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### An exploration of the impact of picture book illustrations on the comprehension skills and vocabulary development of emergent readers

Judy Lavender Nicholas

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AN EXPLORATION OF THE IMPACT OF  
PICTURE BOOK ILLUSTRATIONS ON THE COMPREHENSION SKILLS  
AND VOCABULARY DEVELOPMENT OF EMERGENT READERS

A Dissertation

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
in partial fulfillment of the  
requirements for the degree of  
Doctor of Philosophy

In

The Department of Educational Theory, Policy, and Practice

by

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May 2007

## **DEDICATION**

To my husband, Jerome, for his love and patience.

To my sons, Matthew and Joseph, for their unending support.

## **ACKNOWLEDGEMENTS**

With special thanks to Dr. Earl Cheek.

Thanks also to Dr. James Wandersee, Dr. Pamela Blanchard,  
and Dr. Margaret Mary Sulentic-Dowell.

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## ABSTRACT

The formal instruction process of teaching reading to emergent and beginning readers needs to incorporate a much more multimodal approach. People today, not only in America but in many other countries as well, are more graphically bombarded than any other generation has ever been. Children in our society expect to experience pictures and images in almost everything they encounter. This graphic orientation needs to become an instructional opportunity and be incorporated into the educational process in ways that are beneficial to the learning environments of children in our educational systems. Reading programs need to forego one-dimensional teaching methods and learn how to expand their methodologies by taking advantage of various approaches that prove to be advantageous to the development of children.

This study adds another dimension to the research conducted by Azripe and Styles (2003), as seen in their publication *Children Reading Picture: Interpreting Visual Texts*. It also contributes pertinent information to Paivio's work concerning his Theory of Dual Coding.

Research for this study centered on observing emergent readers as they demonstrated comprehension and retelling skills both with and without the aid of illustrations that would normally accompany a story. Observations and informal, descriptive assessment of indirect vocabulary development in relation to the books used in the study were conducted. These observations and assessments were directly linked to whether the student-participant was shown or not shown the illustrations of a story that was read to him or her. The study also described the personal impact that picture book illustrations had on students in relationship to the processes of learning how to read.

This study showed that students who visually experienced the illustrations accompanying a picture book demonstrated moderate improvement in overall story comprehension and retelling ability than those who did not see the pictures of the story. Of more significance was the fact



that students, in two different study settings, who saw the pictures as a story was read exhibited greater indirect vocabulary development than did those students who did not see the illustrations as the story was read aloud to them.

# CHAPTER I

## INTRODUCTION

“What is the use of a book,” thought Alice, “without pictures...”  
(Carroll, 1941, p. 5)

Children’s picture books are not only important because of the literary value they provide young readers, but they are also an essential element in the developmental reading process.

Illustrations are associated with the initial stages of reading and one of their functions is to help children understand that print has meaning before they actually can read (Harms, 1998; Landers, 1987; Manning, 2004). The main function of illustrations in a child’s picture book, if the author has done his or her job correctly, is to illuminate the text (Heins, 1987). Without the illustrations, today’s emergent readers may have a more difficult time with the processes of learning how to decode text, developing recall and comprehension skills, and even vocabulary acquisition and development. Because the text and the illustrations in the best picture books are so well balanced it would be difficult to imagine one without the other. The two are sometimes so undeniably interlinked that the support can be total (Butler, 1987). Children who are exposed to one without the other may indeed be missing an important step in learning how to read.

After casual observation of students in environments where they are being read picture books, student comments and reactions indicate they do not enjoy stories as much if the illustrations are not shared with them. In almost all of the groups of young children observed, it is a noticeable phenomenon that students will complain if they are not the first to see the pictures after the text is read aloud to them. As they examine the illustrations students will often point out, and with a certain amount of pride in their developing abilities, characters, objects, or actions that they were just told about in the story.

These observable occurrences began the formulation of two questions about the reading processes that children experience. The first question concerned the extent to which illustrations

in picture books influence the comprehension skills of a child who is at the beginning stages of formal reading instruction. The second question was the connection between the picture book illustrations and how much influence they have on indirect vocabulary development (vocabulary that is not learned through direct instruction) in these students.

### **The Purpose of the Study**

The purpose of the study was to observe emergent readers as they demonstrated comprehension and some retelling skills both with and without the aid of the illustrations that would normally accompany a story. Observations and informal, descriptive assessment of indirect vocabulary development in relation to the books used in the study were also conducted. These observations and assessments were directly linked to whether the child was shown or not shown the illustrations in a story that was read to him or her. The study also described the impact that picture book illustrations had on students during this part of the reading process.

Picture books are, more often than not, reviewed and critiqued by publishers, authors, illustrators, educators, and even those who simply enjoy reading them in terms of their overall format rather than just the content or quality of the story. These study reviews show the dependence of the text upon the illustrations and, at the same time, a dependence of the illustrations upon the text. There is a reflection of the words in the illustrations, as well as, an expansion of both the illustrations and the words by each other (Bader, 1976; Galda & Cullinan, 2006; Goldstone, 2002). In a study conducted by Hibbing and Rankin-Erickson (2003), the use of illustrations in texts and picture books helped to improve comprehension abilities of struggling readers. In another study by Beck and McKeown (2001), the researchers warned that children can become so dependent upon pictures in read-aloud situations, that as they concentrate on the pictures, they tend to stop focusing on the language elements of stories to which they are listening.

The subject of this study extends the findings of recent research involving children reading pictures in picture books (Arizpe & Styles, 2003; Walsh, 2003), and studies concerning the relationship of visual images and a variety of comprehension measures (Haring & Fry, 1979; Peeck, 1974; Sadoski 1985, 1983). This research study accomplished this by describing how illustrations impact story comprehension and some basic recall. Although Peeck (1974) conducted some relevant research concerning illustrations and improvement in vocabulary, existing research specifically assessing the degree of vocabulary development in relationship to the illustrations in picture books used with emergent, or beginning, readers was not found.

Ethnographic methods provide information in this project by presenting case studies of students who are in the first months of their first grade school year, giving detailed accounts of their observable behavior while they listened to stories as part of a larger social group. Data were collected by assessing and analyzing indirect vocabulary development in relation to the illustrations that accompanied the story; by providing details about the participant students' abilities and skill at comprehension and retelling the story; and by summarizing students' personal comments about the story and the pictures, or lack of pictures, and how the omission of the pictures during story book reading helped influence their opinion of this particular type of reading/listening process. This study provides help to the reader in their understanding of the impact that illustrations in children's picture books have on the development of comprehension skills and indirect vocabulary learning in emergent readers.

### **The Setting**

#### **The Schools**

The setting for this study was the library at each of two elementary schools, in a parish in the northwest part of Louisiana. Students from first grade classes came to the library in order to listen to stories read by the school library media specialist. The normal routine for all of the

students in all observed classes remained unchanged except for the students who were randomly chosen to participate in the study.

School A had a total population of about 450 students in grades kindergarten through fifth, while School B had a total population of about 850 students in grades kindergarten through fifth. In almost all other demographic variables, the schools were similar. The schools' student makeup included a diverse ethnic population and students at both schools came from similar socioeconomic backgrounds. According to information provided by the school's Language Arts Coordinator, the students had varying academic abilities, ranging from high to low level. Most students in both schools resided within a suburban community, with a small percentage in each living at the fringe area between the urban and rural area of the parish. Approximately 30% of the population in each school fell below the national poverty level, as indicated by an average of a little more than 28% of them participating in the free or reduced lunch program.

At the time the study took place, the professional teaching staff at each school was adhering to the teaching methods and requirements as set forth in the standards, benchmarks, grade level expectations (GLEs), and Comprehensive Curriculum requisites that are currently being mandated by the Louisiana State Department of Education. This overall process embraces an approach to literacy that incorporates teacher directed instruction, phonics instruction, the use of basal readers, and the use of trade books. Both of the schools involved in the study demonstrated high levels of a child-first approach in their teaching practices, with an emphasis on reading and the importance of providing experiences that promote the philosophy of life-long-learning on the part of students. One of the long-range, primary objectives in each school was that children should eventually become more active in their ability to take control of personal learning development and improvement.

## **The Teachers**

When considering which teachers to use in conducting this study, it was with purposefulness that the school library media specialist was selected. This librarian (in both settings) was most enthusiastic about providing students with rich and varied reading and genre experiences. It was assumed that a greater depth of information would be obtained by studying students as they participated in an environment where literature was given a high priority and was considered a vital part of the learning experience.

Each participating media specialist was recommended by a colleague who described her as someone who was knowledgeable of literature for children of various ages, and as a person who finds it important to promote the joys and benefits of reading to all library patrons, both children and adults. This librarian was also a person who made attempts at staying current in her understanding and knowledge of how reading and being read to influences the development of children. Each was the type of teacher who believed that professional development is a necessary and on-going process for those who are educators. The library media specialists chosen were persons who had several years of experience (30+ in each case), as a certified teacher and librarian. Both, throughout their careers, had regularly attended a variety of conventions, conferences, and workshops, and were, at the time, members of several professional educational organizations that are relevant and effective in the promotion of reading and literacy.

### **Significance of the Study**

This study provides the potential to benefit teachers in their development of instructional strategies as they interact with students during story book reading. Identifying the relationships that may exist between the illustrations in a children's picture book and vocabulary development, and the illustrations and a child's ability to retell a story with plausible comprehension and finesse, will contribute to the knowledge base of teachers and librarians. It also provides

information about how to utilize a multimodal approach in the emergent reading process of students. Helping children learn how to develop their visual literacy abilities as they view and, on occasion, carefully examine the illustrations found in picture books in order to increase their vocabulary and their level of comprehension ability, rather than merely using them as a source of decoration or entertainment, may improve reading skills.

This research study used some detailed descriptions, developed from classroom observations undertaken by the researcher, which provides information about case studies of first grade students and gives more in depth accounts of students' retelling skills and abilities of the story that they heard in the library setting. The study describes the students' personal opinions about the story and the way it was presented to them. It also provides an analysis of the results of a pre- and post-vocabulary test. The case studies incorporate an ethnographical approach as they describe the students' reactions while they were being read a story, as well as their interaction with the library media specialist and other classmates during story time. They also include a descriptive statistical analysis of the information obtained from the administration of the pre- and post-vocabulary test. During the story presentation by the media specialist, the researcher participated only as a passive observer of student behavior.

This study sought to understand what the relevance and importance of picture book illustrations may have to the improvement of indirect vocabulary development of a child, as well as, the importance of the illustrations to a child's ability to comprehend a story after it has been read to him or her. By studying these relationships after interviewing the participants and by analyzing the pre- and post-vocabulary test, insights are offered as to how other educators, in other places and with other children, might take advantage of the instructional implications gained from this research.

The pre- and post-vocabulary tests were developed from information found in the specific books that were read to each class. A group of selected target words that were used for the test were determined by analyzing the text and pictures of each book chosen for the study through recommendations made by a teacher book review committee. The target words included on the vocabulary test were those that were mentioned in the text, but not defined or described by the text of the story, and that were seen in the illustrations. These target words were those that could be 'defined' by examining the visual image seen in the illustrations. An example of this concept can be seen in Figure 1, an illustration found in the book *Charlie Needs a Cloak* (dePaola, 1990). On this page of the book the words 'shepherd,' 'crook,' and 'flock' are mentioned in the text and shown in the picture but are not defined in the story text.

A small number of superfluous, additional words, which are neither mentioned in the text nor shown in the pictures, were also included on the vocabulary test. After having heard these words twice, once on the pre-vocabulary test and once during the reading of the story, it was reasonable to believe that some students could assimilate them and their meanings through indirect learning processes. The extra words were added so when a child took the post-vocabulary test, he or she would not be conditioned to, thus possibly making them overly knowledgeable of, a specific set of words that were found in the story. The group of specific target words, and not the extra words included on the test, were the only ones that were used by the researcher for evaluation and description of the child's indirect vocabulary development based on the results of the pre-and post-vocabulary test.

The realistic and reliable representation of action words, or verbs, in illustrations is, at times, a more difficult skill for an artist to perfect and produce in illustrations for children. Such words can sometimes be harder than nouns, or object representations, for students to ascertain and understand the meaning of in one reading of a story. The vocabulary tests were, therefore,



composed primarily of nouns, or object words. Some action words, or verb forms of a word, however, were essential to the understanding of each of the stories. Since some of these action words were understandably represented in the illustrations, they were included on the vocabulary tests.

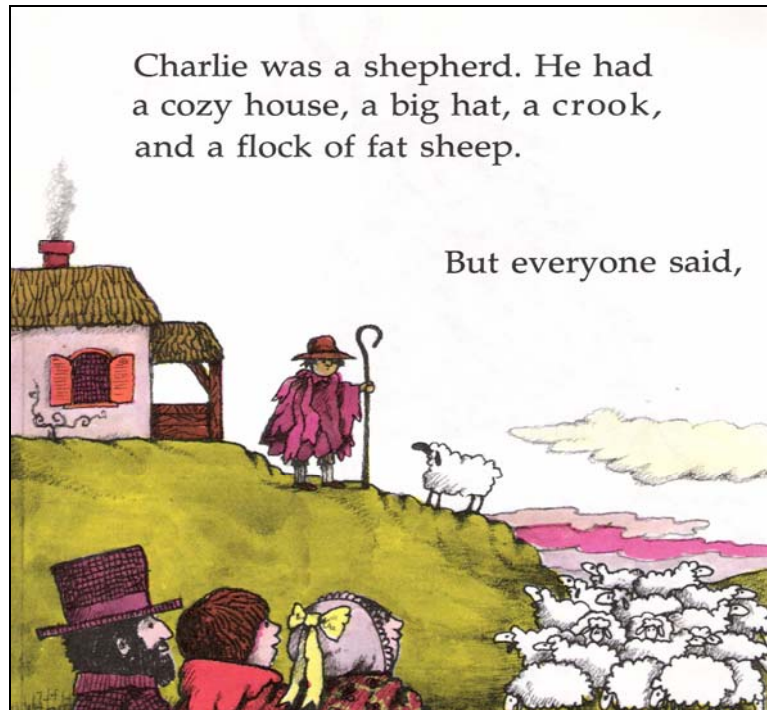


Figure 1

*Note.* From *Charlie Needs a Cloak* (p. 1), by T. dePaola, 1990, New York: Scholastic. Copyright 1973 by Simon & Schuster. Reprinted with permission (Appendix A).

Since this study took place at the beginning of the first grade year, it was possible that reading abilities varied greatly among students, with some reading very little, or not at all, at this particular point of the school year. Because of this reason, the pre- and post-vocabulary test was given orally to the participating students. The test (both pre-test and post-test) was read aloud to each student participant by the researcher. Students' responses were recorded by the researcher in order to be examined at a later time.

## Research Questions

This study sought to describe and understand the relationship between the illustrations in children's picture books and a child's ability to comprehend the story for the purpose of retelling. It also sought to describe and understand the relationship between the illustrations and indirect vocabulary development of the child who was listening to the story. The following questions, as they related to the children's comprehension skills and retelling and the children's vocabulary development, as a result of the library media specialist sharing, or not sharing, the illustrations from the story during the reading, were explored:

- (a) How was comprehension and retelling of emergent readers impacted, if at all, by seeing the illustrations as the story was being read to them?
- (b) How was comprehension and retelling of emergent readers impacted, if at all, by instructing students to attend to the illustrations they were exposed to as the story was being read to them?
- (c) How were emergent readers' abilities to comprehend and retell a story impacted, if at all, when the illustrations were not shown to the listeners as the story was being read?
- (d) How was the ability to indirectly develop vocabulary in emergent readers impacted, if at all, by seeing the illustrations as the story was being read to them?
- (e) How was the ability to indirectly develop vocabulary in emergent readers impacted, if at all, by instructing students to attend to the illustrations they were exposed to as the story was being read to them?

- (f) How were emergent readers' abilities to indirectly develop vocabulary impacted, if at all, by not seeing the illustrations as the story was being read to them?

## CHAPTER II

### REVIEW OF LITERATURE

...human intellectual capacity is extraordinarily diverse, that the varieties of meaning are many, and that the comprehension of a subject profits from more than one perspective and form of representation.  
(Eisner, 1993, p. 85)

#### Introduction and Purpose

The idea of using illustrations in picture books as a learning tool in reading needs to be considered as a viable and alternate tool for teaching reading. The assumption of curriculum supported by educators from Peter Ramus (as cited in Doll, 2005) to Ralph Tyler (1969), that a standardized, limited curriculum, which omits multiple ways of learning and teaching, is challenged by William Doll in his paper, “The Culture of Method.” In this article he stated the necessity for, “child and curriculum... to form a complex pattern – ever changing, ever stable, ever alive” (Doll et al., 2005, p. 55). The purpose of this research study is to add to and reinforce the current research on the educational value of illustrations found in children’s picture books; specifically, the contribution that illustrations in quality picture books make to indirect vocabulary development and comprehension of vocabulary and story in emergent readers. It will also attempt to explain the rationale and benefits of the aesthetic implications that pictures and illustrations in books have for children, both when they are in developmental reading stages and beyond.

Relatively few significant research studies have been conducted over the past 50 years on the effect of illustrations and pictures and their impact on the various processes of reading and learning how to read. In the past, some research studies negated the relevance of the importance of illustrations in the reading process. In research conducted by Samuels in 1967 (as cited in Samuels, 1970), the inclusion of illustrations, when learning words in isolation, was not beneficial to the reading development of a child. Using index cards showing four words (one set with an accompanying picture and one set without), Samuels found that kindergarten children

who were considered to be poor readers had more comprehension, when learning the words that were not accompanied with an illustration, than those who learned the words that also included a picture of the object. A study conducted by Peeck (1974), showed that although a group of fourth graders benefited from pictures that accompanied a story both one day and seven days later, they did not receive any immediate significant benefit. Studies conducted in 1963 by Silverman, Davids, and Andrews (as cited in Samuels, 1970), reported that pictures actually interfered with reading development in poorer students.

In recent years, however, current research has been conducted in order to challenge those researchers whose work proposed that images, or pictures, included in the reading process presented a negative effect when considering the value and benefit of illustrations in reading materials. Significant current research supports the facilitation of reading and comprehension by the use of pictures and illustrations when the pictures overlap (or have common characteristics and connections to the words) the process of learning how to read (Haring & Fry, 1979; Harms, 1998; Hibbing & Rankin-Erickson, 2003; Landers, 1987; Manning, 2004; Peeck, 1974; Sadoski 1985, 1983; Walsh, 2003). These studies have touched on topics such as preferences in illustrations, comprehension and recall of stories with and without pictures, directing attention to mental imagery, and critical thinking skills. For the purposes of environmental and experimental control, most of the research studies found were conducted using either researcher-produced or other locally-produced materials that were not exactly similar to the types of materials teachers are expected to use in their classrooms. Very few experimental studies were found that used commercially produced materials, or the types of materials to which reading teachers have access. Brody (1981), in his article about the need for a broadened perspective in the use of illustrations in research, expressed concern over the fact that many researchers have a tendency to use sets of material specifically designed for their individual study instead of using some of

the commercially produced materials that are available for use by the classroom teacher. He stated that the illustrations, and even the texts, used in too many research studies are not realistic because they do not represent the kinds of reading materials that teachers are expected to use in their day-to-day teaching.

One quantitative study undertaken by Smerdon (1976) involved children's preferences of artwork when the work was considered on a scale ranging from abstract to representational. A set of black and white illustrations (each picture was of a castle and was chosen with the intention that this subject would be appealing to both boys and girls at a variety of ages) was produced by an acquaintance of the researcher. With the assistance of a group of professional teachers of art, the pictures were ranked according to their characteristic scale of being representational or abstract. In the second phase of the study, the pictures were presented in pairs to each child, who was to make a choice as to the picture he or she preferred in each pairing. Three specific areas were considered in the study, including: a comparison of the children's preferences of the pictures with that of the adults who originally ordered them by artistic style; a comparison of the children by age; and a comparison of preferences of style made by boys with those made by girls.

