'm gonna draw a dinosaur and write a story about him. I'm gonna have one live in my backyard just like in the book. We'll get into all kinds of trouble like Clifford.
E: I'll draw you write, okay?
C: No! It was my idea so I get to draw!
E: Then I'm not doing it with you!

[PN: Anthony has been listening and watching as the other boys argue about who will do what. He begins to draw a picture of a dinosaur and write a story at the bottom of each page. Following is an excerpt of what Anthony wrote after listening to his peers.]

[WS, OB#86, 6/6/91]:

[Under the picture of a dinosaur in a fenced in backyard]:
There's a big old dinosaur living in my backyard. He takes up the whole yard. He gets into lots of trouble just like Clifford. Now, if you don't know who is Clifford, he's that big red dog that belongs to Emily.

[Under the picture of a dinosaur with a swing set tipped over]:
Now are you asking what kind of trouble could a dinosaur get into? Well, he stepped on the dog's house. (It's crushed). He tried to swing and made them fall over. (Their messed up now too - Boy is Mom mad!)

Primarily, Anthony was influenced by the informational texts. Secondly, he was influenced by teacher-talk. Last, but still relevant to Anthony's writing, was the dynamic peer/social interaction that

influenced his writing. From the beginning of Anthony's first-grade school year until its conclusion, Anthony wrote many different kinds of texts. He produced a broad range of texts during the period of observation, learning from books, his teacher, and his peers. A complete list of Anthony's written products is shown in Table 19.

Table 19. Anthony's Written Products

Writing Event	N	%
Informational Stories	112	60
with fictional elements	69	62
Fictional Stories	46	33
Lists	3	2
Letters	13	7
Documentaries	8	4
Notes	4	2
Record Keeping	6	3
Drawing (pictures only)	4	2
Labeling (overlapping category)	34	18
Persuasive Writing	9	5
Dialogue (overlapping category)	41	22

As a writer, Anthony entered into this study writing mainly from his experiences in and out of school. As the year progressed, the researcher observed Anthony becoming more aware of and interested in his surrounding learning environment. From a Vygotskian perspective, Anthony had progressed as far as he could as an independent learner. He needed social involvement with his peers and his learning environment in order to continue growing and developing as a reader, writer, and learner.

Anthony mingled with his peers within his socially constructed learning environment. He joined small groups and pairs of children reading to one another and participated in their dialogue. Anthony listened to conversations surrounding an activity at a learning center. The social elements within Anthony's classroom became a vital part to Anthony's learning, contributing to his reading and writing development. Dialogue from a group's discussion, pieces of other children's writing, and specific learning center events found their way into Anthony's writing.

Goodman et al. (1989), referring to Dewey, said that "schools can adjust pupils to the school or adjust the school to the learners. His advice was to start where the learners are; accept the language, culture and experience of the pupils. It also means understanding their motivations. There are social zones of proximal development as well as individual" (p. 36). Mrs. K. had adjusted her classroom learning environment to fit Anthony's needs. She allowed him to engage in his social zone of proximal development when he was ready.

Jamie

Jamie engaged in dialogue with her peers and was influenced by the social interaction within her classroom learning environment. Even when Jamie was not a primary participant within a peer/social interaction, she and her writing were still influenced by listening to

and observing her peers. Jamie's written products demonstrated the influence from the surrounding peer/social interaction.

One day during science, the children recorded the growth of their seeds and any other relevant data in their Seed Journals. Many of the children examined their plants and collaboratively decided what to record in their Seed Journal. Jamie worked independently, but listened to a group of three girls discuss their observations.

[TN, OB #63, 5/3/91]:

> #1 Girl: All *my* seeds are growing!
> #2 Girl: Mine are too, but mine are doing better than yours cause look . . . the skin is coming off.
> #3 Girl: That don't mean it's doing better! It's just losing it's . . . it's . . . what's it losing?
> #2 Girl: The skin . . . it's losing the skin and it do too mean it's better cause now the thing we're waitin' to grow can come out!