From the results indicated it was possible for the researcher to make several statements. First, children in all age groups (with an exception seen in the youngest age group) preferred those pictures, labeled by the adults prior to the study conducted with the children participants, which were representational as opposed to those that were more abstract in nature. Second, the age of the child had a bearing on preference, with more variation seen in younger participants and less seen as a child reached the age of adolescence. And finally, there seemed to be no difference in those preferences made by boys and those made by girls. According to Smerdon, an important implication determined from this study for educational environments is that

children's preferences in illustrations should be considered as an active process in reading readiness in order to meet specific, known needs of students.

Reading comprehension involving the inclusion of illustrations with content text was a study conducted by Goetz, Dixon, and Schallert (as cited in Schallert, 1980). Determining the comprehension level of fourth graders' understanding of how valves control the flow of water in faucets was the point of concern of the study. The students were separated into two groups. Both groups were to read a written explanation of how such a valve worked, with one group's explanation including a line drawing (constructed locally for this project, based on specifications of the researchers) of the inner workings of faucets. After reading the assigned passage, each student completed a test that included multiple-choice questions and free recall questions. The results of this study indicated that those children who were provided with the schematic representation along with the text learned more information about the subject.

Mental imagery plays an important role in the cognitive development of children. It has commonly been used in teaching and learning situations as a strategy which "encourages use of prior knowledge as a part of creating vivid representations of prose" (Gambrell & Jawitz, 1993, p. 265). A qualitative study by Kiefer (1993), presented in the article, "Children's Responses to Picture Books: A Developmental Perspective," discussed illustrations and their importance in the development of mental imagery within readers. Kiefer was concerned with three major categories of response in her study. Those categories were of behaviors that developed because of contact with picture books; how children looked at picture books; and how the children in this study talked about picture books, including what they saw in the illustrations. Kiefer discovered that verbal responses were the result of a variety of functions, including: informative, providing information; heuristic, problem solving; imaginative, imaginary world play; and personal, explaining individual experiences, emotions, and opinions. As children mature their responses,

when discussing picture books, involve more critical thinking. They also developed an understanding that one of the important criteria for picture books is that they make one think. As a result of this study, one of the main recommendations Kiefer suggested is that the meaning-making potential of picture books within the classroom can occur when a collection includes a variety of different styles and types of books.

There have been some fairly recent studies conducted concerning children and vocabulary development (Klein, 1988; Robbins & Ehri, 1994). There have also been some research studies that examined the relationship between vocabulary and illustrations (Denburg, 1976-1977; Robbins and Ehri, 1994; Samuels, 1970). Specific research, however, which indicates that the pairing of text and illustrations in commercially produced picture books may have a direct impact on vocabulary development, has not been found in any single study.

The most important way in which children become successful in school is by learning how to read. It is also becoming more important in a child's educational experiences that those primary learning needs, including reading, should be taught in a multimodal format (Klein, 1988; Vincent, 2005; Walsh, 2003). Education curriculum theorist Maxine Greene believes in the continuous processes of questioning, imagining, and evolving. She has pointed out, "that curriculum can be a potential tool for ... [assisting] students in creating many more learning networks" (Zacharias, 2004, para. 18), or can facilitate in the blending of biological, cognitive, and social elements that are part of our ever changing world and life experiences. The use of the incorporation of aesthetically pleasing illustrations as reading tools would contribute to this learning network by exposing students to a wider array of experiences that increase personal knowledge.

When discussing the word 'pictures,' this research study specifically focuses on quality picture book art and illustrations found in commercially produced books. The books that were



used as examples are those that were written and illustrated by authors and artists who clearly understand the qualities and characteristics necessary to produce a superior picture book for children. This is the type of book described by Maurice Sendak, children's picture book author and illustrator, as being a "visual poem" (Lanes, 1980, p. 110). Points made in this study pertaining to the connectivity of illustrations to text and text to illustrations, as well as the supplemental qualities of illustrations to text cannot and should not be applied to all books written for children. Several sources can supply to educators criteria regarding the types of books that should be considered as quality, superior picture books for children. The American Library Association (ALA) annually awards the Randolph Caldecott Medal "to the artist of the most distinguished American picture book for children published in the United States during the preceding year" (Caldecott, 1987, sec. 1, para. 1). The evaluation criteria for this award, that was developed by the Association for Library Service to Children division of the ALA, includes a number of relevant aspects. The work should be a book that provides a child with the opportunity to receive a visual experience; it should be one that has a collective unity seen in the story line, theme, or concept that is developed through the series of pictures in the book; it should be a work that shows respect for children's understandings, abilities, and appreciations; it should display excellence of execution in the artistic technique used; it should display excellence of pictorial explanation of story, theme, or concept; it should show an appropriateness of style of illustration in relation to the story, theme, or concept; and it should display a delineation of plot, theme, characters, setting, mood, and information presented through the accompanying pictures (Caldecott, 1987).

Another source that provides criteria for the determination of what constitutes quality picture books for children is the National Council of Teachers of English (NCTE). This association "annually selects 30 children's books it considers to have outstanding potential to

enhance language awareness among students in grades K-8” (NCTE, 2001, p.12). The criteria that are used each year for the selection of these quality books for children mainly target excellence of the story. These standards include the following: the book can be a representation of any genre suitable for children; it must deal with language, such as play on words, or word origins; it should demonstrate uniqueness in the use of language and style; and it should openly invite the reader to respond to or partake in personal participation with what they are reading or hearing (NCTE, 2001).

The Robert F. Sibert award is “intended to honor the author whose work of nonfiction has made a significant contribution to the field of children’s literature” (Sibert, 2000, sec. 1, para. 1). It is an award that is also presented by the Association for Library Service to Children division of the ALA. The criteria for this outstanding book award includes: excellence in writing and illustration, possessing clarity and accuracy of presentation in both text and illustrations, as well as correct documentation, distinctive use of language, and exceptional artistic presentation of illustrations; interesting and stimulating presentation of facts, concepts, and ideas; engaging writing and appealing illustrations; and appropriateness of style of presentation of information for topic or subject with respect to the various age levels for whom the book may be suitable (Sibert, 2000).

Quality books for children would include works that show an author has a mature and knowledgeable grasp of effective literary elements and characteristics and can use them in an artistic and creative manner, such as defined in the information provided by the ALA and the NCTE. Desired literary elements may include: rhythmic language, use of sensory images, patterned language, strong characterization, believable consistent plot, well-defined conflict, affective setting, and a consistent theme (Galda and Cullinan, 2006; Sutherland and Arbuthnot, 1972). The quality of the illustrations in some children’s books is a contributing factor to the

notion that picture books can be considered as aesthetic objects, which enhance a reader's understanding of how visual elements work. These visual essentials would include the aesthetically pleasing use of line, color, shape, value, form, texture, and space (Doonan, 1993). The term 'picture book' will be defined in subsequent sections.

### **What Is Visual Literacy?**

In any picture book the illustrations and the words should be read... By focusing attention on book illustrations, children can attain deeper meaning...  
(Considine, 1986, p. 39)

According to Arnheim (1993) "visual thinking is the ability of the mind to unite observing and reasoning" (p. 98). Visual literacy is basically defined as a group of acquired competencies that when developed enable a viewer to comprehend, interpret, create, and compose visible images and messages in order to communicate effectively to others (Arizpe & Styles, 2003; Considine, 1986; Debes, 1969; Debes, 1968; Brill, Kim, and Branch as cited in Sims, O'Leary, Cook, & Butland, 2002). Dondis (1973) describes individual growth in visual literacy as, "the development of criteria that extend beyond natural response and personal or conditioned tastes and preferences," (p. 185). In his writing he compared the syntax of visual literacy to that of linguistic grammar, but used words such as line, color, shape, tone, dimensions, and texture instead of verb, clause, and sentence (Dondis, 1973). Sims' et al. (2002) discussed a study, entitled "Visual Literacy Defined: The Results of a Delphi Study – Can IVLA (Operationally) Define Visual Literacy?" which was conducted in 2000 by Brill, Kim, and Branch. In this article the authors suggested that the underlying assumptions of the concept of visual literacy are that images communicate meaning, and that literacy means being able to read and compose in a legible manner. In applying this statement to an individual, Brill and colleagues continued by saying that a visually literate person is one who is able to "(a) discriminate, and make sense of visible objects as part of visual acuity, (b) create static and

dynamic visible objects effectively in a defined space, (c) comprehend and appreciate the visual testaments of others, and (d) conjure objects in the mind's eye" (Sec. 3, para. 2).

Raney (as cited in Arizpe & Styles, 2003) suggested that there is no fixed or 'single-code' that applies to and/or limits our concept of visual literacy. She further suggested a more all encompassing, functional meaning. Her working definition of visual literacy stated "it is the history of thinking about what images and objects mean, how they are put together, how we respond to or interpret them, how they might function as modes of thought, and how they are seated within the societies that gave rise to them" (p. 41).

The understanding of the meaning of visual literacy has recently become an important area of study. Its impact on the cognitive development of children and educational ecology is beginning to be investigated more thoroughly. At the 32nd Applied Imagery Pattern Recognition Workshop, Aanstoos (2003) defined visual literacy "as the ability to recognize and understand ideas conveyed through visible actions or images, as well as to be able to convey ideas or messages through imagery" (p. 189).

Educational researchers who study visual literacy have postulated that as one becomes more mature in his or her ability to interpret the various integral aspects of visual literacy, it is possible to become better at making intelligent choices and judgments in aesthetic matters. Studies have shown that the development of visual literacy has proven to be beneficial in the reading development of children, both while they are learning to read and after they have become fairly competent at the task (Arizpe & Styles, 2003; Arnheim, 1993; Eisner, 1993; Fang, 1996; Lesgold, De Good, & Levin, 1977).

Current studies that explored visual literacy have relevant implications for the classroom teacher. The selection of books, which are used by teachers as supplemental materials in their reading programs with children, is, more often than not, guided by one of the three following

sources. They are recommendations that are obtained from professional publications, those that are received from district and individual school media specialists, and, ultimately, those that are gleaned from the professionally developed opinion of the individual teacher. In order for teachers to have a better understanding of this phenomenon, it is becoming increasingly important that they be trained in visual literacy in their pre-service classes and inservice experiences. Knowledge of and the development of visual literacy skills is necessary in order for teachers to understand how to critically evaluate the materials presented to them by various recommending sources. Since there is such a plethora of materials available to the classroom teacher, it is also important that they become more confident in their own abilities to evaluate materials they plan to use in their classroom settings.

### **What Are Picture Books?**

Picturebooks successfully combining the imagery and the symbolic, the iconic and the conventional, have achieved something that no other literary form has mastered.  
(Nikolajeva & Scott, 2000, p. 262)

References to illustrations in this research study are not made to those found in texts or basal readers, but to illustrations found in commercially produced children's picture books. The particular type of illustrations that are referred to in this research are the type that play an essential function within the book in which the pictures are found. These include "books in which the story depends on the interaction between written text and image and where both have been created with a conscious aesthetic intention" (Arizpe and Styles, 2003, p. 22).

Today's children are not just simply exposed to, but are actually bombarded with visual cues in every aspect of their lives. This inundation of visual images has contributed to their seeming dependence upon the use of pictures and images in order to help define and understand their world. This desire for pictures has extended to various reading experiences, including books, regardless of the story quality. Through personal observations from years spent teaching elementary school children, it has been noted that if given a choice, almost all children will

choose books with illustrations over those without. Since young readers prefer illustrations in books, it is essential that the books offered to them be those in which the pictures and text are of high quality. According to Sutherland and Arbuthnot (1972), the illustrations in good picture books for children “are so integral a part of the content that the story can be ‘read’ by the child from the pictures” (p. 63). Likewise, Galda and Cullinan (2006) state that:

Picture books... are a unique genre’ in the world of children’s and adolescent literature, as they are categorized by virtue of their format rather than their content. Picture books are those books in which the illustrations are as important as the text in the creation of meaning - sometimes even more important (p. 29).

Understanding and comprehension of the overall story line through the text is not the only important function of a child’s book for young readers. Understanding the words and the story by examining and visually interpreting the illustrations is an additional function of picture books in the cognitive development of students. In addition, Fletcher and Reese (2004) state that “[picture books] can present [very young] children with a set of vocabulary likely to be outside the realm of their daily experience” (p. 66).

Author and illustrator, Maurice Sendak, has stated that “in the United States we work to bring pictures and words together to achieve a wholeness” (Moebius, 1986, p. 141). This is obvious in the abundance of excellent picture books that are published each year, not only in this country but world wide. Editor-in-chief of the *Teaching K-8* professional journal, and author, Patricia Lee Gauch, stated that “putting the art and text together for a book is a major, major undertaking. Art, when it’s really good, doesn’t imitate or mirror the text. Rather, it adds a new dimension that goes way beyond the words” (Raymond, 1995, p. 64). When discussing picture books, Lewis (2001) in *Reading Contemporary Picturebooks*:

tells us that the words are never just words, they are always words-as-influenced-by-pictures. Similarly, the pictures are never just pictures, they are pictures-as-influenced by words. Thus the words on their own are always partial, incomplete, unfinished, awaiting the flesh of pictures. Similarly

the pictures are perpetually pregnant with potential narrative meaning, indeterminate, unfinished, awaiting the closure provided by the words (p. 74).

Simply looking at the words in a text as one reads is not enough to expand the cognitive and creative development of young children as they learn how to see and understand the world around them. Not only do we need to learn how to think, but we need to learn how to see what we are looking at, as we think. Arnheim (1993) states that “visual learning enhances the cognitive understanding of abstract concepts to children. A child’s perception of ideas... can be radically enriched by a visual example. This understanding leads to excellence in perceptual thinking” (p. 94). Certainly these should be ultimate goals of the educational system – to enable students to think deeply and to understand on a variety of levels; both supported by a diversity of experiences. This variety in the educational processes thus facilitates students’ abilities to answer the questions that they themselves generate and develop, as well as the ones that are presented to them.

Is it honestly enough to simply expect students to comprehend and understand on a surface level alone? It is imperative that children learn how to develop the ability to ‘read’ through the processes of learning to be visually literate. In his early studies of the uses of audiovisual materials and equipment in educational environments, Debes (1968) believed that specific attention needed to be given to the application of the audio visual format. He stated that visual literacy learning experiences for children should:

be of a nature that permits him, once he has seen a thing, to do something about it in such a way that there is meaningful interaction between him and whatever he is looking at... that he has the opportunities to create meaningful visual statements ... [and] the child [be allowed] practice in arranging ideas, visually, the way he wants to arrange ideas (p. 964).

Studies of the value of illustrations in literature and their contribution to the development of reading skills reported that pictures in books can serve important functions in the process of presenting various types of information to readers (Arizpe & Styles, 2003; Denburg, 1976;

Gambrell & Jawitz, 1993; Haring and Fry, 1979; Sadoski, 1983, 1985; Santa, 1977; Walsh, 2003). “At the heart of the reading experience is the gap in the text which has to be filled by the reader, particularly pronounced, of course, in picturebooks” (Arizpe & Styles, 2003, p. 20). It is essential that students know how to interpret information presented to them in visual form in order to fully understand the learning situations in which they find themselves.

The processes that provide readers with the ability to fill these visual literacy gaps are basically the same as those that can be found in quality literature. These functions are, in essence, the same functions that good writing serves when incorporating the literary elements of setting, characterization, plot, theme, and style into the story (Fang, 1996; Galda & Cullinan, 2006; Sutherland and Arbuthnot, 1972). Through evidence seen in a variety of studies, Walsh (2003) stated that “children’s responses reveal that the impact of images can have a holistic effect... [and their] multi-varied responses demonstrate the activation of a range of cognitive and affective processes so that the act of reading a pictorial text is paralleled with... reading words” (p. 129). Elster and Simons (1985) declared that, “Pictures also help to bridge the gap between spoken and written language by representing the speakers and settings of story dialogue” (p. 148). Illustrations used as a tool to help teach the reading process should be those found in the type of books Bader described as:

sophisticated picturebooks which require sophisticated readings;  
picturebooks which are simultaneously art objects and the primary literature of childhood; [picture books emphasizing] the importance of design and the interconnections between word and image; picturebooks as compelling narrative texts, which, indeed, work on the basis of the ‘drama of the turning page’ (Bader, cited in Arizpe & Styles, 2003)

Maurice Sendak considers illustrations in children’s picture books to be an art form. When he speaks to illustrators, he advises that one should “never illustrate exactly what is written. You must find a space in the text so that pictures can do the work. Then you must let the words take over where words do it best” (Lanes, 1980, p. 110). The word ‘art’, as it is used



in this research study, can be defined using various sources, all of which support the concept that it is a process that involves “those branches of learning associated with creative skill” (Allen, 1990, p. 60). It is a process, as well as a product, that has been explained by Eliot Eisner (1978) to be “a humanly constructed configuration which can be held fast for apprehension, inspection, and possible comprehension by other human beings” (p. 45).

### **Research Related to Illustrations in Picture Books and Stories**

Sadly, this skill of visual literacy is not widely understood or exploited in our educational system... Hundreds of pages devoted to the skills that children need to acquire in order to be literate... barely mention visual texts.

(Arizpe & Styles, 2003, p. xiii)

### **Study Summary**

Arizpe and Styles (2003) wrote the book *Children Reading Pictures* as a result of a third strand of the Reading Pictures Project that began in Great Britain. The basic concern of this study revolved around the ability of young children to actually see and understand what they were looking at as a sophisticated means of multi-modal reading. Several researchers participated in conducting case studies involving children at a number of schools located in different parts of Great Britain. All of the children involved were either read to by a researcher, or read themselves, three different picture books. These included: *The Tunnel* (Browne, 1989), *Zoo* (Browne, 1994), and *Lily Takes a Walk* (Kitamura, 1997). The book written by Evelyn Arizpe and Morag Styles is a re-visitation of previously conducted, individual studies of these three picture books, and of other smaller studies concerning children, reading, and visual literacy. Arizpe and Styles (2003) were primarily concerned with the children’s extensive opinions and reactions to both the stories, through verbal communication and through their drawings, and the relationship of the illustrations to their respective story. Questions asked by the researchers about the books and opinions expressed by students took place as the student was allowed to look at and reexamine the illustrations. Story recall was considered here only to the point that the child understood the story line in order to relate it to the illustrations.

## **Study Findings of Children’s Responses to Stories and Pictures in the ‘Children Reading Pictures’ Project**

The researchers discovered that when children are given a significant amount of time to analyze and discuss picture books the results can be “outstanding.” A report generated from the two year study and project included the findings that illustrations are a significant avenue for providing access to narratives and ideas that in many instances are not available to young readers through text alone; that in the strategy development of ‘reading’ pictures the cognitive abilities of students improved; the revisiting of the same books added depth to a child’s understanding of story; the development of ‘visible thinking’ at higher cognitive levels as books were discussed with other students was evident; and higher order reading skills development was displayed by students as connections were made between word and image (Arizpe and Styles, 2003).

### **Benefits**

We live in an increasingly visual world and the need for visual images is not likely to subside, or even diminish, in the near future. Most children and teachers enjoy sharing stories in picture books. The findings of Arizpe and Styles (2003) supported current research that for children the reading of pictures can be as equally complex an act as that of reading words. With the expert guidance of teachers, children will be able to develop visual literacy skills and strategies that will help them improve their abilities to approach reading in a multimodal manner, as well as in their development of higher order cognitive thinking skills. When children are given the opportunity to express their opinions and discuss with others what it is they see as they read a picture book, the potential for expanding their own schematic concepts of the world around them is certainly inevitable.

### **Limitations**

The conclusions drawn by Arizpe and Styles (2003) from their discussions and interviews with children are interesting. Research in visual literacy is indeed necessary in order for

educators to become more aware of the importance of the connection between it and the reading processes of emergent readers. There does not seem, however, to be much, if any, new information given to the reader about this topic.