[FN, OB #63, 5/3/91]:

> Jamie intently listens to this discussion about the status of each of the girl's seeds. Jamie writes the following observations in her seed journal.] [PN: Example of secondary peer/social interaction influence]

[WS, OB #63, 5/3/91]:

> Most of my seeds are growing. The skin is tearing away on some (that's suppose to let me know the flower will pop thru soon).

[FN, OB #64, 5/6/91]:

> It's time to begin science. Mrs. K. asks the children to take a few minutes, examine their seeds and record any

changes or other observations they want to make in their Seed Journal. Jamie gets her Seed Journal and asks 2 other children (2 girls) if they want to work together; they agree.

[TN, OB #64, 5/6/91]:

#1 Girl: Well, my plant is showing these [PN: girl is pointing as she speaks to others] . . . what is that? The plant or what? [3 girls examine very closely]
Jamie: My plant has that, too. Looks like a leaf to me.
#2 Girl: N-O-!! Can't be that cause the flower comes 1st.
Jamie: [Looking closer and touching the mysterious 'thing'.] That's not the flower! Flowers aren't green and this thing is green!
#1 Girl: Yeh! I *knew* it was a leaf! [PN: All giggle and begin to write in their seed journals.]

[WS, OB #64, 5/6/91]:

[PN: Jamie's writing sample that follows is an example of primary peer/social interaction influence.]

Levs are coming out of my seeds (I know that cause flowers aren't green or else Ive never seen one!).

Jamie's writing was influenced by her direct and indirect social interactions.

A complete list of the written products Jamie produced is represented in Table 20. She produced a broad range of texts during the observational period, learning from the books, the teacher, and her classmates.

Table 20. Jamie's Written Products

Writing Event	N	%
Informational Stories	41	23
with fictional elements	23	56

Table 20. (Continued)

Fictional Stories	35	19
Lists	8	4
Letters/Thank-yous	3	2
Poems	3	2
Notes	15	8
Record Keeping	19	10

Table 20. (Continued)

Drawing (pictures only)	8	4
Labeling (overlapping category)	27	15
Dialogue (overlapping category)	16	9
Alternative Texts	10	6
Recipes	4	2
Comparison Charts	6	3
Story Maps	11	6
Summaries	18	10

Table 20 indicated that Jamie wrote more informational stories (i.e., 41) than any other kind of writing. Of the 41 informational stories that Jamie wrote, however, 56% of those stories contained identifiable fictional elements (e.g., characterization, story beginning and/or ending).

Jason

Initially, Jason did not share his work or ideas with his classmates. The environment, however, constantly put Jason into interactive situations working with a peer or small group. The peer/social interaction of Jason's classroom influenced his learning and his writing. On one occasion, the children worked in small groups talking and writing about their families. Jason listened carefully to everyone's dialogue. When he wrote, Jason's writing included elements that group members shared.

[WS, OB #6, 2/5/91]:

Hi My name is Jason My favorit color is red.	[PN: One of the other children in the group had underlined his name; Jason chose to do the same; this was page 1]
I Losed 6 teeh and I get 6 dollars.	[PN: Page 2; the children had talked about losing teeth]
My DaD wrestle with Me.	[PN: One boy in the group talked about his dad and the fun they have; Jason included his dad]

Table 21. Jason's Written Products

Writing Event	N	%
Informational Stories	17	18
with fictional elements	12	71
Fictional Stories	39	42
Lists	7	8
Letters/Thank-yous	2	2
Notes	6	6
Record Keeping	10	11
Drawing (pictures only)	4	4
Labeling (overlapping category)	8	9
Dialogue (overlapping category)	5	5
Retellings	6	7
Story Maps	2	2

Table 21 indicates that Jason wrote more fictional stories (i.e., 39) than any other kind of writing. Of the 29 informational stories that Jason wrote, however, 71% of those stories contained identifiable fictional elements (e.g., characterization, story beginning, and/or ending).