At the present time visual literacy skills are not included in many reading curriculums. The current concern with high stakes testing and science-based, research reading programs leaves little time for the exploration and incorporation of these types of more affective programs. The two years invested in the type of picture book study that was accomplished by Arizpe and Styles (2003) and their colleagues may actually not fully impact the teaching practice of some elementary school classroom teachers due to the reading programs that they are currently mandated to use.

### **Study Summary**

Walsh (2003) conducted a study of oral responses made by two groups of young children after being read the story from two different narrative picture books. One story was on the Kindergarten level and the other story was on the One Year level. The data for this study was taken from a larger study conducted by Walsh in 1997 at several elementary schools in Australia. Part of the original study dealt with content, text-related variable responses compared to the study groups' oral personal responses to the same books. Reading sessions and subsequent taping of the children's responses for the 2003 study were conducted individually with students. During the question and answer session the students were allowed to refer back to the illustrations in the books and were given time to think about their answers before they actually had to make their responses.

### **Study Findings on the Effects of Oral Responses and Reexamination of the Illustrations in 'Reading Pictures: What Do They Reveal? Young Children's Reading of Visual Texts'**

Findings in Walsh's study illustrated that the pictures significantly influenced the responses of both the Kindergarten level students and the One Year level students. Analysis of

the responses made by the children interviewed indicated that when given the opportunity to look through the book, all of them (100%) referred back to the pictures accompanying the text in both storybooks in order to gain a better understanding of the answer to the question prior to their retelling of the events that took place in the story that had been read to them. Evidence showed that the older students depended upon the text for responses more often than the younger students. Both levels of students, however, relied upon the illustrations to incorporate additional information that was not included in the original text, into their individual retellings.

### **Benefits**

Based on the findings discussed in this study, Walsh (2003) demonstrated that the reading of pictures is not just a different process from that of reading words, but can be a process that is equally as complex as that of reading words. Using illustrations as a reading tool offers a powerful medium to those who are involved in the literacy development of emergent readers. Incorporating the teaching of reading pictures into the reading process would provide students with a number of benefits. These would include: the development of the ability to identify and observe details, the development of the ability to make critical interpretations and predictions, and the development of the ability to make affective and evaluative comments about what they have read or been read.

### **Limitations**

Walsh (2003) indicated that further research needed to be conducted using other multimodal texts. He suggested that studies should be conducted that would give a better understand of how learning may develop by using pictures and illustrations. The word multimodal, in the recent past, has generally referred to “multimedia environments” (Vincent, 2005, p. 1). In Walsh’s study, however, the term is used in order to make a distinction between text in books and illustrations in books.

There can sometimes be a problem with comparing the reading responses of kindergarten aged students to those of first-grade age students. As children mature as students (and readers), it seems as though their responses to what they read, or what has been read to them, can vary dramatically. As effective as this study was, maybe it would have been more successful if Walsh had limited it to one grade or the other.

### **Study Summary**

Haring and Fry (1979) completed a study in which fourth-grade and sixth-grade students participated in determining the effects of pictures on the comprehension of text. Within the parameters of the study, they predetermined that the pictures should correlate with the text, the text was to be presented in an increasingly difficult (from the beginning to the end of the story) narrative format and written on grade level, and comprehension was to be measured by the number of ideas a student could recall based on a hierarchy level developed by the research team. The student participants were divided into groups so that each group was to read only one of the three different sets of story booklets. One booklet contained only text. The story was a researcher-rewritten (in order to be presented to students on their grade-appropriate readability levels) version of an Aesop tale, "Mercury and the Woodcutter." The other two booklets included this same story with the addition of illustrations, which were drawn by an acquaintance of the researchers according to their specifications. One booklet contained a set of illustrations that depicted all 350 idea units (as determined by the researchers) from the story, and the second booklet contained a set of illustrations that depicted only 179 idea units from the story. Students randomly received one of the three copies of a booklet. After reading the story independently and then experiencing an immediate distraction, students were asked to write down everything they could freely recall from the story. Five days later, without fore-warning, the students were asked to again write down everything they could recall from the Aesop tale they had read.

## **Study Findings on the Effects of Inclusion or Omission of Pictures on Children's Comprehension of Written Text**

Findings showed that those students who read the booklets including pictures recalled significantly more idea details than did the students who read the booklets with no pictures. Those students who read the booklets with pictures were also able to recall more idea units after an interval of five days than did those students who read the booklets that included no pictures. The comprehension level of those students who read the booklets in which the illustrations depicted the smaller number of idea units was just as significant as those students who read the booklets in which the illustrations depicted all of the idea units of the story (Haring and Fry, 1979).

### **Benefits**

The findings of Haring and Fry (1979) indicated that recall of story ideas was supported by the inclusion of pictures with the text. It was determined from this study that pictures did not necessarily need to be elaborate in order for them to be used by students to receive positive benefits in the ability to recall a story they had read. The recall of ideas, even after a period of time, aided by the presence of pictures accompanying the story, would have benefits to students and teachers in a developmental reading program. As reported by Haring and Fry, another relevant concern that surfaced as a result of this study was the amount of attention paid to a more precise method of selecting picture content for the stories that are going to be used by educators to teach reading. Teachers need to be aware of the inclusion of and the quality of illustrations in the materials they are going to use in their classroom reading program.

### **Limitations**

Results of the study (Haring and Fry, 1979) indicated that the use of elaborate pictures, instead of simpler ones, were of no substantial additional benefit in reinforcing story concepts to the recall processes of children. It had also been assumed that older students (the sixth-graders)

would be able to employ the use of pictures as mnemonic devices more successfully than the younger students (the fourth graders), but this proved not to be the case. The sixth-grade students did not independently employ the method of using mnemonic devices with any more success or to any greater degree than did the fourth-grade students.

### **Comprehension Skills Development**

“Listening comprehension is often measured by the student’s skill at answering questions about what has been read” (Collins & Cheek, 1999, p. 214). The ability to listen and understand seems a simple task for most students, but those who are lacking certain literacy experiences often lag behind as the early reading processes begin. Communication is one of the basic functions of language and literacy development. In order to communicate what has been comprehended from story-listening a child needs to have an understanding of the information that the author is attempting to transmit (Johnson & Pearson, 1984). Pictures and illustrations in picture books have the ability to supply a more tangible meaning base to the process of comprehension.

Children who come to school with a background knowledge of stories, and who have been read to outside of the school setting are more likely to successfully answer comprehension questions about stories. Those children who come to school unprepared because of their lack of exposure to listening to stories and understanding schema need to be taught comprehension strategies (involving discussions, interpretations, and clarification) in order to extract meaning from the various types of books they will encounter throughout their school experiences. The experience of listening to books being read is one of the important ingredients in helping children understand how to gain meaning from written text (Center, 2005). Paivio (1986) stated that cognition involved both a verbal linguistic system and a nonverbal imaging system. The ability to produce mental images improves a child’s ability, not only, to understand, but also, to

increase the amount of information that he or she can comprehend and recall (Gambrell & Jawitz, 1993).

As children are taught how to think about texts as they begin learning to read, it may become beneficial that a multi-modal, or even nonlinear, approach be incorporated into the process. A reliance upon illustrations in picture books as a comprehension tool may provide the foothold some children need in order to succeed in reading. Considering that pictures and illustrations have become entrenched in the world today, it seems “reasonable to exploit their potential as effectively as possible” (Klein, 1988, p. 15). Research has indicated that text used in educational settings that induces mental imagery also tends to induce more engagement, interest, and emotional response in students, as well as better understanding and recall by them (Klein, 1988).

### **Research on Illustrations and Comprehension Development**

Children who are frequently exposed to storybook reading are more likely to use complex sentences, have increased literal and inferential comprehension skills, gain greater story concept development... (Silvern, as cited in Isbell, Sobol, Lindauer, & Lowrance, 2004, p. 158)

### **Study Summary**

In the article “Mental Imagery, Text Illustrations, and Children’s Story Comprehension and Recall,” the research conducted by Gambrell and Jawitz (1993) is discussed. The study focused on the effects of four different strategy instructions with fourth-grade students. The first focus was the use of mental imagery along with an examination of the illustrations that accompanied the text. The second focus involved instructions that only included the task of forming mental images about the story being read. The third focus of instructional strategy concerned only directions to examine the text illustrations without the directions to employ mental imagery about what was being read. And the fourth strategy involved the direction to use only general memory in order to remember what was read (without the aid of illustrations or instructions to form mental images of ideas). Each small group of students read a story silently



and then performed the intervening, distracting task of completing a maze that had no relationship to the subject of the story. When these two tasks were completed the students were asked to write down the story as if they were writing it down for a friend to read; a friend who had never heard it before. After writing their version of the story each student then made oral responses to sixteen cued recall questions. Students' papers were scored according to the amount of text-based information that was correctly recalled. Scoring was also influenced by the internal organization of the story, as well as, the quality of the recalled information. The oral responses were scored according to a template of acceptable answers that had been devised by the researchers.

### **Study Findings on the Effects of Mental Imagery, Text Illustrations, and Children's Story Comprehension and Recall**

The three treatment groups: imagery plus illustrations, imagery only, and illustrations only, all outperformed the control group of general memory only on the amount and quality of information that was recalled. The major finding of this research study, however, was that comprehension performance was enhanced when students received both the instruction to induce mental imagery and to specifically examine the text illustrations as part of the learning process. This treatment group (imagery plus illustrations) outperformed each of the other groups in the study. The number of stories that were completed by students, as part of their writing assignment, was also larger for the imagery plus illustrations group than for any other group.

### **Benefits**

The results suggest that when these two actions, the directions to induce mental imagery of what is being read while at the same time giving attention to the accompanying text illustrations, are combined, then a deeper level of processing of information is achieved than when these two actions are used individually and as separate, unrelated functions. The results are viewed as support for an imagery-illustration interaction theory where there is a dynamic,

flexible, and organized way in which these actions should be used in order to enhance comprehension of text. It can also be seen that text-relevant illustrations can supply a knowledge base from which children can begin to create mental images about the text they are reading. It is also important for teachers of reading to understand that the time spent teaching students how to utilize specific tools when participating in various types of instruction, such as attending to mental imagery development of a story and examining the accompanying illustrations, can prove to be beneficial in the overall learning process.

### **Limitations**

A methodological limitation of this experiment is that only one story was used during the study. The findings from this study are limited to narratives that have a clear presence of story structure elements and a high picture rating (which was predetermined before presenting the story to the student-participants), as this was the only type of story read by participants. Future studies need to be conducted to determine if the results generalize to other forms of narrative stories, to other types of stories which would include nonfiction materials that may be written in a narrative format, to other types of illustrations and graphics, and to other age groups and types of students.

### **Study Summary**

Lesgold, De Good, and Levin (1977) reported their findings as the results of research they conducted using illustrations and their effect on learning both simple and complex stories, which varied in length. The initial purpose of this study was to argue against the hypothesis that illustrations add unduly to the cognitive load of young children. The study design concerned itself with condition (illustration vs. control), story set, and replication that varied between subjects (at different schools), while story complexity (one story setting vs. two story settings) and story length (50 vs. 100 words) varied within subjects. Sixteen grade-level appropriate

stories were written by the researchers for the study: four that were 50 words long and took place in one setting (requiring only one background); four that were 100 words long and took place in one setting (requiring only one background); four that were 50 words long and took place in two settings (requiring two backgrounds); and four that were 100 words long and took place in two settings (requiring two backgrounds). Four literal follow-up questions were written for each short story and six follow-up questions were written for each of the longer stories. An average of eight cutouts, representing objects mentioned in the stories, were produced (by a colleague of the researchers) to go along with each story; while one background was made for each one setting story and two backgrounds were made for each two setting story.

Each child heard four stories. Those in the illustrations conditions were then given a background and accompanying cutouts and asked to place the cutouts so as to mimic what they had heard while listening to the story. Those children in the story only condition colored sheets of simple figures after hearing the story. The students were then given the title of each story and asked to orally recall it for the researcher. In the process of interviewing the students, each was asked to answer some predetermined, literal questions about the stories they had heard.

### **Study Findings of Pictures and Young Children's Prose Learning**

According to the researchers' results, the illustration conditions clearly produced better cued recall for both long and short passages, no matter whether it was simple (one setting) or complex (two settings), when compared with the conditions of free recall and no cutout manipulation after the story was heard. Lesgold, De Good, and Levin (1977) reported that although there was no interaction of condition with length or complexity for cued recall conditions, there was a hint of a condition for the length factor with free recall. In this case the percentage increment was greater for shorter passages than for longer ones. It appeared that the contribution of the illustrations was greater at the cued recall level than at the free recall level.

## **Benefits**

The work of these researchers (Lesgold, De Good, and Levin, 1977) indicated that the use of illustrations when teaching comprehension is more effective when the pictures interface with crucial information contained within the passage students are expected to remember. Students do not necessarily have to reproduce the illustrations as long as the prominent components of the story's illustrations are presented to them. Those who teach reading comprehension should consider using a variety of approaches, including the use of illustrations for the purposes of enhancing recall, in their instructional methods.

## **Limitations**

The researchers, themselves, believe that the passages may have been too long for children of this age group (first-graders) to be able to produce significant levels of free recall. They contended that illustrating the story on a sentence-by-sentence basis may strengthen a student's global free recall ability when conducting a post-reading activity. It should also be remembered that as children mature in their reading abilities they rely less and less on illustrations for literal comprehension and may need to learn how to use them in more specialized learning functions (Lesgold, De Good, and Levin, 1977).

## **Study Summary**

Santa (1977) conducted a series of three studies that involved experiments contrasting participants' memory for verbal and figural displays. In the first study a sequence of 60 original stimuli, the various combinations of three geometrical shapes and their corresponding word form or label, were randomly separated into three sections of twenty each. Another set of 60 was devised with symbols only and a third set was made with only words, or labels. Participants were shown first a card from the original set and then a card from one of the other sets, for a period of two seconds each with an interval of one half of a second between the two, and then

asked to indicate if the second card was the same or different from the first. Scoring was determined by the correctness of the answer and the length of time taken to make the response. The second experiment was a replication of the first in all aspects but one. In the second experiment the interval between the two cards was extended to five seconds.

In the third experiment the presentation of the original set of cards was altered. The information in the first two experiments was presented in a horizontal array. In this third experiment the information was presented in two rows, with two elements on the top row and a third element below and centered between the top two. They were also bordered by a perimeter line (basically, a square shape). The comparison stimuli were presented both in this manner, as well as in the original horizontal line array (Santa, 1977).

### **Study Findings on Spatial Transformations of Words and Pictures**

In the first experiment participants were faster on figural than on verbal comparisons. Subjects were also more affected by a transformation on verbal comparisons than on figural comparisons. In the second experiment, spatial transformation had a more deleterious effect on verbal comparisons than on figural, indicating that an image is less subject to constraint than verbal representations. Results from the third experiment showed that same identity judgments were rendered faster than transformed, or indications of difference, judgments. Again, decisions involving transformations were more damaging on verbal problems than on figural problems. The rearrangement of the presentation did, however, produce more constraints for the figural elements (Santa, 1977).

### **Benefits**

Since figure displays are matched at a faster rate than verbal displays it would be beneficial for educators to include the use of pictures and illustrations when helping students develop their abilities to comprehend information. It seems to be relevant from this research that

even though pictures are best presented in spatial relationships and words are best presented in an ordered relationship, the two can interact in a way that can enhance learning. According to Santa (1977), the implementation and use of both figural and verbal elements can provide students with multilayered levels of thinking and seeing. Educators need to understand how to use both illustrations and texts in the teaching of comprehension skills.

### **Limitations**

The results of this type of study (Santa, 1977) are not readily predicted by a single-coded model. Because words and pictures differ in both representation and manner of processing it seems as though the most viable alternative to predictability is a multiple-coding model that recognizes these levels. The study lets the reader see that a multiple-coding model is in evidence, but in a very narrow way. This type of study could be extended to incorporate more information that could actually be used by those who are concerned with the development of comprehension skills in students.

### **Study Summary**

Peeck (1974) explored the use of illustrations in textual information students read for retention. The primary areas of concern for Peeck involved the different modes in which information can be presented to students. These included information exclusively in the text, information exclusively in the illustrations, and information presented in a format that included text and illustrations. The participants in the 1974 study were given either an illustrated version or a version that included no illustrations (text only) of a strip cartoon “Beuintje Beer in Dromenland” (“Rupert Bear in the Land of Dreams”). The cartoon strip used for this research was modified, as per the specifications of Peeck, by an acquaintance of the researcher in order to fit the parameters and objectives of the experiment. As part of the study, in order to find out the extent to which students based their responses on textual information or pictorial information, the

multiple-choice answer section for each question contained both a correct answer response corresponding to the information provided by the text and a correct answer response corresponding to the information provided by the pictures. The subject participants were nine- and ten-year-old, fourth-graders. The students in three different schools were divided in half, part receiving the booklet with text only and the other part receiving the booklet with illustrated text. After the students finished reading the story they were given a comprehension/recall test, depending upon their designated school group. School A was tested immediately; School B was tested one day after reading the story; and School C was tested seven days after reading the story.

### **Study Findings on Retention of Pictorial and Verbal Content of a Text with Illustrations**

The results of this study clearly showed that illustrations in the informational text had a significant effect on the recall abilities of the students involved. On the questions exclusively concerning pictorial content and on the questions that offered both a textual-based and an illustration-based answer concerning the information that was presented by both text and illustrations, students who read the illustrated text scored significantly higher on recall than subjects who read the text that included no illustrations. On test items that covered the information presented by the text and the illustrations in an incongruous way, students who read the illustrated text checked the answer choice corresponding to the pictorial content far more frequently than those students who read the text only format (Peeck, 1974).

### **Benefits**

Peeck (1974) pointed out that the significant effect of the pictures on students' recall in this study corroborates Paivio's (1969) theory of Dual-Coding, which he discusses in his study, "Mental Imagery in Associative Learning and Memory." One of the aspects of this theory states that illustrations can be considered as a 'conceptual peg,' aiding a reader in comprehension

abilities. This study shows educators that a combination of text and illustrations has a greater impact on student learning and comprehension than text alone.

### **Limitations**

It was not fully understood why the students in School B (who took the recall test one day after reading the story) had lower retention levels than the students in School A (who tested immediately) or the students in School C (who tested seven days later). Peeck (1974) gave no palatable explanation for this phenomenon, and simply indicated that it was an issue that required further study. A limitation seen in this study, as in most others of this type, is the manipulating, or altering, of story illustrations. In order for this type of study to be truly beneficial for those who teach reading skills to emergent readers, the materials used to produce the desired effects need to be the kind to which a teacher has ready access, without having to spend large amounts of time redesigning all of the resources they will be using in their own reading classroom.

### **Vocabulary Development**

In the teaching of vocabulary, educators should be concerned with helping students develop strategies that will enable them to learn new words (Wolfe & Nevills, 2004). Some of these strategies are acquired because of the natural way in which learning may be comfortable, or relevant, for the child. This is significant because the amount of vocabulary that is actually taught by a teacher is minute compared to the vocabulary students will learn as a result of indirect instruction (Klein, 1988; Robbins & Ehri, 1994). As in most other areas of learning, personal learning strategies of students need to be considered and developed in order for them to assimilate these new words. “Learning to read, like anything else, is driven by curiosity and interest on the part of the learner; if these elements are missing, the motive for learning is absent” (Zemelman, Daniels, & Hyde, 1998, p. 44).



A total language experience needs to be used with children in order for the greatest amount of exposure to new vocabulary to be introduced to them (Johnson & Pearson, 1984). This research study is not suggesting that vocabulary development rely solely upon the images seen in picture books. It is suggesting, however, that the use of picture book illustrations be included, along with seeing the word, repeating it, using it, and responding to it, as reported in research conducted by Center (2005), as an instructional tool in the reading development of emergent readers. A variety of research has been conducted showing the relationship of illustrations and pictures to vocabulary development.