Initially, Jason wrote very little. As the year progressed, Jason became interested in his surrounding learning environment and socialized with his peers. Jason developed self-confidence to ask questions and share ideas. Eventually, Jason actively participated in his learning by depending on his peers and using the surrounding supportive environment. During the course of the study, Jason's learning functioned at Stage I (see Appendix B) in Vygotsky's Zone of Proximal Development (Tharp & Gallimore, 1988, p. 35). His writing and behaviors imitated an influential peer's. Mrs. K. assisted Jason's learning through questioning and feedback. From a Vygotskian perspective, Jason had progressed as far as possible independently; he needed peer/social interactions. By the conclusion of Jason's first-grade school year, he functioned within Stage II (see Appendix B) of the Zone of Proximal Development (Tharp & Gallimore, 1988, p. 36). Jason successfully completed tasks without assistance from others, but the performance was still not automatized.

Mrs. K. adjusted the classroom learning environment to fit Jason's needs, supporting his engagement in the zone of proximal development. "What is spoken to a child is later said by the child to the self, and later is abbreviated and transformed into the silent speech of the child's thought" (Tharp & Gallimore, 1988, p. 44). Jason needed the support of his peers and his learning environment in order to progress and become an independent, self-confident, and capable learner.

CHAPTER VI

CHILDREN'S WRITING AND INFORMATIONAL TEXTS: SUMMARY, REFLECTIONS, AND IMPLICATIONS

Summary

The Problem of the Study

According to Newkirk (1989), "challenging the conventional views of writing development which underestimate children's competence at analytic writing, demonstrated that young children can write more than stories" (p. 3). The purpose of this study was to explore the influence of informational books on first-grade children's writing. This research observed first graders during the composing process, studied the various literacy learning contexts that might influence the writing they did from informational books, and determined what elements they might use from informational books in their own writing.

By observing one literacy-rich classroom that used children's literature, by assessing three case study children's writing processes, writing behaviors during writing, social interactions during writing, and the texts the children modeled during writing, the following questions were addressed:

Question 1: What experiences with informational literature, during the Language Arts and the Science portion of the curriculum, are provided for the children in one first-grade classroom?

Question 2: How does the writing of three case study children reflect their experiences with informational books within the social context of the classroom?

Procedures

Because the research problem defined reading and writing from a literature-based perspective and assumed children to be actively involved in reading, writing, and other literacy learning tasks, the research was conducted in one whole-language, literature-based, first-grade classroom.

Data were collected from January, 1991 through June, 1991 in two different phases. Baseline data were collected on all class members (n=25) from January, 1991 through February, 1991 in order to establish salient classroom learning contexts and the range of writing produced within those contexts. Case study data (n=3) were collected from March, 1991 through June, 1991. Data collection procedures included the use of audio tapes, field notes, teacher reflexive journal entries, interviews of both the children and the teacher, and an analysis of written artifacts.

Data analysis procedures were undertaken during and after the data collection period.

Findings

Each of the three case study children learned many things from informational books (See Appendix C, Tables 22-24). Data presented in the previous two chapters suggested that four broad themes were important in understanding how informational texts might influence first graders' writing:

1. The teacher's inclusion of informational books across learning contexts and the instructional conversations that surrounded them proved significant for children developing an understanding of the function and form of expository writing. The various learning contexts within which the children worked and experienced informational books were whole and small groups, and learning centers. Within these various learning contexts, the activities were child-directed explorations with teacher suggestions. Mrs. K. organized the Language Arts and Science curricula to make informational books an integral part of the learning environment. Centers were stocked with a variety of books that were integrated across learning events. Children's literature was brought into the classroom from many sources and changed according to instructional themes. Across instructional settings, Mrs. K. discussed the organizational pattern and the complexity of book language with the

children. For example, during the sharing of From Seed to Plant by Gail Gibbons, Mrs. K. modeled for the children how she read the story and used all of the information that was provided on each of the pages in order to make meaning. After one of the children noticed how each illustration was done within a frame, but always left a piece of that object outside of the frame, Mrs. K. discussed with them possible reasons for illustrating the text in this manner. She also shared with the children the many scientific terms that were presented with each illustration in the form of labels and explained how those labels provided additional information to the printed text at the bottom of each page.