### **Research on Vocabulary Learning from Stories, With and Without Pictures**

...children continue to acquire new words beyond the initial language acquisition years and ... children's vocabularies grow by thousands of words each year during the elementary school years.  
(Robbins & Ehri, 1994, p. 54)

#### **Study Summary**

Robbins and Ehri (1994) replicated part of a study that had been conducted by Eller, Pappas, and Brown (1988) concerning the ways in which “children learned lexicogrammatical information incidentally through exposure to written context” (p. 5). Robbins and Ehri’s research involved indirect, new vocabulary learning among non-reading kindergarten students who listened to stories. Each child was individually interviewed. Students who were reading and those students who proved to have extremely poor vocabularies (as determined by the administration of Form M of the PPVT-R assessment test) were eliminated from the group of participants. In this study an experimental group listened to a story twice while the control group did not listen to it at all. A multiple-choice, post-test was given to all participant students to determine if they could identify the meaning of target words that were in the story read to the experimental group.

## **Study Findings on the Effects of Reading Storybooks to Kindergarteners to Help Them Learn New Vocabulary Words**

The results of the study showed that non-reading kindergarten students could indeed acquire new vocabulary simply by listening to stories. Findings also show, however, that “prior vocabulary knowledge was the only subject-related variable to significantly affect vocabulary growth” (Robbins & Ehri, 1994, p. 60), indicating that those children who went into the study with larger vocabularies to begin with, learned more words than those students who began the study with fewer words in their own personal vocabulary schema. Robbins and Ehri (1994) determined from this study that as children age and their vocabulary grows, those students who start reading with smaller vocabularies will fall farther and farther behind those with larger vocabularies.

### **Benefits**

The researchers indicated that their work is proof to authors of children’s books that the stories found in those books need to be written using not only more difficult words, but that they should also be surrounded by meaning-clarifying contexts from the surrounding text. It is also proof that young children with smaller vocabularies need to be given additional vocabulary instruction in the course of their early school years. One of the ways this can be accomplished is by providing them with abundant opportunities to hear new words by reading them more stories from picture books (Robbins and Ehri, 1994).

### **Limitations**

The stories read to children in the study were repeated only one time. Robbins and Ehri (1994) believe that the story books they used in their experiment would have had a greater impact if they had been read to the children at least four times. They also reported that there had been no delayed time before the administration of the post-test. It is believed that a delaying activity before the post-test was given may produce varied results.

## **Study Summary**

Denburg's (1976-1977) research showed clear evidence that first-grade children incorporated integral information from both print and illustrations in their ability to identify words. The manipulated independent variable in this study was the amount of pictorial information that accompanied a printed, grade-level appropriate sentence. The process consisted of showing students individual cards, which included four different types of information. The information was presented in sets of cards including: one card with text only, one card with a completed picture accompanying the text, and two cards that included text along with two different partial pictures. One of the partial pictures included everything in the normally viewed picture except that part that represented the object noun. The second partial picture included everything in the normally viewed picture except that part that represented the actor noun. In the example given in the article, a wagon was considered an object noun and the donkey was considered an actor noun. Each student in the study was exposed to every written sentence but never saw the same sentence in more than one type of picture format.

## **Study Findings on the Interaction of Picture and Print in Reading Instruction**

Denburg reported the advancement of several hypotheses as a result of this study. The findings involved 'trade-off' of one method of decoding words for another and the presentation of partial information (1976-77). The first significant finding was that an increase in the amount of information from various sources presented to an emergent reader about the words he or she is learning will provide, in a positive way, more resources, thus, improving that the chances of correct word identification will be enhanced. A second finding was that words that are pictured are identified with a significantly higher frequency than those words that are not accompanied with a picture. A third finding showed that the noun words in the sentences on each card in both partial picture conditions was identified no less frequently than in the sentences accompanying

the complete picture. It also showed that the noun word in the sentences accompanying the partial pictures was identified with significantly greater frequency than were the noun words in sentences that included no picture. This indicated that the additional pictorial information in the completed pictures may exceed the level of information needed for correct word identification, but that it was not necessarily detrimental to word reading.

### **Benefits**

Until a child develops some high level of skill in identifying and reading words when they are presented as text only, then he or she learns to use all information that is made available in order to understand new text. Accompanying pictures, which help describe what a child needs to read, can be beneficial as one of these additional tools in word identification. Denburg claimed that pictures should be used, not in the place of text, but as an additional source of information from which an emergent reader should be able to draw resources in order to develop larger vocabularies needed to be successful in the processes of learning how to read.

### **Limitations**

Basically, one of Denburg's strongest points is that pictorial information accompanying text should only be redundant to the reading situation. She reported that any illustrations that were not explicitly significant to the text were distracting to children (1976-77). This may be relevant when children are learning individual vocabulary words, but may not have the same significance when reading or listening to stories. Oftentimes the illustrations provide pertinent story information to an emergent reader that cannot be relayed to them through the text. Text of this particular type may occur when the vocabulary words used in a story are of a difficult nature or are more complex than the words with which a young reader is familiar.

## Theory of Aesthetics in Curriculum

Broudy argues that the capacity to decode aesthetic clues – the elements of an image  
– is central to the capacity to think...  
(Pinar, Reynolds, Slattery, & Taubman, 2004, p. 570)

The theoretical approach of aesthetics in curriculum is one that provides some insights about the role of the use of illustrations in comprehension skills and vocabulary development in the reading process. “A generation ago, the semantic approach exemplified by I. A. Richards and C. K. Ogden made valuable contributions to aesthetics in analyzing the concept of beauty and the psychology of literary value-judgments” (Munro, 1964, p. 258). Their ideas enlightened the field of educational theory as they helped teachers understand that just because a concept is labeled as ‘universal’ does not mean that it is forever unchanging and stagnant. The fact that an ideal can become a universal concept is a good indication that it is flexible enough to be accepted by a broad spectrum of individuals.

Aesthetics, according to the *Random House Webster’s College Dictionary*, is that “branch of philosophy dealing with taste and the study of beauty in nature and art” (p. 21). And in similar manner, according to *The Compact Edition of the Oxford English Dictionary*, aesthetics is defined as “the philosophy or theory of taste, or of the perception of the beautiful in nature and art” (p. 148). The theory of aesthetics in education is concerned primarily with the development of imagination. “Broudy suggests that the cultivation of the intellect – the capacity to generate, analyze, and synthesize concepts – necessarily requires cultivation of the imagination” (Pinar et al., 2004, p. 569). A multi-dimensionality, or variety, of methods that contribute to the development of experiences is necessary for a child to mature in his or her ability to use imagination in learning situations. Varied and diverse experiences offer the learner the ability to answer questions that surface throughout their educational life.

Understanding is a matter of grasping patterns in experience, of envisaging possibilities and concocting hypotheses – of answering questions of the

form ‘What may this be?’ or ‘Why may that have happened?’ that are apt to arise with respect to experience (Meynell, 1993, sec.1, para. 7).

As a result of incorporating aesthetics into the curriculum, students will develop, “the ability to find and frame aesthetically interesting and meaningful compositions from within the visual chaos and clutter of daily living” (Vallance, 2004, p. 514). The development of this skill, in turn, enables a learner to improve his or her ability to intelligently judge and make decisions about the questions they are faced with in life and the world. Broudy believes that, “education in the arts can permit students to become analytically discriminating in their apprehension of images and more sensitive to... emotional veracity or manipulation” (Pinar et al., 2004, p. 570).

In “their refusal to be guided in their reception and interpretation of experience by stock and outworn categories” (Moore, 2004, sec. 2, para.1), some aesthetic theorists of the late twentieth-century accepted the concept that, “Seeing is primary; thinking about seeing is an afterthought. Being taught how to see well is one thing; being taught how to frame and evaluate what one sees is quite another” (sec. 2, para.1). When Moore discusses the philosophy of Paul Duncan, a leading advocate in aesthetic theory, it is seen that:

the everyday aesthetic experiences offered to us by corporate capitalism are here to stay. For this reason, he thinks, it is all the more important that young people be made aware of what is going on in the visual environment of their everyday worlds. The objective is not merely a broadening of appreciation; it is attention to what is pervasive, persistent... in our lives so as to prepare us to be ‘critically aware and active citizens’ (sec. 3, para. 6)

Kimball discussed ethical implications of his observations about Kant. He finds that he must, like the rest of us, struggle with the statements made by Kant about the moral dimension that can influence aesthetic judgment. Kimball states that:

when it comes to the beautiful, Kant observes, we expect broad agreement. And this is because we have faith that the operation of taste... provides a common ground of judgment. We cannot prove that a given object is beautiful because the point at issue is not the object but the state of mind it occasions (Kimball, 2001, sec. 3, para. 27).

Van Camp (2004) explained that aesthetic judgment involves the use of “critical thinking skills about art [that] can serve... in understanding the entire range of aesthetic experiences and objects in [life]” (Sec. 11, para. 2). It is that ability that involves the use of critical observation or analysis of objects, especially objects of artistic merit, seen in the world, in an attempt to interpret them into personal meaning.

Aesthetic theory is concerned with a student’s ability of knowing and inquiring. A curriculum that is rich in the arts “not only provides students with an aesthetic literacy crucial to the development of thought and feeling in an imagistic world. It provides a theory of knowing divergent from those associated with mainstream educational psychology” (Pinar et al., 2004, p. 571). This statement about art made by Eaker (1938) almost 70 years ago is as poignant today as it was then:

art and poetry are perhaps the chief instruments by which the standards of response to life’s situations may be raised. Satisfying artistic experiences are cumulative; something of their value stays with us after they are gone; the self is modified and attitudes and interests are built up which embody in themselves some of the deepest meanings of the universe.... Life then becomes a rhythm of want and fulfillment, a continual growth (p. 189).

In the continuous pursuit of curriculum that is ever developing and changing, aesthetic theory today is primarily concerned about the interaction and relationship “among imagination, language, thought, and feeling” (Pinar et al., 2004, p. 569).

### **Theory of Dual Coding in Literacy**

Paivio’s Theory of Dual Coding reflected a relationship of illustrations to the reading process of emergent readers. It is a relationship which emphasizes the importance of the dual, but supportive, interaction between the words on the page and the illustrations which reflect primary support or supplemental meaning to those words. “A major hypothesis of the dual-coding theory is that these verbal and nonverbal subsystems perform independent functions, but

they can also perform in parallel, or in an integrated manner” (Gambrell & Jawitz, 1993, p. 266).

This relationship can be seen even in the light of human processing constraints of the different functions needed to interpret images and language.

In the 1960s, Paivio began publishing articles on the study of the dual nature of the cognitive structure. His primary concern was with the relationship of cognitive systems of language and mental imagery.

The most basic assumption of Dual Coding Theory is that cognition in reading and writing consists of the activity of two separate coding systems of mental representation, one system specialized for language and one system specialized for dealing with nonverbal objects and events (Sadoski & Paivio, 2001, p. 43).

The Dual Coding Theory (DCT) suggests that there is a difference between verbal and nonverbal representation in a person’s literary processes of reading and writing. This theory assumes that mental images retain some of their original properties derived from awareness in our sensory modalities, even when these images are associative parts of a larger mental structure that may include verbal representations. The strength of the connection between verbal, or linguistic system, and nonverbal, or imagery system, representation units is important in the cognitive process, but just as important are the differences, in the qualities of the verbal and nonverbal representational units, that get connected.

In DCT, organization of the verbal system is sequential and organization of the non-verbal system is non-sequential (e.g., spatial) and synchronous (all information is available at the same time), resulting in different constraints on processing. Another difference between the two systems is that verbal sequences are more constrained by sets of specific rules and nonverbal sequences are less constrained by such rules. A clear example of this thought process that offers understanding can be seen when ideas and concepts are considered in a reverse sequence.

Paivio’s theory of literary cognition promoted the idea that “all meaning and knowledge is



explained through direct interconnections between the modality-specific mental representations in the two systems, so that we can switch from one form of representation to another, or recode, both within a system...or between systems” (Sadowski & Paivio, 2001, p. 43). In visual sensory modality, for example, there can be both verbal and nonverbal programming for an individual. Verbal visual encoding may be the mental image of the letter ‘d’ or the visual word ‘dog.’ A nonverbal encoding, for the same example, may be a mental image of the thing itself, such as the mental picture of one’s pet.

One of the assumptions of DCT is that codes, for obtaining information verbally or non-verbally, are independent and additive; they depend upon each other and cumulatively add to the learner’s information base. In other words:

Structurally, they differ in the nature of representational units and the way the units are organized into higher order structures. Functionally, they are independent in the sense that either system can be active without the other or both can be active in parallel. At the same time, they are functionally interconnected so that activity in one system can initiate activity in the other (Paivio, 1986, p. 54).

It is, therefore, believed that “information encoded both verbally and nonverbally should be remembered better than information encoded only one way” (Sadowski & Paivio, 2001, p. 63).

A basic element of DCT is that the process of building links between mental representations of a word form and mental images of an appropriate picture is useful in understanding and remembering words. The accurate learning of words is a key point and critical in the process of learning how to read. When this accuracy learning takes place, the addition of a multimodal learning process, such as an appropriate referential picture, can add meaningful and memorable language expansion, in much the same way in which the association to pronunciation supplies important connections to speech.

Dual Coding Theory principles are helpful in understanding how children acquire and develop vocabulary, as well as how it is taught. A meta-analysis, completed by Swanborn and

deGlopper (1999), of “20 experiments of incidental word learning during normal reading showed that students learn about 15% of the unknown words they encounter” (p. 261). The addition of a variety of instructional techniques that are specifically meant to increase vocabulary, without direct vocabulary instruction, can provide a means of improving that learning rate. Such a technique would include teaching children how to be mindful of and personally examine the illustrations in materials being read to them.

### **Who Are Emergent Readers?**

“Emergent literacy is the foundation for developing the language skills necessary for success in reading and writing” (Collins & Cheek, 1999, p. 232). The term emergent literacy generally refers to a time frame that includes the period from birth through the first few years of school, or the time period in which children are developing background knowledge and schema, which prepares them for learning how to read. Since all children do not enter school with the same level of background knowledge this period extends, for some, into more than just the first years of elementary school (Searfoss & Readence, 1994).

The students referred to in this research study are those who are basically at the age-appropriate stage for beginning formal reading instruction. In most school settings this usually takes place beginning in the first grade year.

### **Literary Functions of Picture Book Illustrations**

A book doesn't really exist until it's read, looked at, and thought about... picture books need the reader to fill in the blank space between one page and the next.  
(Gail E. Haley in Considine, 1986, p. 42)

Of what importance is the ability to see the whole picture when learning to read? Why is it necessary for children to be able to see more than just the text that is found on the page? When one considers the aphorism, ‘one picture is worth a thousand words,’ what relevance does this familiar saying have to children who are at the early stages of the reading process?

As is true with text, one function of picture book illustrations is that they help establish setting. “Some stories depend on picture settings in much the same way that spoken conversation depends on the physical and social setting in which it takes place” (Elster & Simons, 1985, p. 149). In Tanya Thomassie’s (1995) *Feliciano Feydra LeRoux* the watery, watercolor paintings by Cat Bowman Smith help the reader understand, and almost feel, the proverbial drippy dampness that is in perpetual evidence in a south Louisiana swamp. When a picture of how Feliciano and her delightful family lives is shared with the reader he or she can not help but feel a connection to, as well as a need to know more about this particular culture. In some stories the setting is hardly, and sometimes never, mentioned in the text and the clarity of this information is left entirely up to the illustrations. This can be seen in many of the books by Jan Brett. In *Christmas Trolls*, written and illustrated by Brett (1993), someone hearing the story knows only that the main characters are riding through a forest. But only someone who is able to examine the pictures while the story is being read knows that the main characters are riding in an open sleigh, pulled by a beautiful reindeer, in the snow, through a deep, green forest where animals (and trolls) are hiding and watching them from under the cover of leaves and brush.

A second function that illustrations serve is the defining and development of characters. This is achieved by presenting appealing and consistent characters in the usually shortened format of a children’s picture book. The visual actions and reactions of these characters towards others is an important way of showing the reader who they really are. In *Feliciano Feydra LeRoux* the visual reader can immediately see the type of mood the main character, Feliciano, is in by looking at the expressions on her face. A child who is listening to this story may not get the same impression of Feliciano’s mood, and thus fail to develop to a fuller extent the tenacity of Feliciano’s personality. While reading *Strega Nona*, written and illustrated by Tomi dePaola (1975), the child who has access to the pictures from this story gets a strong feeling about the

overall calm and patience of the character, Strega Nona, simply by examining the expressions on her face. At the same time they see a variety of looks that represent confusion, exasperation, exhaustion, but eventual understanding as they watch the changing expressions on the face of her helper, Big Anthony.

Extension or development of the plot is another function of illustrations. Due to the shortened nature of children's picture books (usually restricted to 32 pages), as well as the compactness of story provided through the text, it is imperative that the development of plot rely upon information that is supplied by the illustrations. Lewis (2001) makes the remark that:

One of the reasons why pictorialization – the promiscuous mixing together of words and images – is able to shake loose generic bonds and derail expectations, is that it enables the picturebook to look in two directions at once and sometimes permits picturebook[s]... to play ... one perspective or view against another (2001, p. 68).

This 'double orientation of perspective' (Lanes, 1980), which is a situation in which two plots are developed simultaneously as a story progresses, is quite obvious in the book *Officer Buckle and Gloria*, written and illustrated by Peggy Rathmann (1996). A child who is simply listening to this story will not understand anything about the secondary plot that is developing in the background because of the antics of Officer Buckle's dog, Gloria. Only the child who can examine the pictures as she or he reads, or has the book read to her, can determine that as Officer Buckle's dreadful presentations become increasingly boring, Gloria's escalating performance upstage always ensures that each show will end up as a success.

The creative use of theme by an author or artist provides the structure needed to successfully unify ideas. Illustrations in picture books contribute to a storyline by aiding in the unification of the text through the logical and supporting progression of the pictures. In the wordless book *My Friend Rabbit*, illustrated by Eric Rohmann (2003), each page builds upon the next, in a sequential order, as the animals help each other in reaching an ultimate goal. This

sense of development is accomplished by Rohmann's artwork, which is presented in bold, thick, black lines that support the feeling of movement, encouraging the reader/viewer to move on from one page to the next.

Because of the diligent work of publishing editors, theme, or the support of the text to pictures and pictures to text is seldom off-the-mark in good children's literature. Even children's books of lesser quality seem to be able to somewhat carry the story theme from beginning to end. Seeing and understanding the theme in a literary piece, however, is an important aspect of reading that children need to learn and continue practicing throughout their life. Because of their sequential order, illustrations in literature help children develop the ability to not only see, but to better understand the theme being presented in the picture books they read.

Another important functional contribution of pictures in children's books is that they offer the visual reader a look at different styles, which include the author's or illustrator's point of view. Point of view in a story can be the obvious one that an illustrator is presenting to the reader/viewer, in order to supplement the text or to simply reinforce it, or it can be a completely and uniquely different one from that which the author is making known to the reader. This is indeed evident in *Officer Buckle and Gloria*, considering the fact that Officer Buckle seems to have no idea of what is happening behind him on the stage. Another example of this can be seen in the book *The Great Pig Escape*, written and illustrated by Eilene Christelow (2001). In this story only the reader who is a visual observer can see that as the unknowing farmer and his wife drive their pigs to town to be sold, the animals are escaping from the back of the truck by ones and twos at each stop they make. When the farmer arrives in town he has no idea what has happened to his livestock, but the child who has been able to experience the pictures could tell him. The postcards delivered to the farmer sometime later seem to reinforce the secret known only to the viewing reader.