Beyond instructional conversations, the children were given opportunities to experiment with and to independently investigate texts. Within individual and small group settings, the children talked about shared texts. The language from these texts was then incorporated into their talk and writing. After several shared and independent readings of Monarch Butterfly by Gail Gibbons and The Very Hungry Caterpillar by Eric Carle during Language Arts and Science, Jamie composed the following text.

[WS, OB #64, 5/3/91]:

> Once upon a time there was this caterpillar. Her name was Tara. She was a hungry caterpillar. She was a very hungry caterpillar. She ate and she ate and she ate. Then Tara found a leaf to take a nap. Not just any leaf a milkweed one. She slept and slept. She was in the crysalis. A long time she did. Then she got up and wasn't sleepy. I don't

> think she was hungry either. Something was different and feels funny. Tara gots wings now. Tara can fly, I think. Tara is a monarch butterfly. She flew up and away.

Mrs. K.'s instructional conversations established a foundation for the children to build upon as they interacted with their peers and created texts. Informational books were read aloud and made available at each of the centers.

Informational books were enjoyed, used as resource materials, and modeled another use of language, style, and presentation.

2. Using informational books across the curriculum influenced the content, form, style, and language of the children's writing. Learning across the curriculum was, for the most part, teacher-directed learning activities with many opportunities built-in for the children to make choices. Mrs. K., for example, may use informational books for a math, science, or social studies theme. The children borrowed extensively from the children's literature that they read. They blended styles and content and crossed genre boundaries to meet the needs of the various writing tasks. The children began to demonstrate their awarenesses for the differences in writing style/format and purposes in the various content areas, such as science. The children borrowed from the language, literary formats, and the illustrations. However, many of the organizational features and the language that the children borrowed from these texts were elements that Mrs. K. had featured or discussed.

The children had opportunities to write about many topics. They wrote about communities and people, animals and their habitats, experiments and their meanings. Being exposed to many informational texts, the children began borrowing from and improvising on the elements from those texts. Initially, the children borrowed only a few elements from the informational texts, but as the study progressed the children borrowed more elements from the informational texts. Jason, for example, initially borrowed from the ideas or concepts presented in the texts that Mrs. K. had featured. Gradually, Jason incorporated elements from informational texts that he noticed on his own.

3. Social interaction with peers influenced the content, form, style, and language of the children's writing. The children within Mrs. K.'s classroom were encouraged to talk and to collaborate with one another. Many literacy learning tasks were done in small groups or in pairs and the children were encouraged to interact and to share with one another. Therefore, many of those shared ideas and perspectives found their way into one another's writings. Anthony, the most independent writer of the three case study children, often influenced his peers before and during independent writing. On one occasion, Anthony had taken the Writing Suitcase home. Before having the opportunity to share what he had written with the whole class from the Author's Chair, he shared what he had written with a small group of peers during independent writing time. Anthony had drawn a detailed

picture of a tarantula and had labeled the body parts. The next four children to take the Writing Suitcase home produced products similar to Anthony's. Anthony's social interactions also had an influence on his peer's writing. During one discussion about caribou, Anthony contributed that they live on the tundra in the Arctic. Following that discussion, 17 of the 25 children's pieces of writing included the word "tundra."

4. The children's writings were influenced by the overall classroom learning environment. Mrs. K.'s classroom learning contexts provided for many and varied opportunities for the children to engage with informational books and to explore reading and writing possibilities. By integrating modeling into independent and collaborative small and whole group work, the world of books became important and useful to Mrs. K.'s students. The learning environment encouraged and nurtured cooperative learning as well as independent investigation. Therefore, all of the children were extended and challenged, but were also supported in both their attempts and in their successes. Individual learning styles and needs were acknowledged and addressed, enabling each child to take risks and progress.

Discussion

This research study, while attempting to understand the influence of informational books on children's writing, also provided

information about the contexts that facilitated children's understanding and use of books in general. Investigating the influences of informational books on children's writing also revealed the importance of teacher talk and peer/social interaction. In the following discussion, results of this study will be compared to critical research in the field of children's writing development.

The field predominately operates under the assumption that expository texts are too difficult for young learners. Therefore, children are often not provided experiences with informational books. Because informational texts are considered "too difficult" for young learners, their literary experiences consist of listening to and reading and writing from fictional narratives. The overwhelming stance, concerning informational books and children, is that specific knowledge about textual elements common to exposition develops later than knowledge about their fictional counterparts. Newkirk (1989), however, discovered that children, even at an early age, acquire an awareness that writing is used for different purposes and they are able to use elements of exposition in their writing. Newkirk's (1989) study demonstrated that exposition is not too difficult for children and that they can successfully identify and use elements of exposition in creating their own expository writing. He provided examples of children arranging a letter, for example, from general-to-specific, a format characteristic of expository prose. Newkirk also found that children are capable of independently using persuasion,

labeling, and creating signs. This research study supports the findings and implications of Newkirk's study. Given experiences with exposition through the regular use of informational books across learning contexts, children begin to incorporate elements from informational texts into their writing.

This research study supports and extends the findings of five other key research studies completed within the past 10 years. One research study conducted by Pappas (in press) focused on children and their experiences and successes with informational texts, first with four kindergarten children and later with twenty kindergartners from two classrooms. She found that children used elements common to informational texts because of their exposure to those elements and, as a result, their familiarity with features of informational texts. This research project, conducted in Mrs. K.'s first-grade classroom, discovered that young writers, as they were provided experiences across learning contexts with informational books, attended to the textual elements, such as format, language, and illustrations, found in informational books. First, the children pointed out focal textual elements in whole group discussions. As those elements became more familiar to the children, they were incorporated into their writing.

Pappas (in press), within the same set of research studies, also supported the notion that children learn about book language by hearing written language read aloud. She contended that these

read-alouds prepared the children for independent and/or collaborative exploration of the shared read-alouds, making children sensitive to and aware of specific elements within informational books. This research study also supports the idea that reading aloud stimulates children to independently investigate informational books, as well as specific elements and textual features. This study, however, demonstrates that the elements that were explored further, both independently and through social interactions. were the elements that were specifically focused on and talked about by the teacher during the shared read-aloud and book discussion. Those "featured" elements, talked about by the teacher during a read-aloud, were what the children also began to talk about within their small group social interactions and were, also, the first elements they included in their texts.

This research investigation supports the findings of Skillings's (1990) research study with third graders and their use of exposition within their own writings. She initially determined that, prior to the children in her study being familiar with elements of exposition, they were unable to incorporate those elements into their writing. The children recognized and identified elements of exposition, but were unable to successfully implement them into their writing. However, once the children had been given experiences with and specific instruction about the elements of exposition, the children used those elements in their writing. Anthony entered this study with a great deal

of knowledge about informational books and incorporated elements of exposition into his writing. Jamie and Jason, however, were not as familiar with expository elements and did not use those elements in their writing. After many and varied experiences with informational books, Jamie and Jason incorporated elements from informational texts into their writing.

Burton's (1985) research study focused on third and fourth graders. He found that young writers borrowed from and improvised on what they were most familiar with from their literary experiences. This research study corroborates the findings of Burton's (1985) research study in that the three case study children, as they became more familiar with informational books, incorporated expository elements into their writing. As the three case study children became more familiar with incorporating elements of exposition into their writing, they also began to integrate elements of exposition into their fictional narratives. Eventually, all three case study children moved comfortably between the writing of fictional and informational pieces, integrating elements common to each genre.

This research study supports another finding that Burton's (1985) research study revealed and that was the importance of teacher focus. Burton discovered that the children in his study borrowed textual elements that had been pointed out and made explicit to them by the teacher. The children in this research study, too, focused on and borrowed elements that Mrs. K. discussed and/or

modeled. As the three case study children were provided with many additional experiences with informational books, with many opportunities to talk about those elements with their peers, and with adequate time to practice incorporating those elements into their own writings through independent investigation, they began to move beyond just those "featured" elements talked about by the teacher. The three case study children, by the end of the observational period, borrowed elements of exposition that were not discussed by the teacher. In other words, the children used the "featured" elements as a "springboard" and, eventually, focused on and incorporated other elements of exposition into their writing.