The way that illustrations in children's books offer a variant point of view is by presenting information about cultures other than the one with which the reader is familiar. In *Christmas Trolls* the reader is given a vivid visual description of Scandinavian cultural symbols. An image she or he would not have been exposed to if the pictures had not been an integral part of the book, or if they had not been shown to the listener as the book was read. Another example of this can be seen in the book *Ashanti to Zulu*, written by Margaret Musgrove (1977) and illustrated by Leo and Diane Dillon. In this book different African tribes are described using an alphabet book format. Although the text itself in this book is descriptive and rich only the child who is looking at the pictures can appreciate the character of the people, the types of clothing they wear, and the environment in which they live.

### **The Importance of Developing Visual Literacy**

Language is a labyrinth of paths. You approach from one side and know your way about; you approach the same place from another side and no longer know your way about.  
(Wittgenstein, cited in Lewis, 2001, p. 124)

One of the major reasons for teaching children how to develop their visual literacy skills is for the aesthetic acumen a child develops. Eliot Eisner (1993) warned that the lack of aesthetic training and development found in the curriculum is a disservice to the growth and education of children. He states that there are aspects of visual learning that play an important role in human development, and that visual learning enables one to develop a variety of meanings from the world. The importance of these meanings is seen:

as sources of consummatory experiences. Visual learning makes... forms of experience possible. In doing so, it becomes a means through which we make sense of the world we inhabit and learn to experience and enjoy visual forms for their own sake (Eisner, 1993, p. 81).

When visual perception is employed by people "it consists of seeing relationships among qualities... [and] learning how to see these relationships means learning how to select and focus" (Eisner, 1993, p. 84). He goes on to say that a second aspect of visual learning also helps people

use visual form. The ability to utilize visual form both enables people to decode forms and words that are hard to define, but have cultural meanings. For example, this can be seen, in some cultures, when we are able to understand that the particular type of wave of a person's hand indicates a friendly or unfriendly gesture. He also says that "A second way we use visual form is to perceive or create images whose expressive properties afford us a certain quality of life as we perceive them. The visual arts represent the quintessential realization of this use of visual form" (Eisner, 1993, p. 84).

### **Conclusion**

In reading Lewis (2001) we may begin to agree with his comments that "the very presence of pictures appears to loosen generic constraints and open up the text to alternative ways of looking and thinking" (p. 66). When children are taught how to perceive visually it provides them with needed literacy skills. Children should be given every opportunity in their educational experience to develop multidimensional ways of learning. Stripling and Hughes-Hassell (2003) commented that "In order to build independent learning skills, educators must offer a series of experiences in which students develop and use those skills to learn important content" (p. xviii).

Educators need to understand that as a child is given the opportunity through formal and critical, as opposed to affective, lessons to increase the ability of visual intelligence, it becomes easier for the child to see and understand a variety of other meanings that take visual form, as well. The use of illustrations as a reading tool affords such opportunity. Reading quality picture books in abundance to children is one of the essential ways in which vocabulary development and improvement in comprehension can take place. In a study on story reading and storytelling by Isbell et al. (2004), children who were questioned concerning their comprehension "relied heavily on the illustrations to retell the story... [and] often described the illustrations, to help

restructure the story” (p. 161). If referring to the pictures in a book or story improves recall and comprehension for emergent readers, as shown in this study, it would stand to reason that the use of these illustrations should be incorporated into the curriculum as an additional reading tool.

Arizpe and Styles (2003) posited that complicated picture books can involve complex seeing and evaluation. When commenting on the study, “The Dynamics of Picturebook Communication,” conducted by Nikolajeva and Scott in 2000, Arizpe and Styles (2003) stated that these particular types of complicated books “lend themselves to hermeneutic analysis: the reader starts with the whole, looks at details, then goes back to the whole picture, as the process begins anew” (p. 20). Hermeneutics, according to the Oxford English Dictionary On-Line (1990), refers to the ability to interpret or explain. According to Terrence Carson in *Understanding Curriculum*, hermeneutics is “a practice of interpretation and reinterpretation, thoughtfully grounded in practice” (Pinar et al., 2004, p. 289).

Our existence would be a lifeless, empty place without the ability to perceive, understand, and appreciate the arts around us. Eisner is not the only educational philosopher who believes this to be true. Arizpe and Styles (2003), declared that “the reading of a picturebook can be much more significant as intellectual excitement converges with aesthetic pleasure, sometimes with emotional resonance and often with some humor thrown in” (p. 21). When it becomes obvious to educators that children can look at pictures and become capable of responding to them in terms of reflection, ideas, and feelings as a result of studying them, it can be seen that efferent responses and knowledge are not the only types of information being acquired through their reading experiences. We can also see the development of an aesthetic appreciation of picture books, as well. In the conveyance of these standards to students shouldn’t we also help them understand that the ideal of aesthetic awareness “must remain always an ideal, something we approximate, never achieve” (Kimball, sec. 3, para. 36). And, because of this practice,



wouldn't students then learn that the search for beauty in the world becomes a never ending, but continually rewarding search? Shouldn't the ultimate moral and ethical goal be, as Maxine Greene in *Understanding Curriculum* stated, to empower children with the ability to "see colors for the first time, each time" (Pinar et al., 2004, p. 605)?

## CHAPTER III

### METHOD AND PROCEDURE

#### Method

Three entire participating first-grade classes in both schools came to the library to listen to a story that was read by the library media specialist. Each class was regarded as a separate group in the study, and was referred to as School A, Group 1 (A1); School A, Group 2 (A2); School A, Group 3 (A3); School B, Group 1 (B1); School B, Group 2 (B2); and School B, Group 3 (B3). Each class within the school experienced the same story in a different way. In School A, groups A1, A2, and A3 were compared. In School B, groups B1, B2, and B3 were compared. The three classes of students in both School A and School B were observed as they participated in similar situations. The primary difference was that different, but similar, picture books were used at each school. After the study, the observable results and the descriptive statistical information obtained from each school was compared. The purpose of this comparison was to observe if the same set of situations was affected by different books, in different settings, thus giving the study more generalizability in educational settings. All students in all three groups at each school listened to an age appropriate story.

A number of books were pre-selected by the researcher using the “Checklist for Evaluating Picture Books” in Galda and Cullinan (2006, p. 49), as well as, some of the criteria for selection of informational materials as set forth by Moss (1995) in *Using Children’s Nonfiction Tradebooks as Read-alouds*, as a guide. The resulting list of criteria has been attached as Appendix B. In an effort to establish consistency in the children’s picture books that were used in the study, interrater reliability was obtained by consulting two library media specialists and a reading specialist. This consultation provided professional judgments concerning the final selections of the specific books that were read to the student participants.

Secondary verbal consultation, concerning the choice of books read, was also solicited from one of the kindergarten teachers in each school. These five advising teachers had a combined total of 70-plus years of teaching experience in the elementary school.

A checklist (Appendix C), of relevant characteristics regarding the definition and qualities of an outstanding, superior picture book, was used to determine which books were to be used in the study. The checklist was completed by the advising teachers for each of the researcher pre-selected books. This checklist was developed using the sources discussed in the Introduction and Purpose section in Chapter I of this research study.

Most of the pre-selected books chosen by the researcher were narrative stories in the fiction genre. The Randolph Caldecott Medal award criteria and the NCTE award criteria were used to garner information in order to develop a checklist that would include this type of literature. Even though most of the books chosen to be evaluated by the teacher committee were considered picture books, some were books that were, not only narrative in nature, but also, presented a range of correct facts to students. Standards used to determine qualities that are apparent in informational books for children and science picture books for children were gleaned from the following two sources. The Robert F. Sibert award criteria, as well as the criteria established for the Giverny Award, were used to obtain information about nonfiction materials that helped the researcher develop the school study book-evaluation checklist.

The Giverny Award was established at Louisiana State University for the purpose of awarding a yearly prize in children's literature. A study conducted by Goins (2004) contributed to the establishment of desired characteristics and qualities inherent in superior informational science books. The award is presented annually by the 15 Degree Laboratory Organization to the most outstanding children's picture book representing those established qualities. The purpose of the Laboratory is to promote "visual cognition in biology, visual approaches to

learning biology, and the graphic representation of biological knowledge” (Giverny, 2006, sec. 1, para. 1).

All of these sources were considered when developing the checklist to be used by the evaluating committee, which was comprised of one reading specialist and two elementary school librarians. The checklist was given to these three members of the book-evaluation committee. It was completed by them as they reviewed each of the books chosen by the researcher in order to render a professional judgment as to the quality of the illustrations and the text. Even though the pictures and the text were supposed to be the primary concerns of the evaluators, they were asked to evaluate each book’s overall value to emergent readers, as well.

It was desirable that the students in the study had never before heard the pre-selected stories. The advising kindergarten teacher in each school confirmed if the books were read, or not read, last year. A brief survey was also conducted with a first teacher in each school to see if either book had been read so far during the current school year. Although none of the teachers questioned had specific knowledge of everything a child had read or been read at home, each was a fairly competent judge in this situation. The information discovered by the assisting kindergarten teacher was verified with the other kindergarten teachers in their respective school. The books used at the two schools were different, but comparable in quality of story and illustrations, in that they both appealed to young children. The librarians and the reading specialist consultants also helped determine the comparability of the two books that were used.

The book selected to be read at each school was only read once to the class for purposes of this study. The library media specialist, who read the story at each school, was asked to interact as little as possible with the children, but could answer questions that were not directly related to the defining or explanation of any of the unusual or difficult words found in the story. This librarian gave simple explanations and instructions to each individual group depending

upon the experimental condition. All students in each class were expected to perform another task (choosing and looking at or checking out library books) as soon as the story was over. This distraction activity took, approximately, the same amount of time in all classes at both schools.

With Groups A1 and B1, the media specialist explained that the class was being observed this day and the usual way in which a story is read to them may be a little different. The librarian then gave a very brief introduction to the book (author and title), and as it was being read the pictures were shown to the students in both of these groups. Groups A2 and B2 were also given the explanation that the normal routine of reading a story may seem a little different today due to the request of a researcher who was observing the class. In addition to the brief introduction of the book, the students were told that they should pay close attention to the illustrations in the story, even if the librarian does not mention anything about them. They were also told that the illustrations can sometimes help the listener understand parts of a story that they may not understand when they are simply listening to it. The pictures accompanying the story were shown to both groups of these students as the story was being read. Groups A3 and B3 also heard the explanation about the class helping an observer and that the way they are going to hear the story today would be different from the way they usually hear a story. The media specialist also explained that she would discuss the situation with them at a later time so that they would better understand their role in being observed by the researcher. A brief introduction to the book was given and the story was read. The pictures were not shown to Groups A3 and B3 as the story was read.

There are often pictures on the covers of children's books, as well as, on the pages of the story and many elementary school media specialists, and most other elementary school teachers as well, are in the habit of automatically showing students the pictures. The pictures are shown both before the story is read in order to activate prior knowledge and during the story so students

can develop mental images. To insure that no illustrations, that may help describe the story in any way, were accidentally seen by the students the text of the book was typed on plain pieces of paper. The media specialists used these typed pages to read the story to the students in the class groups A3 and B3.

Observation of the overall reactions of students in each class took place as the story was being read. The researcher recorded field notes during observations of the students from each class who were pre-selected for closer observation. These notes were organized further, by looking for patterns of attention and listening behavior that were both similar and unique among the case study students, after they had been reviewed at a later time. The pre-selection of study participants was conducted through a process involving, first, purposeful sampling and then simple random sampling. Through the method of purposeful sampling only those students who were determined by each individual classroom teacher to be the type of student who would cooperate with a researcher in a study had their name submitted for a simple random sampling drawing. Purposeful sampling is defined by Bogdan and Biklen (2003) as choosing “particular subjects to include because they are believed to facilitate the expansion of the developing theory” (p. 65). A simple random sample, as defined by Hinkle, Wiersma, and Jurs (2003), is one in which “all possible samples of a given size have the same probability of selection” (p. 142). After these students’ names were added to a common pool, one student’s name per class was drawn from this pool and selected to take part in the study. At the same time, two or three other names were drawn in case the parents, or guardian, of the first student drawn did not grant permission to the researcher for their child to participate in the study.

The pre-selected students came to the library and were administered a pre-vocabulary test of words that could be seen in the illustrations of the story and were not defined by the text. These words were found in the book that the media specialist, at each school, later read to the

entire class. The words were read, one at a time, to each student in the study. The individual student responded orally by giving the meaning, if he or she knew it, of the word to the researcher or by indicating that they did not know the meaning of the word. In either case the child's response was recorded onto an information sheet by the researcher. Although the researcher remained as objective as possible in reaction to the answers given, students received praise for their attempts at answering all questions, whether the answers were right or wrong. After hearing the story, each student was given the same list of words as a post-vocabulary test in the same manner that he or she took the pre-vocabulary test. Each child was interviewed concerning their opinions and feelings about the story, and each was asked to retell the story, initially through free recall and then with the aid of prompting questions, for the purpose of determining the level of comprehension. The individual interview with each child was audio-tape recorded, transcribed, and examined more closely at a later time for further analysis. Fuller, richer notes on the student participant were developed using these tape recorded interviews. Only observable behaviors of the students who were part of the study, as well as any other students in the class, were recorded by the researcher.

### **Research Design**

This was a descriptive case study conducted in the library media center with regular education, grade-level, on-track (up to this point) students at two public elementary schools in a northwest Louisiana parish. The study included six students. One student from each of three first-grade classes, in both of the schools participating, was selected. All students in the first-grade classes at both schools came to the library media center to participate in a regularly scheduled library, literature-based program. A pilot study began in September 2006 to conduct observations in each of the first-grade classes while they participated in either library lessons or story time in the library media center. The pilot study was used as an opportunity for the

researcher to become familiar with students (before the random sampling process took place), to observe the organization of each school's library program, and to refine the research questions. Occasionally, researchers observed that some children, who are either too young or too immature, may not be ideal subjects for the type of study that requires them to make verbal responses about what they have read or heard (Levin & Lesgold, 1977). Because all of the first-grade teachers in each school were more knowledgeable of their students' behaviors and abilities to voluntarily participate with the researcher, each was asked to provide a list which included the name of any student who would not be a reliable study candidate.

After examining the field notes from the pilot study, observation of the first-grade students as they were being read to by the library media specialist continued, while answers to the following questions were sought: (a) How was comprehension and retelling of emergent readers impacted, if at all, by seeing the illustrations as the story was being read to them? (b) How was comprehension and retelling of emergent readers impacted, if at all, by instructing students to attend to the illustrations they were exposed to as the story was being read to them? (c) How were emergent readers' abilities to comprehend and retell a story impacted, if at all, when the illustrations were not shown to the listeners as the story was being read? (d) How was the ability to indirectly develop vocabulary in emergent readers impacted, if at all, by seeing the illustrations as the story was being read to them? (e) How was the ability to indirectly develop vocabulary in emergent readers impacted, if at all, by instructing students to attend to the illustrations they were exposed to as the story was being read to them? (f) How were emergent readers' abilities to indirectly develop vocabulary impacted, if at all, by not seeing the illustrations as the story was being read to them? Observations of all students in the first-grade classes, three in each school, were conducted. From these classes, pre-selection through a



purposeful sampling of the six students who became the focus subjects of each case study, was conducted in the presence of the media specialists.

Beginning in September 2006, observations of students' behavior and data collection took place. This included an investigation of students' participation during study skills lessons and story time in a school library media center. Focus case studies of six students' and their abilities regarding retelling and comprehension in relation to exposure to the illustrations that would normally accompany a picture book took place. Along with information gathered concerning observed behavior during story book reading, the focus case studies included an analysis of the student participants' pre- and post-test concerning indirect vocabulary development in direct relationship to the illustrations in a picture book. Field notes were taken in these first-grade classes each time an observation was made. Observations of the six focus study students was the primary data source for the research of this dissertation. These six, individual students were observed during the reading of a pre-selected picture book. The specific observations took place on eighteen separate occasions (nine times in each school), as planned with the media specialists and the classroom teachers. The researcher assumed the role of an objective observer in this classroom environment as information and data were collected during the first two visits to each class. On the third visit the researcher assumed the role of a participant observer as students were individually interviewed and data was collected during these sessions.

Just before the entire class came to listen to the story, the pre-selected student came to the library media center to take the oral pre-vocabulary test. After taking this test the student either left the library in order to go to recess and then returned with the entire class immediately after the recess break, or had the opportunity to look at picture books while waiting for the rest of his or her class to come to the library media center. Arrangements for the administration of this

pre-test (as well as the post-vocabulary test) were made prior to this occurrence. Parental permission was obtained, and scheduling arrangements were made with the media specialist and the classroom teacher.

Immediately after the story was read, the entire class (in both schools) continued with their familiar library media center routine. This usually involved a study skills lesson and the opportunity for students to select and check out materials that they took home for the week. All classes in both schools were organized using basically this same format. After the scheduled class the focus study student was asked to stay in the library media center for the purposes of taking the oral post-vocabulary test, retelling the story to determine the level of comprehension, and to have a brief conversation with the researcher about their thoughts and feelings concerning the book that was read. Descriptive statistics were used to compare the results obtained from the pre-vocabulary test and the post-vocabulary test. Qualitative research methodology, in the form of case studies, was used to describe the retelling for comprehension and the interview with the focus students, providing a broader knowledge of the phenomena that were observed. Key informants such as the library media specialist, first-grade teachers, kindergarten teachers, and the curriculum coordinator were used to provide a more thorough understanding of the students, their levels of comprehension ability and vocabulary development, and the learning environment.

According to Bogdan and Bilken (2003) qualitative research inquiry is a significant approach for collecting descriptive data while observing in a natural setting in the real world. The researcher places importance upon using inductive reasoning and of understanding the point of view of the subject(s) being studied. They believe that case study research and ethnographic research are similar and can be used simultaneously, as case studies can reveal information about the life situations of specific individuals, and the ethnographic process can involve the interpretations of life in a common sense approach. Studies conducted by Marshall and Rossman

(1999), which looked at the functioning of a society or culture, used case study as a way of describing and exemplifying the innate meaning of the experiences being observed by the researcher.

### **Selection of Participants**

It was planned that the researcher be only an observer in each of these classes during one, or more, of their regular visits to the library. Plans were made to do this so the students would become comfortable in her presence. Although casual observation of different children was made during this time, it was decided to select the six focus group children, from each of the classes involved in the study, through a combination of processes. The purposeful sampling method eliminated those students (by conferencing with the classroom teacher) who may not be ideal subjects for this study because of their young age or lack of adequate maturity levels (Levin & Lesgold, 1977). After removing the names of any children who were not mature enough to participate in the study, simple random sampling took place by drawing a name out of a common pool in each class. By using this method it was assured that any preconceived notions about a child's intellectual level, either on the part of the researcher or the classroom teacher, would not prejudice the selection. After the child participant was determined, arrangements were made to obtain parental permission for these children to be part of this study. On the day that the class was observed while the study picture book was read, plans were made with the first-grade teacher, and the media specialist, to see this pre-selected student before the regularly scheduled class time and to then keep this student after class for the post-vocabulary test, retelling, and an interview.

### **Data Collection**

There is a fundamental difference between the qualitative and quantitative research methods. This difference involves the methods and instruments used to collect the data that

became part of the research. Although there are several ways to describe these differences, the most significant difference involves the relationship that the researcher, or observer, has with the subjects of the study. In a quantitative study the researcher remains detached and distant, has a short term relationship with the subject, if any at all, and compiles data in a circumscribed way. On the other hand, in a qualitative study the researcher develops empathy for the subject because of the intense contact that goes hand-in-hand with the observation sessions and, as a result, an emphasis of trust often develops (Bogdan & Biklen, 2003).

Because there are inherent limitations to data collection methods, it is necessary to use several of them in order to strengthen the description of the phenomenon being studied. An ethnographic study that is credible will include a multiple case study drawing from several sources and methods of data collection in order to develop an accurate and full description of the occurrence being observed. According to Creswell (1998), triangulation is typically the process that “involves corroborating evidence from different sources to shed light on a theme or perspective” (p. 202). Bogdan and Biklen (2003) state that when one is using the term triangulation in qualitative research he is referring to the original definition used in trigonometry that requires a navigator to take bearings from more than one object in the distance in order to determine location. In qualitative research several sources of data collection, instead of just one, will furnish a more accurate picture and a better understanding of the observable facts being studied. The collection of data is the backbone of a qualitative research project and can be achieved using a variety of methods and strategies. Descriptive statistical analysis will be used to describe the information obtained from the results of the pre- and post-vocabulary tests administered to participants during this study.

## **Observations**

As the library media specialist read the study picture book, observations were made and recorded of the reactions and perceived attitudes of students in each class, specifically those of the focus study students. Because many parents are unwilling to give permission for their elementary school aged children to be video-taped, notes were taken by the researcher on various class members' behavior as the story was being read to them. These notes were examined at a later date only for the purpose of making a record of observable behavior.

While listening to and observing each student during their retelling of the story, examples of prompting questions used by the researcher with all student participants included: Can you tell me what happened?, Can you tell me what happened next?, If you were going to tell this story to your friend, what would you tell him or her?, and Have you told me everything that you remember? The questions that relied upon the illustrations to help students formulate an answer depend, out of necessity, specifically upon the actual books that were chosen for the study. Therefore, prompts used with the students who saw the illustrations as the story was read included questions, such as: Can you explain what the pictures showed you about where the mouse and the dragon lived? and Can you tell me where Charlie and his sheep lived? Prompts that were used with the students who were asked to make extra effort to examine the illustrations as the story was being read included comments and questions, such as: Tell me what you thought about the picture that showed us Charlie's old cloak, and What is your opinion about how the illustrator showed us what was in the background of the story? Prompts used with those children who did not see the illustrations included questions, such as: Were you able to see, in your mind, things that the story told you about? and What are some of the things that were discussed in the story that you could not see in your mind and had a hard time understanding? As each child retold the story a written record of their answers and reactions, as well as

researcher comments about their behavior was kept. Their actual retelling was recorded using audiotape that was transcribed and re-examined at a later date. A Comprehension Coding sheet for each student was later completed while re-examining the audio-tapes of each child's answers. These coding sheets are included in this research study as Appendices D and E.

## **Interviews**

After the student finished with the retelling, a brief interview with the child was conducted. Each student was asked what he or she remembered from the story. Each was asked questions, such as: Did you like the story? and Why? and Can you tell me what helped you remember things that happened in the story? Students from Groups A1, A2, B1, and B2 were asked questions similar to: Did you like the illustrations? and Why?, If you had not been able to see the pictures would you still have enjoyed this story as much?, Did the illustrations help you understand the story?, and Did you think about what you saw in the illustrations as you were telling about the story? Students from Groups A3 and B3 were asked questions, such as the following: If you had been able to see the pictures would you have enjoyed this story more or less?, Would you have liked to have seen the pictures during the story?, Is it important, or not, for you to see the pictures in a story?, and What are your feelings about not being able to see the pictures? If a child had difficulty in responding then prompting aids were given to him or her as needed. This assistance simply included words such as 'Good' and statements such as 'What else do you remember?' without supplying any of the content of the story. Help from the researcher also included encouragement to students by filling in gaps in the retelling. This was accomplished by suggesting the occurrence of an incorrect fact happening between two points that the child had already mentioned, thus triggering memory of the correct fact (Salinger, 1993).

These interviews were tape recorded and were transcribed at a later date for further examination. In providing consistency to the interviews, a list of the basic questions that were

asked each student is included in this research study as Appendix F: 'Basic Interview Questions for Both Groups.' The final draft of this list of questions was determined after the books that were chosen to be used in the study were selected.

### **Analysis of Documents**

In order to determine findings from a qualitative study it is necessary to perform the process of systematically searching through and arranging the data from all of the collection techniques. These can include field notes, the transcripts of interviews with subjects, forms and questionnaires, and any other materials that may have been used. This process involves not only the arranging of materials in a logical, usable format, but it eventually requires the researcher to synthesize them and search for the relevant patterns (Bogdan & Biklen, 2003).

There were four primary sources of document analysis for this study. One was the field notes taken and collected from various observations of the classes and focus students during regular story time and during the time the study picture book is read to them. These field notes primarily concentrated on the observable attention and listening behaviors that were exhibited by class members and the student-participants. The field notes were examined to discover both similarities and differences in the behavior of the six case study students. A second source was a recall coding sheet devised by the researcher and used to record information as the subjects were being interviewed. This coding sheet consisted of all major ideas and concepts that could be seen in the picture books that were used in the study. The coding information sheets were developed after the books for the study had been selected and read several times. A third source of document analysis was the taped interviews with each of the six first-grade students in the focus group. These tapes helped the researcher in understanding each child's recall and comprehension of the story. The tapes also provided the personal reflection information that was shared by each child after they complete the recall portion of the interview. The final source of

document analysis was the pre- and post-vocabulary test results. A comparison of the results from the pre- and post-test for each student participant was made and an analysis of the comparison was completed. A copy of the pre- and post-vocabulary test words for each picture book is included as Appendices G and H. These tests were designed after the study picture books had been selected. The data from the study was compiled and triangulated based on these sources.

### **Data Collection Procedure**

Permission to complete this research project was obtained from the local school board, as well as the administrator and the media specialist at the individual schools. A copy of the letter requesting this permission from the school board is attached as Appendix I. A copy of the letter from the school board granting permission to proceed is attached as Appendix J. Permission to observe, interview, and to audiotape the pre-selected children was obtained from parents. A copy of this letter of request is attached as Appendix K. Student participants gave their permission to participate in this study by signing a Child Assent form that was read to each by the researcher. A copy of this form is attached as Appendix L.

Field notes were taken during the initial observation periods. During these visits finalization of the determination process on how to select the students who participated in the project was made. As the pre-selected picture book for the study at each school was being read to the class, students were observed during their participation. Additional field notes were compiled and reviewed for similarities and differences in observable behavior during the informal observation period that took place in September 2006. Triangulation of sources and resources were used in order to gather information from: (a) field notes, (b) interviews showing participants' comments and thoughts, (c) analysis and comparison of the pre- and post-vocabulary tests, (d) key informants, (e) observer reflections and comments, and (f) analysis of



documentation. The first-grade teachers were interviewed as key informants. Other key informants, such as the Kindergarten teachers and the library media specialist, were informally interviewed to obtain new insight and a different perspective about students' recall, comprehension, and vocabulary development abilities. Journal entries and a retelling coding sheet, were devised and used during interviews with students, and were reviewed at a later time for pertinent information. Each coding sheet was specifically relate to the book being read and was modeled and developed using the "Codes for Data Analysis [for] Levels of interpretation [and] Categories of perception" in *Children Reading Pictures* by Arizpe & Styles ( 2003, p. 258) and the coding sheet "Functional categories for children's verbal responses to picture books" (Kiefer, 1993, p. 272). The coding sheets used for this research study were specifically designed with the concept of visual literacy in mind. Individualized copies of these coding sheets were devised after the study picture books had been selected and are attached as Appendix M and Appendix N, respectively. Examples of transcripts of the interviews with the student-participants are attached as Appendix O. After the field notes, recordings, and recall data sheets from observations and interviews were reviewed and information from the relevant documents was read critically, all of the facts were analyzed to discover common patterns or ideas that contributed to the formulation of answers to the research questions.

### **Data Collection Analysis**

After field notes are taken it is important to separate the information that is relevant to a study by dividing it into coding categories. This allows the researcher to focus on the facts that are significant. These can range from activity and event codes to narrative and subjects' opinions codes, and more, depending upon need. After the data has been categorized, depending upon the relevant behavior observed, the researcher can look for and describe patterns and topics that emerge. As the data are being placed into usable categories, a researcher also needs to apply

critical thinking by speculating about these patterns as they apply to what is known about the subjects and the study. This will help to develop a strategy for the interpretation of the information that has been collected (Bogdan & Biklen, 2003).

A descriptive image of how comprehension skills and recall abilities and vocabulary development of emergent first-grade readers can be affected by using, or not using, the illustrations in picture books as a reinforcing tool during story telling, has been provided to the reader. This was determined through application of the processes suggested by Bogdan and Biklen (2003) in *Qualitative Research for Education*. Speculations were made that may help form an interpretation of the data.

### **Trustworthiness**

In order to show that the findings in this qualitative study are indeed sound and legitimate it was necessary to employ several established research procedures. These include the use of credibility, transferability, dependability, and confirmability in the gathering and presentation of the information (Bogdan & Biklen, 2003; Lincoln & Guba, 1985) found in this research study.

### **Credibility**

An important purpose of qualitative research is to provide groups in a society with the ability to make credible arguments and plans that will support their causes. This can be done by providing information, understanding of issues, and factual data that substantiates the research. It is the type of information that is necessary at a time when decisions need to be made that may have potential effects on educational practice (Bogdan & Biklen, 2003). According to Lincoln and Guba (1985) one must use a combination of techniques, including observation, member checking, and peer debriefing, in order to insure the credibility of the findings. Triangulation, or the collection of data from a variety of sources, is an important part of the process. The use of triangulation insures the consistency of the findings.

After several class observations, a feeling of trust developed between the researcher and the subjects. As this climate of trust began to take hold the students became freer in their actions and participation in class, allowing the researcher to identify emerging themes and patterns. During observation periods and at times when students were being interviewed, opportunities were made available to determine which responses and actions were irrelevant to the project or were distorted behaviors.

Credibility was also established with help received from both a member checker and a peer helper. One of the first-grade teachers in each school was a member checker and assisted by reviewing the field notes that were written. This teacher and the researcher discussed problems and changes that needed to be considered in order for the information collected to be accurate. The library media specialist in each school acted as a peer debriefer. As a disinterested peer (Lincoln & Guba, 1985) she assisted in coding the field notes that were written up in order to help insure that the inquiry process was on track and was progressing in a logical manner.

### **Transferability**

The detailed description that is used in qualitative research offers to those who read this research study, and who may want to transfer this hypothesis to other research projects, the basis by which to judge whether the context is appropriate for their purpose. Transferability, used as a form of external validity, attempts to prove the generalizability of the specificities of context (Lincoln & Guba, 1985) and keeps writers from having to personally verify every piece of information that they study. In this research study descriptive data has been provided to allow practical judgment of transferability by other researchers and writers. Reliable description, as Geertz (1973) stated in his article, "Thick Description: Toward an Interpretive Theory of Culture," is an important aspect of research in that it provides "a vocabulary in which what

symbolic action has to say about itself... can be expressed” (p. 27). Detailed writing and documentation of researched phenomena is most desired in qualitative methodology in order for the researcher to make “mere occurrences scientifically eloquent” (Geertz, 1973, p. 28).

Conscious, reliable, and expressively recorded information, provided in a scientific manner, about what is observed during a study, offers other researchers the opportunity to understand what has already been added to a particular field of study as they begin their own work.

### **Dependability and Confirmability**

As the result of this study there is a well documented collection of data. This includes field notes, information provided to the researcher by school coordinators from official documents concerning the student-participants’ current grade-level tests and reading level tests, transcriptions of interviews, copies of the pre- and post-vocabulary test results, and notes of discussions with the member checker and the peer debriefer. Some of these documents provide factual information and some of them provide rich descriptions of the subjects and the environment being studied (Bogdan & Biklen, 2003). The use of an external auditor who independently determined the dependability and confirmability by verifying the research processes and the project product is recommended by Lincoln and Guba (1985) in their book *Naturalistic Inquiry*. A primary auditor used the documentation from this study to determine if the findings and perspectives were indicated accurately by analysis of the data; that they, as they should, lack bias; and that they were interpreted and presented in a logical manner. A second auditor checked the study for lack of bias and to determine if the information was presented using commonsense, as well as, a systematic approach.

The following time frame will be used in implementing this research study and in collecting, analyzing, and synthesizing data:

### Time Line

1. Book study committee evaluated the pre-selected books chosen by the researcher. (4-6 weeks before the study began)
2. Requested permission from schools and the school district to conduct a research study at two local elementary schools. (4-6 weeks before beginning the study)
3. Applicable pre- and post-vocabulary tests were developed. Interview questions pertaining to the books chosen for the study were developed. (3-4 weeks before the study began)
4. Orientation observations in library media centers. (2-3 weeks before beginning the actual collection of data for the project.)
5. Student participants were chosen. (2-3 weeks before pre-selected picture book was read to the class)
6. Requested permission from parents to conduct a research study with their child. (As soon as the permission to proceed was received from the school district.)
7. Obtained student-participant's signature on Child Assent forms (before administering vocabulary pre-test and interview)
8. Collected data, made field notes, had informal discussions with key informants, the peer debriefer, and the member checker, and conducted interviews. (Over a 1 month period.)
8. Synthesized collected data. (4-6 weeks at the end of the project period.)

## **Conclusion**

The narrative, descriptive nature of qualitative analysis combined with reliable organization of data from a variety of sources provides a meaningful way to explore and understand educational phenomenon (Bogdan & Biklen, 2003). The examination of issues that affect education is a process that is in constant flux. As a researcher becomes an observer in social environs that allow him to see and record relationships, it can provide rich descriptions of situations that can be examined for future study. By examining the reactions and interactions of emergent readers during story time, and by recording their personal opinions during the process of the project through qualitative research methods, a better understanding of the use of illustrations as reinforcement tools in the developmental reading process for these young readers was obtained.

**CHAPTER IV**  
**RESULTS AND DISCUSSION**

**Introduction**

The six student participants chosen to be the subjects of case studies for this research were selected from three first-grade classes in two different suburban school sites in Shreveport, Louisiana. There were four first-grade classes in School A and seven first-grade classes in School B. Since all classes were similar in size and since the school and student demographics were also similar in both schools, an enrichment teacher (who instructs all students in the school on a weekly basis) and the elementary school coordinator from each school made recommendations as to which three classes should be used. This was not in any way based upon student ability but was primarily based upon the level of classroom teacher cooperation that could be expected during the term of the study. Before initial informal observation periods began, letters were sent to the participating first-grade classroom teachers. These letters were used as a means of introduction for the researcher, as well as a way of discovering if any students in the classes were considered by the teacher to be too immature or too shy to work with the researcher on a one-to-one basis at a later date. The point was made by this researcher that students not be eliminated from class lists simply because the teacher felt they performed below average.

When attempting to determine which students can be used for case studies in the academic setting, the use of random selection alone is not always the most realistic process to consider for research purposes. The pre-selection of study participants was conducted through a process involving, first, purposeful sampling and then simple random sampling. Because the first grade teachers in each school were most knowledgeable of student behaviors and their capabilities of voluntarily cooperating with the researcher, each one was asked to make

judgments concerning those students who would not be reliable study candidates. Other requirements were that the students should be in regular education and had not ever been retained in the elementary school setting. A list of names of students who did not match these requirements was provided to the researcher by each teacher. The names of those students who were determined to be unreliable candidates due to lack of maturity or who did not meet the required criteria of subjects for the study were removed from the class pool. A random sample was chosen in each class by simply drawing a name out of the remaining pool. Letters were sent to the parents of the students whose names were drawn as a means of introduction to the researcher and to explain the purpose of the study. The letters were also sent to request parental permission for their child to become a student-participant in this study.

The first week of observation was undertaken in order to become familiar with the class routine, the students and teacher, and the environment. Upon receiving approval from parents, the second week of observation was used as an opportunity to specifically note the behavior of the selected student during library class. Both weeks of observation were also a means of letting the students become familiar with the presence of the researcher in their class.

Seven books were originally considered by the researcher. They were selected because they each met primary criteria, as well as, other secondary criteria that were considered important for this particular study. The most important criteria was that the picture books contained words in the text of the story that were not defined by the text but were depicted in, and thus defined instead by, the illustrations. One of the important secondary criteria considered was that each book needed to include the type of exceptional pictures as those described in Chapter II of this research study. This definition took into consideration several expert sources of illustrations in children's picture books (Arizpe & Styles, 2003; Bader, 1976; Nikolajeva & Scott, 2000). Another secondary criteria that influenced this decision was that the book had



been either written or illustrated, or both, by a person who is considered exceptional in the area of children's picture book publication. A list of desired traits one expects to see in exceptional picture books for children was used by the researcher when considering these seven books and is included in this research study as Appendix B: 'General "Checklist for Evaluating Picture Books" (Galda & Cullinan, 2006).'

After the initial book selection was made, the books were given to members of the book evaluation committee to read, evaluate, and rate. The committee was composed of two elementary school library media specialists and one elementary school reading specialist. None of the committee members was informed as to the specifics of the particular study which was to be undertaken by the researcher. Each was given the seven books along with the same evaluation sheet for each book. The evaluation sheet was devised by the researcher after examining the criteria established by several reliable sources which regularly evaluate children's picture books (Caldecott, 2006; Giverny, 2006; NCTE, 2001; Sibert, 2000). This evaluation sheet is included in this research study as Appendix C: 'Criteria for Evaluating Illustrations, Text, and Overall Value of Picture Books for Emergent Readers.'

The two books that were chosen for the study were *Charlie Needs a Cloak* (dePaola, 1973) and *Chopsticks* (Berkeley, 2005). These two books were examined by the media specialists, who participated in the study, and each one considered the books to be good example of literature for children. Both books were considered to be the type that each of these teacher-librarians would read to students in their own library/classroom program.

Both books were also shown to all three Kindergarten teachers in School A and one Kindergarten teacher in School B, all of whom were teaching this level last year. In School A, one Kindergarten teacher said that she had briefly read the book that was selected to use in this school study at the beginning of the year last year, but did not spend a great deal of time

discussing it with her students. After talking with the school coordinator it was discovered that none of the pre-selected students from School A was in this Kindergarten teacher's room last year. When talking with the other two kindergarten teachers in School A, it was also discovered that one of them was familiar with the book but had not read it to her students last year and the other teacher had never read the book. All three teachers in School A said that they had never used the book that had been selected to be read in the School B study. The Kindergarten teacher in School B informed me that they regularly planned lessons together and all kindergarten students in the school basically received the same lessons. The informant explained that all of the kindergarten teachers there regularly read the book that was selected to use in the study at School A to their classes, but had never used the book with their students that had been selected for the School B study.

The three members of the Book Evaluation Committee reached 96% agreement with respect to the explicit criteria for evaluating picture books listed on the Appendix C document in the areas of child appropriateness, visual appropriateness, text appropriateness, and overall value, for the book *Chopsticks* (Berkeley, 2005). The same group of committee members reached 90% agreement with respect to the explicit criteria for evaluating picture books listed on Appendix C for the book *Charlie Needs a Cloak* (dePaola, 1973). Two of the other books that were evaluated were given high marks by the book review committee, but it was determined by the researcher that the two books finally chosen for the study fit the criteria of including new or difficult words that were defined by the illustrations instead of by the text.

The readability level for *Charlie Needs a Cloak* (dePaola, 1973), as determined by the Fry Readability Graph (1968), is estimated to be at a third-grade level. The readability level for *Chopsticks* (Berkeley, 2005), as determined by the Fry Readability Graph (1968), is estimated to be at an upper fifth-grade level. Even though these books are at different readability

levels, the students did not read them by themselves for the purposes of the study. The books were read to all students. The rationale for selecting books that were above the average first-grader's reading level was to insure that they were not already familiar with the vocabulary words found in the stories. It was determined by the Book Evaluation committee and the two media specialists who participated in the study that both books, if read aloud, would be enjoyed equally by most first-grade students. The additional important commonality between the two books was that they both included vocabulary words that were not defined by the text but by the illustrations, alone.