Dyson's (1981) work demonstrated the importance of talk to developing young writers, determining talk to be an integral part in children's learning about the writing process. Dyson found that talk helped children determine what they wanted to write about and moved their understanding of literature forward. This research project revealed that even though the three case study children depended on teacher-talk and peer-talk, surrounding talk influenced their writing processes and products. Initially, the children included elements of exposition based only on what either the teacher or their peers had discussed. After listening to many informational texts read aloud, listening to surrounding talk, and having opportunities for independent investigation, they incorporated elements of exposition not discussed by the teacher or their peers.

Rowe's (1986) research study, too, revealed that social interactions (i.e., teacher-talk and peer/social interaction) enabled children to share commonalities and to fill in the gaps in their understanding, but then moved their thinking forward. This research project revealed that social interaction served the same purposes as in Rowe's study. This study also discovered that social interaction established and reinforced the three case study children's self-confidence. Through interactions with the teacher and/or with their peers across learning contexts, each of the three case study children discovered that they did know a lot about informational books and about writing. In discovering or having their capabilities reinforced through social interactions, all three of the case study children took risks.

Implications for Teaching and Practice

To generalize the findings of this research study to larger populations would be a gross exaggeration of the conclusions as well as an act of overinterpretation. However, examining possible classroom applications is important. This research study and the previous research studies which it both supported and extended, offer valuable implications for classroom instructional practices. This research study revealed the importance of the inclusion of many classroom learning contexts in order to support and to promote a positive relationship between informational books, children's writing, and literacy learning. The implications are not hierarchically

discussed, but are intended to be viewed as interrelated and interwoven elements within a classroom, creating a community of learners.

1. The literacy learning environment needs to incorporate many classroom learning contexts. Children arrive at school with rich, but varied, literacy experiences. They approach learning differently and have idiosyncratic needs across learning tasks. In order to successfully use prior knowledge and address individual learning needs, a successful classroom learning environment has many and varied learning contexts. The findings from this research study suggest that moving from a whole group into a small group setting and back again into a whole group setting provides young learners with a needed learning balance. The whole group provides guidance and direction, while the small-group provides opportunities to explore and take risks. Finally, returning to the whole-group setting, children's small-group questions are answered and their independent or collaborative learning discoveries confirmed.

One way this learning strategy was successfully implemented within Mrs. K.'s classroom and can be implemented in other learning environments was through the use of centers with a workshop approach. Having the children move through the classroom centers provided them with many and varied ways to investigate a phenomenon and gave them multiple perspectives on that phenomenon.

2. The influence of teacher talk and modeling influences young learners' writing. The classroom teacher, as expert, moves each young learner forward in his or her learning. Children are influenced by the meaningful talk and modeling that surrounds children's literature. As a result of meaningful teacher-talk and teacher modeling, young learners focus on featured elements during independent investigation and include those elements in their writing. Teacher-talk and teacher modeling provides young learners with strategies for approaching and successfully using informational texts.

3. Peer/social interaction and peer modeling influences children's learning. Classrooms need to provide learning situations for young learners to interact with one another and talk about their learning. It is when learners are presented with anomalies that their thinking and perspectives are challenged and learning occurs. As young learners interact with one another, they understand other ways of approaching learning tasks. Children at all levels of literacy learning benefit from both listening to and talking with their peers.

4. Children need many and varied opportunities to explore informational books. Children need experiences across genres and, yet, all too often informational texts are omitted from young learners' experiences. Critics of integrating informational books into young learners' realm of experiences claim that they do not yet have the capabilities of dealing with exposition. This research study, however, demonstrates that young learners are capable of reading and writing

exposition. Children need many and varied learning experiences with all genres, including informational books.

5. Children need time for self-investigation and independent exploration of informational books. Young learners may not realize what they know without "rehearsal" time. After young learners listen to the teacher's modeling and "instruction," they need opportunities to experiment on their own. All too often classrooms "instruct" and then evaluate whether the learners understood, or evaluate their level of comprehension. Allowing time for the learners to "play with" new information enables the learner to process and integrate the information.

6. It is important that young learners hear informational texts read aloud. The values and benefits of reading aloud to children are documented. Reading aloud children's literature provides children with good models of written language and develops positive attitudes toward reading and writing.

Further Research

Three research studies can be recommended that might extend the research conducted to date on informational books and children's writing:

1. It would be important to duplicate this research study and to obtain more on-line data concurrently. On-line data might provide

information concerning (a) what the children are thinking while reading informational books, and (b) what the children are thinking while writing.

2. Engaging Anthony, Jamie, and Jason in a longitudinal study may reveal relevant information about informational books and children's writing across time. Do the children continue to read and explore informational books? How do informational books, across time, influence their writing? As the children get into the upper grades, is their writing "stronger" than the writing of classmates who have not had early and extended experiences with informational books across learning contexts?

3. Research needs to be conducted that will extend this project into multiple classrooms, across teachers, across teaching styles, and across populations of children.

4. Research into teacher background preparation in the various content areas may inform curriculum and instruction. For example, the teacher that has many courses in math as preparation for teaching math versus only a few courses in science--will there be a difference in teaching approach, flexibility, willingness to try new things and allow the children to be more in control?

Besides additional research studies addressing the issue of informational books and children's writing, two research procedures used in this study need to be reconsidered:

1. Consulting with individuals from different disciplines would add an interesting dimension to this study.

2. It would be worthwhile to consider the use of videotaping as another source of data collection. Having the flexibility to review the children interacting within their learning contexts would contribute to the scope and range of data collection and interpretation. Also, having the children actually view the videotapes and respond may contribute to a better understanding of the children's meaning making.

Further research into the influence of informational books on children's writing may inform classroom instructional practices. This research study extends our current knowledge in three key ways. (1) It contributes to our understanding of the importance of informational books. (2) It focuses on the ability of first-grade children to read and write informational pieces, originally assumed inappropriate at that grade level. (3) It encourages teachers to use informational books across the curriculum, including with young learners.

APPENDIX A

SAMPLE TEACHER INTERVIEW QUESTIONS

Sample of Teacher Interview Questions

1. What is your definition of informational books?

2. Do you use informational books in your classroom?

3. Can you give me some examples of ways you use informational books with your class?

4. How do you discover informational books that you may want to use with your class?

5. How do you decide on the informational books you will use in your classroom?

6. How do your first graders respond to the informational books you share with them?

Resources for Teacher Interview Questions

Dyson (1981):

1. Many of the books you introduce you do so in a shared reading context. Can you talk a little bit about why you introduce books to your students in this way?

2. What role do you see "talk" playing in the shared reading context on young children's writing?

3. What role do you think what you focus on during the shared reading context have on their writing?

4. Can you talk a little bit about why you use both fiction and nonfiction with your students?

5. How do you decide on the literature you will share with the children?

Burton (1985):

1. The children often engage in a writing activity following a shared reading. Can you talk a little bit as to why you often will engage them in an accompanying writing activity?

Skillings (1990):