A researcher-constructed list of vocabulary words, used as the pre-test/post-test instrument, was developed from the information that was found in the picture books selected for the study. A separate test was developed for each book. Each assessment instrument included six target words that were found in the story and seven words that were not included in the book. The test instruments are included in this research study as Appendix G: 'Vocabulary Pre-/Post-test for Book #1 – *Charlie Needs a Cloak*' and Appendix H: 'Vocabulary Pre-/Post-test for Book #2 - *Chopsticks*.'

A pilot study was conducted in both schools for a period of two weeks prior to the time the study picture books were read in each school. During this time field notes were taken regarding the librarian/teacher and the particular subjects that were being covered during class instruction, observable student behavior within the larger group, more detailed observable behavior of the student-participants who had been randomly selected for the study, and the overall environment of the classroom. These field notes were evaluated for information relevant to this particular study. The pilot study period was also used to help students in the class become accustomed to the presence of the researcher, who was acting as an objective observer. The time involved in reading the picture book, administering the pre-and post-vocabulary test, and

interviewing the student participants took place over a one week period. All data collection took place in September and October 2006.

Triangulation of the data collected was conducted in order to establish credibility in the research findings. According to Hinkle, et al. (2003), descriptive statistics includes a variety of methods used for summarizing and organizing numerical information. Analysis of the pre- and post-vocabulary test was performed. Descriptive statistics were used to understand the relationship among the three students in each school, who each heard the selected study story under different circumstances. Descriptive statistics were also used to understand the relationships between the two students in both schools who experienced the story under the same circumstance. The transcripts from student interviews were examined. Themes, which will be discussed later in Chapter IV, emerged from these interviews that contributed to the understanding of the relationships which developed, both between the two student-participants in like situations in each school and among the three students in each school who had different experiences with the story. Conferences with various educators in each school concerning students' abilities were examined.

The case studies of each student are organized and analyzed in a descriptive format. The three case studies within each school are discussed in relationship to each other. The relationship of the similar student experiences within the two different schools is also discussed.

### **Introduction to Cases**

The library media specialist, who was also a certified teacher, was involved in the instructional process in each school for the purposes of this research. Both media specialists read one of the selected children's picture books to three different first-grade classes within their school. Each class experienced the reading differently. Other than the way in which the book was read to each class, both media specialists treated each specific group of students within their

school in the same way, by following the prescribed specifications of the researcher. Both media specialists were informed, just before the week of the actual study, about the specifics of how each different class would experience the same story. Both indicated understanding of what they were being asked to do and were agreeable with the request of the researcher.

The media specialist in this research is referred to by various names which are all meant to better explain the nature of her position. Media Specialist and Library Media Specialist are two terms currently used to describe a librarian. The three descriptive terms are used interchangeably in this research study. Since the media specialist is a certified teacher and what usually happens in the elementary school setting involves teaching lessons to students within the confines of the library/classroom, she is, at times, also referred to as a teacher. The same will be seen in the interchangeable use of the word library and the term library media center, which are both used in the school setting.

### **School A**

#### **Background of Instructor**

The Library Media Specialist in School A was a female in her mid-fifties. She attended Louisiana Tech University in north Louisiana where she received a B.A. in Elementary Education. She has taught in Shreveport her entire teaching career. Prior to becoming a librarian she was a first-grade teacher for ten years. She has been a library media specialist in the elementary school setting for the last twenty-four years. This Media Specialist was friendly, yet businesslike with the students who came into the library. Students were familiar enough with her to understand the type of behavior she expected of them, and they were generally well behaved. Older students, who came into the library, were allowed to check out their own materials and were fairly independent about doing this if the Media Specialist was busy with other matters.

## **Classroom Environment**

The library space available for student use is one large room that appears inviting. An open space and a student seating area are the first sections one encounters as they enter. Three banks of student computer workstations are located across the back of the library. Shelves of books encompass almost all of the wall space, with free standing book shelves scattered throughout. There are so many books available for the students in this school that it seems to be somewhat crowded. Bulletin boards that cover the top portion of one wall address the topics of elementary school students and reading, and are attractively done. Other decorations in the room are oriented toward books and/or reading. The room has adequate overhead lighting and hardly any lighting coming from an outside source.

This library was a busy place. Students of all ages, kindergarten through fifth grade, came there for various reasons throughout the day. Most came to return or check out materials; some came to take Accelerated Reader tests on the library workstations; and some came to look up information by using research resources located in the library.

When the first-grade students entered the room they were asked to sit in their assigned seat. Four students sat at each table during class lessons. When the Media Specialist read a story to the class she allowed the students who were at the back tables to move to chairs in the open space directly in front of her so they could be close enough to hear better and to see the pictures. After lessons or stories the students were allowed to go to the sections available to first-graders in order to find the book they wanted to check out for the week. These students were already independently selecting their own books this school year before informal observations of their classes began.

## **School A - Storybook Description**

The picture book that was read to the classes in School A was *Charlie Needs a Cloak* (dePaola, 1973). Although he generally writes fiction materials, this book was one of the first nonfiction books written and illustrated by Tomi dePaola. It is thirty-two pages long, the typical length of a child's picture book, and is written using only 147 words (187 if the glossary at the end of the book is included).

The story is about a young boy, named Charlie, who is a shepherd. Because of the main character's profession the setting is rustic and the illustrations present a pastoral image to one observing his world. When the reader is introduced to Charlie at the beginning of the story he is wearing a faded, ragged, and tattered cloak over his clothes. He needs a warm cloak because he stays outside all day during the year in order to watch his sheep. The text, in narrative story form, tells the reader how Charlie goes through the process of acquiring a new cloak for himself. He begins by shearing his sheep. The young reader develops a clear sense of how wool is obtained, in a simplified, understandable way. The author goes on to explain all of the subsequent steps needed, from washing the wool to spinning it, in order to turn it into yarn. After the yarn is made Charlie dyes it using berries that he picks himself. By using simplistic drawings and uncomplicated sentence structure, one of the processes the author/illustrator shows is Charlie weaving his new yarn on a loom. When the fabric is produced he then cuts it and sews it into the shape that he wants. Charlie begins this whole process in the spring of the year, the time in which sheep are usually sheared, and by the time winter comes the new cloak is ready to wear.

There are six words mentioned in the text that help describe this entire process. These words are not defined in the text of the story, but are all depicted in the illustrations. There is a

simple glossary at the end of the book that includes a picture describing the word along with the word and a brief definition.

The illustrations have a cartoon type quality. They are simple but include enough detail to make them somewhat complex at the same time. They appear to be colored with water color paint, using a minimum number of colors. These colors include various shades of reds, pinks, browns, yellows, and greens. White is also used in abundance on each page. On many of the pages there is a large amount of negative, or white, background space. This background space provides an effective backdrop enabling the foreground pictures to stand out, making them appear more important. Images on the pages are highlighted using a variety of techniques from simple shading to cross-hatching. Almost all major components on each page are outlined, in pencil and/or graphite in order to provide more definition to the individual shapes, thus making them more distinctive.

There is one unusual aspect of these pictures that sometimes needs to be explained to young children. On some double page spreads, the figure of Charlie may be shown up to six times. This is an illustrator's way of showing, in an economy of pages and space, just how much work or activity the main character is involved in or to show how busy he is. Some young children do not understand that this is really the same character, shown demonstrating all of the tasks that are expected of him.

The text is black and is printed in a simple but much larger than usual font. Most of the words are easy for young children to understand. Those specific vocabulary words defining the cloth making process need to be explained to young children in some way. This is probably the reason dePaola included a glossary at the end of the book.



## Classes, Presentation of Picture Book, and Student Participants

### **School A - Class A1**

This first-grade class was comprised of fifteen students. It had about the same number of boys to girls and included a variety of ethnic groups. During the informal observations it was noted that the Media Specialist lectured on book shelf organization, book arrangement, and alphabetical order and its importance in shelf organization. Students were expected to stop and think about how this affected their own lives and to contribute to the discussion during class.

On the day that the official study was conducted class began immediately after an afternoon recess. The students were hot when they entered the room and were allowed to get a drink of water before class started. The Media Specialist introduced class with a lesson on alphabetical order and shelf arrangement. Although most of the students in class sat quietly and appeared attentive during the lesson, several of them were distracted by other activity that was going on in the library.

Prior to the reading of the study picture book, she had been asked by the researcher not to define any of the words in the story that she thought the students may not know. She was also asked not to answer any questions students may ask that would ultimately provide them with a definition to words they did not know. Before reading aloud the Media Specialist did discuss information about the author of the study book and explained to students how they could find other books on the library shelves by him. The students in this study group (A1) were able to see the pictures as the story was read to them. They received no additional instructions about the book or how they were to listen to it.

During the reading the class was quiet and listened to the story. Even though some students had their head down on the table, they were listening and almost always raised their

head in order to see the pictures when they were shown. None of the students asked questions during or after the reading of the story.

The pre-selected student-participant in this class was Matthew [his name, and the names of all student-participants in both schools, has been changed]. The Media Specialist commented that Matthew was a bright student and would be a willing participant in the study. The school's coordinator indicated that he had no discernable learning difficulties. At the time of the study he was scoring in the high-average range on the informal Standardized Test for Assessment of Reading [STAR] (Advantage, 2007) diagnostic evaluation that the school is using. While observing Matthew during the Media Specialist's lesson, the researcher found that he listened quietly, most of the time. During the lecture he began to play with a small toy that he had taken out of his pants pocket. When the teacher saw this she suggested that he put it back into his pocket before it became hers. He quickly complied with her instructions. After the lecture when students participated by answering questions the Media Specialist asked, he would always raise his hand to answer but then had a tendency to loudly blurt out the answer if he was not the first one called. Once when the Media Specialist did call on him she mentioned that he was her friend. This seemed to embarrass him, and although he correctly answered the question his answer seemed to be given in a somewhat curt manner.

When the planned lesson was over the Media Specialist told the class that she was going to read a story to them because she was helping a researcher study students who were learning how to read. She told them that she was sure that they would enjoy the story. Before she began reading the story, the Media Specialist allowed students who were sitting at the tables toward the back of the room to move into the seats closer to her so they could see the pictures. Matthew was at one of the back tables and as he moved to the front of the room he quietly fussed at students so they would move out of his way. When he found the seat he wanted he sat in a

slouching, comfortable looking manner. Even though he was quiet and fairly attentive during the story he was distracted during the reading by older students who came in to use the library.

When the story ended the class was then told they could look for and select the library book that they wanted to check out for the week. Matthew's behavior was again brought to his attention by the Media Specialist while he was looking for his book. He was looking in the section that was marked 'Fiction' and first-grade students are only allowed to look in the section that is marked 'Easy.' The reason he was corrected was because this particular fact had been emphasized as part of the day's lesson.

Because there had been an unannounced fire drill I had not been able to administer the pre-vocabulary test to Matthew before recess. This assessment was completed as soon as the class came into the library after their break, causing him to miss the first few minutes of the Media Specialist's lesson. The first thing Matthew asked me when he came into the small side room off of the main library was, "Am I in trouble?" I told him that he was not in trouble with me, and we proceeded with the pre-test. When he completed the pre-test he returned to his class which was in the middle of their lesson. After Matthew selected his library book and had assistance in checking it out, he returned to the side room where we continued with the post-vocabulary test and interview. After the post-test, I explained to him that he was there helping with a research study. I asked him, at that point, if he got into trouble often and his immediate answer was, "No."

It was discovered during the interview that this was Matthew's first year in this school. He attended Kindergarten in a different school in Shreveport. He informed the researcher that he lived with his mother, and at the time of the study they both lived with his grandmother. Matthew was an interesting student-participant and most agreeable in answering the questions that were asked.

## **School A - Class A2**

This first-grade class was comprised of seventeen students. It had relatively the same number of girls to boys and included a variety of ethnic groups. During the informal observations of this class the Media Specialist discussed how library book identification call numbers are used to help arrange books in alphabetical order. The Media Specialist told the class how to think about and say the alphabet silently in their heads when they were asked to put words in alphabetical order. She discussed the difference between an author and an illustrator. She explained the meaning of the word 'illustrator' and made a mnemonic connection students could associate with the word from a picture she drew on the board. After the lecture the students participated in an activity in which they were to find a specific book on the bookshelves.

On the day that the official study was conducted, class began immediately after an afternoon recess. The students were hot when they entered the room and were allowed to get water before class began. Since the pre-selected student from this class had already taken the pre-vocabulary test before recess, the Media Specialist started class with the study picture book. The experience that students were to have in this group (A2) was that they were allowed to see the pictures as the story was read and they received additional instruction before the reading to pay close attention to the pictures because they can often teach us information about a story.

When the selected storybook for the study was read to this class, the Media Specialist allowed students who were sitting at the tables toward the back of the room to move to the seats closer to her so they could hear better and could see the pictures. She had been asked by the researcher to not define any of the words in the story that she thought the students may not know. She was also asked not to answer any questions students may ask that would ultimately give students a definition to words they did not know. During the reading the class was quiet and listened to the story. As the Media Specialist progressed into the story students said some of the

repetitive words along with her. She read slowly so the students would be able to understand each word. None of the students asked questions during the reading of the story.

When the story was over the Media Specialist began another lesson about alphabetical order and how library books are arranged on the shelves. Students participated in the lesson by answering questions about how to determine the location of books in the 'Easy' section if they were using alphabetical order. The teacher praised those students who stopped to think before just blurting out an answer to her questions.

The pre-selected student-participant in this class was Joseph. After his name was drawn from the class pool, the researcher was informed that Joseph was in the low to middle learning group of the class. He was not a strong student but was cooperative and tended to try his best when he did his work. The school's coordinator informed the researcher that, so far, Joseph had not tested as lagging behind in his work for his age and grade. At the time of the study he was scoring at the low-average range of the informal STAR reading evaluation that the school is using. During the reading of the study picture book, Joseph kept his head on the table. He did appear to be paying attention most of the time as the story was read. He would occasionally look around the room during the story and was somewhat distracted by other students who came into the library to return or to check out books.

Joseph appeared to be paying attention most of the time to the teacher's lecture on alphabetical order. He sometimes seemed to not be listening closely, but was not a distraction to others. During the lecture he knew that the books first-graders could check out were in the 'Easy' section and were marked with the letter 'E.' He looked as though he knew where these books were located. Joseph rarely raised his hand to answer questions the Media Specialist asked, and did not answer out of turn. He turned to look at areas the teacher directed them to

look at in order to become more familiar with them. When he was called on Joseph knew the answer to a specific question about the location of an author's book in the 'Easy' section.

Joseph was a pleasant, quiet child. His facial expressions reflected a calm yet inquisitive persona. He readily attempted to give answers during the pre-vocabulary test where other students did not. When he was administered the post-vocabulary test he gave the impression that he was pleased with his answers. At the time of the study he was living with his mother in a neighborhood that is outside of the school's attendance boundaries. He also informed the researcher that he attended a different school during his Kindergarten year. He willingly answered all of the re-searcher's questions during the interview session.

### **School A - Class A3**

There were 17 students in this first-grade class. It had approximately the same number of boys to girls and included a variety of ethnic groups. During the informal observations of this class the Media Specialist lectured on library book shelf arrangement and alphabetical order and its place in shelf organization. This class was very attentive and appeared to be listening during the lecture. Most of them were enthusiastic about the book search activity they participated in after the lecture.

On the day that the official study was conducted class began immediately after an afternoon recess. The pre-selected student had already taken the pre-vocabulary assessment before the afternoon recess. The students were hot when they entered the room and were allowed to get a drink of water before class began. As soon as students were settled the Media Specialist explained that she was going to read a story to them in order to help the researcher who was visiting their class. She explained that they were going to hear the story in a different way than they usually hear a story in the library. The students in this class (A3) heard the story only and were not shown the accompanying pictures as it was read to them. Even though they

would not be able to see the illustrations the Media Specialist let students at the back tables move to the seats closer to her before she began to read. Media specialists have a tendency to automatically show the pictures from a story book while they are reading to young students. The researcher, therefore, provided this librarian with a plain typed copy, devoid of decorations, in order to prevent accidental showings of the pictures. The Media Specialist had been asked by the researcher not to define any of the words in the story that she thought the students may not know. She was also asked not to answer any questions students may ask that might provide them with a definition to words they did not know.

Without being asked to do so, the Media Specialist discussed the importance of the senses of listening and hearing before she began reading the story. Even though the Media Specialist informed them beforehand, most students actually realized only after the story was begun that they were not going to see the pictures. It was observed that many of them began to listen more closely as she read and became very quiet. Most of them sat attentively and did not rest their heads on the tables, but a few were a little squirmy as the story was read. Some older students came into the library and were quite noisy. This caused a disturbance which distracted many of the students in this first-grade class. The Media Specialist had to stop for a moment to remind the older students that it was their responsibility to remember where there were and to lower their voices. Even though there was a break in the story the Media Specialist continued to read in the same cadence as if she had not stopped. A few of the students applauded when the Media Specialist finished reading. When the story was over one of the students asked a question pertaining to how the word 'the' was pronounced. A brief discussion ensued in order to answer the question.

After the story the Media Specialist began her lecture on alphabetical order and shelf arrangement. All of the students in class sat quietly and most of them appeared attentive during the lesson. This class enjoyed the post lecture, book-location activity.

The pre-selected student participant in this class was a boy named Chris. During the Media Specialist's lesson, Chris listened quietly most of the time. He tried to keep his eyes on the teacher as she was presenting the information to the class, but he was easily distracted by other students who were coming and going from the library. Although he appeared to be listening while the story was being read, he seemed to be easily distracted by objects, such as his shoes or buttons on his clothing. After the lecture when students participated by answering questions the Media Specialist asked, he would always raise his hand to answer and knew the answer to several questions. Whenever the Media Specialist made a statement that Chris found amusing he laughed quietly to himself and made quiet comments to his table-mates. While the class was participating in a book location activity, Chris came to the Media Specialist more than once to tell her about some inappropriate behavior in which some of his classmates were taking part. His teacher tended to ignore these comments from him and simply asked him to finish the task she had assigned.

After Chris's name had been randomly drawn from the class pool, the researcher was told by the first-grade teacher that he was not the best behaved child in the class. He had a tendency to occasionally get into a little trouble. The Media Specialist informed the researcher that Chris did get into trouble occasionally but he was a bright and interesting child who would cooperate with the researcher during the interview session. This information proved to be correct. Both during the interview that covered Chris's level of comprehension ability and during the more casual part of the interview after the story, Chris was quite verbal in his answers to questions that the researcher asked.



The school's coordinator confirmed the fact that Chris had never performed poorly on any grade level tests he had taken up to this point. At the time of the study he was scoring in the low-average range on an informal STAR reading diagnostic assessment that the school was using. It was discovered during the interview session that Chris not only attended this same school during his Kindergarten year, but he also attended the school during his Pre-K school year. When this study was conducted Chris was living with his mother and step-father.

### **School B**

#### **Background of Instructor**

The Library Media Specialist in School B was a female in her early fifties. She received her B.S. in Education in north Louisiana and an M.L.S. from Mississippi State University. Her entire teaching career of 35 years has been as an elementary school librarian in Shreveport. She has been the supervising practicum teacher for many of the library science school certification students who have attended Louisiana State University in Shreveport, and who have subsequently been employed as librarians in Caddo parish. The Media Specialist was friendly but firm with students in her classes.

#### **Classroom Environment**

The library space that was available to students was a large room divided into two by a peninsula shaped area of computer workstations on one side of the room and a large free standing bookshelf on the other side. Student tables and chairs were on both sides of this divided area, as were several free standing bookcases. There were also bookshelves against all four walls. Although the room was larger than most classrooms it was crowded with the bookshelves, furniture, and computers. There were several bulletin boards on two walls above the bookshelves. These were colorfully decorated with what appeared to be a reading theme that

incorporated images of the school mascot. The room was well lit from overhead lighting, as well as with some natural lighting through small windows.