1. What kinds of writing are your young learners capable of successfully engaging in?

APPENDIX B

FOUR STAGES OF THE ZONE OF PROXIMAL DEVELOPMENT

Four Stages of the Zone of Proximal Development

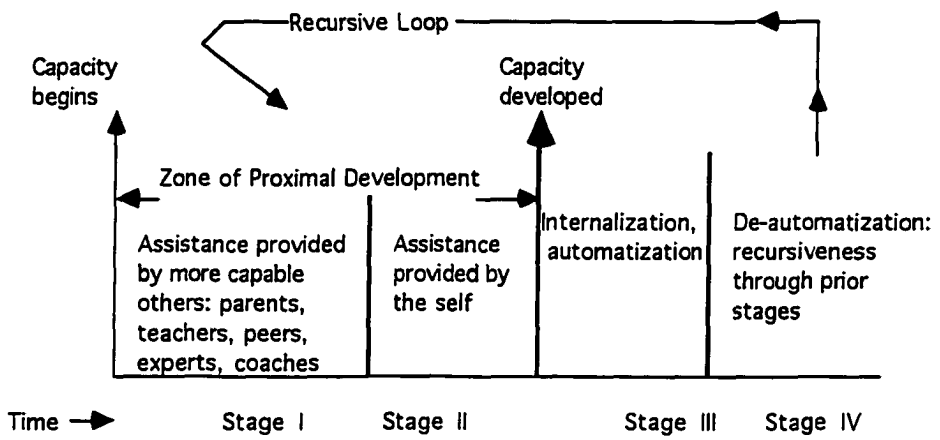

Figure 17. Four Stages of Zone of Proximal Development (Tharp & Gallimore, 1988, p. 35). Reprinted with permission from Cambridge University Press.

APPENDIX C

Children's Learning from Informational Books

Table 22. Anthony's Learning from Informational Books.

Timeline	Language	Style/Format	Information
January -February	• Borrowed exact vocabulary; language imitative of modeled text	•Writings rarely resembled texts • Wrote most everything in list format • Illustrations were own creations; rarely modeled after texts	• Relied on *Teacher Talk* to further understanding of informational text • Compositions often imitative of *Teacher Talk* focus
March-April	• Borrowed exact vocabulary--used more flexibly • Vocabulary or language from text used in other contexts	• Began incorporating informational text structures--compare/contrast, general statements followed by supporting statements into writings • Labeled illustrations like texts • Illustrations became imitative of modeled text	• Began extending his learning context to include influences of *Peer/Social Interaction* & peer authored texts
May-June	• Used ideas/concepts represented in text language, but wrote in own words	• Used many styles & formats • Allowed his purpose for writing to guide his style/format • Illustrations became a mix of those resembling text and own creation	• Same as above

Table 23. Jamie's Learning from Informational Books.

Timeline	Language	Style/Format	Information
January-February	• Borrowed language similar to that found in fictional narratives	• Wrote stories (fictional narratives) only • No text modeling	• Relied on *Teacher Talk* and on *Peer/Social Interaction* in determining what information to use in compositions
March-April	• Developed comfort level with reading informational texts • Began borrowing the vocabulary and the phrasing	• Incorporated elements from modeled informational texts into compositions--wrote in lists, labeled illustrations	• Began to rely on informational texts and her purposes for writing when deciding what information to extrapolate into her writings
May-June	• Confident with putting text's vocabulary and phrasing into own words	• Wrote informational pieces and integrated elements from informational texts into her fictional pieces • Purpose for writing drove what borrowed from informational texts & how to integrate with fictional elements	• Same as above

Table 24. Jason's Learning from Informational Books.

Points During Study	Language	Style/Format	Information
January-February	• Modeled vocabulary/phrasing from text, peer authored texts, and/or teacher authored texts; conventional spelling crucial to compositions & willingness to write	• Style/format imitative of peers' writing and teacher authored texts • Compositions consisted of phrases, ideas; no complete sentences • Illustrations were combination of those found in texts, those by peers, and his own inventions	• All information used in his texts were from peer and/or teacher authored texts
Middle	• Modeled vocabulary from texts and other sources, but more willing to incorporate inventive spelling	• Modeled style/format of compositions from texts • Wrote in phrases, sometimes in complete sentences • Illustrations more his own, but referenced text • Labeling illustrations if modeled text labeled	• Began referencing the text to use specific information in his compositions; ideas for what to write began to be his own • Began participating/sharing in small group conversations; own ideas and purpose for writing began to dictate information used in compositions
End	• Language of compositions combination of Jason's language and specific key words/phrases from texts	• Using multiple styles/formats; purpose for writing drove style/format • Used labeling frequently even if modeled text did not label	• Borrowed and integrated elements/information from several texts into compositions

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