The library was busy most of the day with students and teachers coming and going in order to return or checkout new materials. Even though most students knew how to independently check out their own books, a library clerk was available to help them when they needed assistance. Students appeared to be well instructed on how their actions would help keep the library organized. They knew exactly where to return materials, where to go to look up what they needed, where and how to check out materials, even from which doors they were to enter and exit the library.

As the students came in for class they were asked to sit at the tables in the section farthest from the circulation desk. Students in the first-grade classes sat six to seven at each table grouping. The students stayed in these seats during all of the activities that were observed by the researcher. They could move their chair around if they could not see, but were to remain in it during lessons or story telling sessions. These students were not yet independently selecting or even checking out books when the researcher's informal observations began. By the time the research study was ending in this school, the students had begun to check out materials.

### **School B - Storybook Description**

*Chopsticks* (Berkeley, 2005) was written by Jon Berkeley. The illustrations were also created by the author. The book was composed of approximately 680 words.

This book tells the reader the story of a small gray mouse, Chopsticks, who lives on a floating restaurant in a busy harbor in Hong Kong. One New Year's night when Chopsticks is out scavenging for food, a carved wooden dragon, which is wrapped around one of the entryway pillars, speaks to the little mouse. Even though Chopsticks is frightened he listens to what the dragon has to say to him. The dragon has a great desire to be free from the pillar in order to be

able to fly. As the mouse listens, the dragon tells him that if Chopsticks helps free the dragon then he will be taken along on a ride through the night sky. The dragon tells the mouse to go find Old Fu, the man who carved the two pillar dragons, because he is the one who would know the secret that can set the dragon free. Chopsticks made his way over several boats to Old Fu's sampan and explained the dragon's request.

Old Fu played a tune over and over for Chopsticks on a wooden flute, so the mouse would be able to memorize it. He gave the flute to the mouse and told him to play the tune for the dragon at the next full moon. On the night when the melody was finally played the dragon was able to unwind his long body from the wooden pillar and fly up into the night sky. As promised, he took Chopsticks with him on this adventure. They returned only when the sun began to peep over the horizon. Ever since that night, every time there is a full moon, Chopsticks and the dragon sail through the night sky. While he waits for those nights of adventure, the little mouse spends his days sleeping in his favorite spot – the open mouth of the wooden dragon that is wound around the restaurant pillar. And, as if keeping an unspoken promise, after every flight Chopsticks returns to Old Fu in order to tell him about the experiences of the flight of the dragon and the mouse.

The illustrations appear to be acrylic or possibly gouache paintings with layers of lighter color over a darker or a black base color. The pictures include a variety of vividly bright hues, especially the varied shades of red, green, blue, and gold that can often be seen in Asian artwork. There are both close-up impressions of the main characters, as well as, scenes that provide information about the distance background. There are also illustrations which offer a combination of these two types of images to the reader. Even though the dragon is the golden color of polished wood, his facial expressions help the observer think of him as an animate object. The image of Chopsticks, at the end of the story, sleeping in the mouth of the wooden

dragon under a tiny cover of painted blue silk, gives the reader a poignant impression of the powerful friendship that has developed between the main characters.

There are several two-page spreads. Most show the major illustration on one of the pages as it extends onto the next, where the text is found. The text is larger than average size and is paler than normal shade of black used for storybook text. It is usually printed on top of a white background, but is occasionally printed on a fairly solid-color page.

Like *Charlie Needs a Cloak*, this book also contains difficult words that are not defined by the text, but are clearly depicted in the illustrations. There are other words in this book that are minimally defined by the text and may need clarification or further explanation to the young child as the story is read to them. Many of these additional words that are defined in the text are not shown in the illustrations.

### **Classes, Presentation of Picture Book, and Student Participants**

#### **School B - Class B1**

This first-grade class was composed of nineteen students. The Media Specialist began class by giving the students an overview of the day's lessons. She told them that they were going to listen to a story in order to help the observer with research on students who were learning how to read. She also told them they would be reviewing their library rules booklet and checking out books for the first time today. This seemed to excite some of them. Some students quietly kept busy playing with crayons and pencils on the tables during this introduction time. Most of them seemed to be paying attention, but a few appeared to be fidgeting and it was not easy to tell if they were listening.

The students in this class (B1) experienced the book by seeing the pictures as the story was being read to them. They receive no additional instructions to pay close attention to the pictures as the story was read. The Media Specialist had been asked by the researcher to not

define any of the words in the story that she thought the students may not know. She was also asked not to answer any questions students may ask that would ultimately give students a definition to words they did not know. The librarian introduced the book by telling the class the title and the name of the author. Most of the class paid attention as the story was read. Some watched the activity that was going on in the other part of the library where older students were checking out books and where teachers were walking through the room. Several students in the class appeared to the researcher to be drifting as the story was read. However, when the story ended most of the class said that they enjoyed it. None of the students asked questions during the reading or after the story was read.

When the Media Specialist finished the story she passed out students' library rules booklets. The students flipped through them in order to make sure that all word blanks on each page had been filled in with the correct answers and that the pages had been colored. With the Media Specialist's help, several students had to fill in pages while others were busy coloring pages. This activity lasted for several minutes. Next, the students took turns reading the sentences on the different pages. They raised their hands in order to have a turn to read. During a previous unobserved class period, the students had learned the words to the first-grade book check-out song. Everyone sang the song. After this activity the booklet was again read aloud. One student asked if they could sing the song again with the accompanying hand motions. They all stood and sang the song using the hand motions.

The Media Specialist reminded students that they could not check out library books until they returned the contract that had gone home last week. The contract pertained to checking out and taking care of materials, and was to have been signed by parents and students. She apologized to those who had forgotten their contract and told them that they would be able to

check books out next week if they remembered to return it. All students who had returned the form were able to get up and find a book to check out for the week.

The pre-selected student participant for the class was a girl named Beth. After her name had been drawn the school's curriculum coordinator informed the researcher that Beth had no known learning difficulties. When this study was conducted Beth was scoring in the high-average range on an informal STAR reading assessment that the school was using. The first-grade teacher added that Beth was a solid average performing student and a likeable child who was quiet, but would willingly help with the study project. During the story Beth sat quietly and kept her eyes on the Media Specialist and the book, most of the time. She outwardly showed expressions of delight when she saw the mouse, the main character, in the study book as it was read to the class. She occasionally yawned but did not seem to be distracted with the extra activity that was happening on the other side of the library.

After the story Beth paid attention to the class activities and discussions. She raised her hand in order to have a turn reading a page from the booklet. Even though she read haltingly she knew all of the words on the page. When it was time to check her work and finish coloring the pages in the booklet she did so quietly. Beth leaned over in order to help a classmate find the number he was looking for on his practice keyboard that was in the booklet. Beth was the student who asked if they could sing the book check-out song again using the hand motions. She seemed to enjoy this activity. She looked over at the researcher every now and then and smiled. The pre-vocabulary test had been administered prior to class and she knew she was going to stay after class for the interview.

During the post-reading interview session Beth sat quietly, but answered all questions that were asked. Her responses were usually short without much detail or elaboration. She was, however, a most pleasant child who was eager to help the researcher. During the interview

session it was learned that Beth not only attended Kindergarten at this particular school, but she also attended this school during her Pre-K year. At the time of the study Beth was living with her mother.

### **School B - Class B2**

Class B2 was composed of nineteen students. The Media Specialist started class by telling students that they were going to check out books for the first time today. She told them that before they checked out books they were also going to listen to a story in order to help with a research project and continue their library skills lessons.

The students in this class experienced the picture book by listening to the story and seeing the pictures as the story was read. They also received additional instructions to pay close attention to the pictures as they listen to the story. The Media Specialist had been asked by the researcher not to define any of the words in the story that she thought the students may not know. She was also asked not to answer any questions students may ask that could accidentally provide them with a definition to words they did not know. The librarian introduced the book by telling the class the title and the name of the author. She then directed students to be careful about examining the pictures as the story was being read. Even though she was not instructed to do so, she specifically told the students to look carefully at the pictures if they did not understand some of the words that they heard as they were listening.

For most of the pages the Media Specialist read the story and let students see the pictures as she read each page. On other occasions she read pages and let them see the pictures after she had finished reading it. Several students made comments about the mouse during the story. These comments pertained to actions of the mouse or to comments he made to the dragon. One student made so many comments that a classmate scolded him and told him to be quiet. Another student asked the Media Specialist a question about the mouse. The child wanted to know if the

mouse was able to move by flying. The Media Specialist simply kept reading and did not answer this question. When she did not respond, another student answered by saying, “The mouse moved by jumping instead of flying.” This answer seemed to satisfy the first child.

All of the students seemed to be interested in the story, as the entire class was quiet during the reading. Everyone appeared to enjoy the end of the story when the mouse was sleeping in the dragon’s mouth. No one asked a question as the story was being read. After the story was over several students began an impromptu discussion about different topics related to the story. They made various comments about the city of Hong Kong and their experiences of eating at Japanese restaurants.

When the brief discussion ended the librarian demonstrated how to use the library shelf markers. These are used by patrons in order to remove a book from the bookshelf and then be able to return it to the correct location if it is not the particular book the student wants. Everyone uses these when looking for library books. The Media Specialist allowed time for students to ask questions about using the shelf markers. Each student practiced typing their patron ID number (a need-to-know step that all students in this school must master in order to check out books). Students who had returned their library book contract then chose and checked out their book.

The pre-selected student-participant for the class was Katie. When the school’s curriculum coordinator was questioned about Katie the researcher was told that she had no known learning or reading problems. At the time of the study Katie was scoring in the low-average range of the informal STAR reading assessment that the school was using. The first-grade teacher made the comment that although Katie was not one of her strongest students she did well in class. During the formal observation when the Media Specialist was reading the study picture book, Katie was attentive. She sat quietly and usually kept her eyes on the librarian as she read the story book to the class. She could not see the pictures very well from her vantage



point when the librarian began reading the story and made attempts to lean over as far as she could in order to get a better view. The Media Specialist saw this and adjusted her stance so all students had an opportunity to see the pictures. Katie laid her head on the table at times during the story but did appear to be paying attention. She did seem to be distracted somewhat by activity going on in the library because she would readily turn her head to look at any extraneous noise or conversation. At other times she could be seen playing with her clothing, buttons, and name tag.

When the Media Specialist finished reading a page and held the book up for students to see the pictures, Katie did seem to make extra effort to carefully examine them. At one point she asked the question, “Where is the dragon at?” She made this comment to no one in particular. When the Media Specialist did not answer her, another student answered by saying, “He is flying.” She seemed to accept this answer, and appeared as though she was enjoying the story.

After the story when the Media Specialist presented another lesson on the appropriate way to check out materials, Katie was more easily distracted than her classmates by focusing her attention on the older students who were looking for books. Before the first-graders could look for books to check out, they were required to practice typing their patron user number on the computer screen as the librarian watched. Katie could not remember her ID number and the Media Specialist had to look it up and remind her.

During the post-reading interview with the researcher Katie’s personality proved to be one of energy and eagerness. Although her answers were at times somewhat thin, she was excited about giving answers to any question that was asked. When the study took place it was discovered that Katie attended a different school during her Kindergarten year. It was also learned that she lived with her mother and step-father.

### **School B - Class B3**

There were twenty-two students in this first-grade class. The Media Specialist had to attend a meeting with the principal right before the class started. The meeting lasted longer than she expected and the library clerk started class for her. The clerk passed out the students' library rules booklet they had been working on for the past few weeks. Students took turns reading the pages in the booklet. When they finished reading through the entire booklet, the clerk gave them time to practice typing their student ID number on the keyboard page in the booklets.

The students in this class (B3) experienced the research study book by hearing the story as it was read, but did not get to see any of the pictures. They receive no additional instructions concerning the story. The Media Specialist had been asked by the researcher to not define any of the words in the story that she thought the students may not know. She was also asked not to answer any questions students may ask that would ultimately give them an understanding of the definition to words they did not know. As with the Media Specialist in School A, this librarian was only given a simple, typed copy of the story. The librarian introduced the pictureless story by telling the class the title and the name of the author. She explained to the students that she was helping the observer who was present with a study and this was the reason why she was reading the story without showing them any the pictures. A couple of students made comments about not getting to see the pictures, but no one overly objected to the situation. Without being asked to do so, the Media Specialist changed her voice to fit the different characters in the story. Some students laughed quietly as she did this. A few students appeared to be paying little or no attention to the story. These students were watching the activity of others who were using the library, examining the covers of books that were stacked in the middle of the tables, or simply staring at the ceiling. Most, however, looked as if they were listening intently. When she finished reading the story the Media Specialist, again without being asked to do so, made some

general comments about the story pertaining to a mouse and a dragon (she called the dragon a “little dragon”). The students said they enjoyed the story. None of the students asked questions during the reading or after the story that pertained directly to it.

After the story the class quickly reread the pages in their library rules booklet. They then all stood by their seats and sang the book check-out song they learned last week. The Media Specialist reminded students that they could not check out library books until they returned the library contract about checking out and taking care of materials. She told those who did not return the form that they would be able to check books out next week if they returned their signed contract. All students who had returned the form were allowed to look for a book to check out for the week.

The pre-selected student-participant for the class was Anna. The school’s curriculum coordinator told the researcher that Anna did not have any known learning or reading problems. At the time of the study Anna was scoring on the high-average range of the informal STAR reading diagnostic assessment that the school was using. The first-grade teacher made the comment that Anna was an average performing student who was usually quiet and attentive in class. During the initial lesson Anna raised her hand in order to answer the questions asked by the clerk. She followed all instructional directions the first time and never had to have them repeated for her. When the Media Specialist returned to class and introduced the researcher and the story, Anna looked over and smiled. She had already taken the pre-vocabulary test and was familiar with the researcher’s presence.

In the beginning, Anna listened while watching the Media Specialist as the story was read. After a while she began to play with her face as she listened. She stretched and yawned in the middle of the reading. By the end of the story she had her feet up in the chair and appeared

to be doing a silent cheer with her hands. She was quiet and never really disturbed any of her classmates, but the researcher was not sure if she was paying attention.

After the story was read the Media Specialist continued briefly with the lesson the clerk had started. Anna answered general questions the librarian addressed to the whole class about taking care of books. When they took turns again reading the pages in their booklets, Anna did not raise her hand to read. She must have missed some days from school because she did not appear to have all of the pages in her booklet completed with the correct information. When the class stood to sing their check-out song, it looked as if Anna did not know the hand motions. She did not do them but watch her classmates as they all sang.

When Anna was participating in the post-reading interview, it was discovered by the researcher just how intelligent this particular child appeared. Her personality seemed to exude one of being laid-back and comfortable as she interacted with the adult with her. She willingly answered all questions asked with fairly quick and emphatic responses. When the study was conducted it was discovered that Anna first came to this school at midterm of her Kindergarten school year. She lives with her mother, father, and two siblings.

### **Document Analysis**

#### **Descriptive Statistical Analysis**

The six pre-selected student-participants were the subjects of the individual cases studies for this research project. Five of the selected students came to the library a few minutes before the rest of their classmates came for their regularly scheduled library period. Due to circumstances which were beyond the control of the researcher, the sixth student was seen as soon as he came into the library media center for the scheduled class period, missing the first few minutes of the Media Specialist's planned lesson.

When each arrived the researcher greeted them and briefly explained that they were there to help with a research study. The Child Assent form (Appendix L) was read to each and all of the students signed one. Each was told that they would be interviewed at the end of the regular class period and a more extensive explanation would be given to them by the researcher at that time. After signing the Child Assent form, each student was administered a pre-vocabulary test of words that could be seen in the illustrations of the story they were to hear in class later but were not defined by the text of that story. These words were found in the book that the media specialist read to the entire class. The words on the test were read, one at a time, to each student in the study. The individual student responded orally with a definition, if he or she knew it, and the response was recorded in writing by the researcher. Although the researcher remained as neutral as possible in reaction to the answers given, students received praise for their attempts at supplying an answer to the questions, whether the answers were correct or incorrect. After hearing the study story and participating in divergent activities (i.e.; listening to the librarian's lesson, looking for and checking out a library book), each student accompanied the researcher to a quiet conference room, adjacent to the library, where he or she was given a post-vocabulary test and was interviewed. The post-vocabulary assessment was composed of the same list of words that were in the same order as the pre-vocabulary test, and was administered in the same manner as the pre-vocabulary test. The post-test assessment was the first task the student completed at the beginning of the interview session.

Before the actual interview began, a fuller explanation was given to each student in order to help them understand the reason they were there. Each student-participant was then asked to retell the story, initially through free recall and then with the aid of prompting questions, for the purpose of determining the level of comprehension and how that comprehension may have been effected by the illustrations in the story. After the researcher spent time with the student

concerning comprehension of the story, each was also interviewed concerning his or her opinions and feelings about the story and the way they experienced it. The individual interview with each child was audiotape recorded, transcribed, and examined more closely at a later time for further analysis. Fuller, richer notes on the student-participants were developed using these tape recorded interviews and written pre- and post-test records. Only observable behaviors of the students who were part of the study, as well as any other students in the class, were recorded by the researcher.

### **School A - Comparison of Field Notes of Student-Participant Observations**

The three student-participants in School A were all male subjects. Two of the students from School A, Matthew (A1) and Chris (A3), were described as being brighter than average students but who also had a tendency to misbehave in class. Both were described as being able to tell amusing stories. The third student, Joseph (A2) was described as having a somewhat different personality than the average first-grade student, in that he was more quiet than usual and was not overly concerned with making friends. It was also said that he could carry on interesting conversations with the adults who spoke with him. He was described as being a below average to average performing student.

All three of these students sat quietly while the Media Specialist presented her lesson. Matthew (A1) and Chris (A3) readily raised their hands in order to answer questions. While Joseph waited to be called upon, Matthew had a tendency to blurt out answers if not immediately recognized by the teacher. Joseph (A2) did not seem at all concerned with raising his hand. When called on he did manage to give a partially correct answer to the teacher's question. During the study story reading all three students sat quietly and appeared to be listening. All three also had a tendency to be distracted by small objects like shoe laces, buttons, or small toys, as well as by any student who happened to walk in to use the library. When each of these

students got up to participate in the book location activity, each performed differently. Matthew did not seem at all concerned with locating the book he was supposed to find, but tended to visit with classmates; Joseph had some difficulty with the task; and Chris found his book fairly quickly. All three appeared to interact well with classmates and spent extra time visiting when the class was allowed to freely mill around the room.

### **School A - Comparison of the Results of Comprehension and Retelling**

It was determined that there were twenty-four main concepts in the story *Charlie Needs a Cloak* (dePaola, 1990). This list of concepts and ideas was developed from both reading the text and examining the illustrations. They range from the fact that Charlie was a shepherd, as seen in the beginning of the book, to the scene at the end of the story where Charlie's peskiest sheep was chewing on his new cloak. This list of main ideas is attached to this research study as Appendix D: 'Comprehension Coding Sheet for Book #1 - *Charlie Needs a Cloak*.'

Matthew was the case study student from class A1, the group that saw the pictures as the story was read and received no additional instructions to pay close attention to the pictures. He was able to name, through both free recall and queried responses, eleven of the twenty-four main concepts, or 46% of them. Joseph, the student-participant from class A2, who saw the pictures as the story was read and received additional instruction to pay close attention to the pictures, was able to name thirteen of the twenty-four main ideas, or 54% of them. Chris was the case study student-participant from class A3. This class group heard the story as it was read and did not see the pictures which accompanied it. Chris was able to name twelve of the twenty-four main concepts, or 50% of them.

Chris (A3), who only listened to the story, was able to remember more main ideas than Matthew (A1), who did see the pictures as the story was read. Joseph (A2), who not only saw the pictures as the story was read but received explicit instructions to carefully examine the

pictures he saw, was able to remember more main ideas than either student in the other two listening experiences [See Table 1]. All three students could tell the researcher that Charlie had sheep and that he had an old cloak. They all recalled that the sheep were sheared, the yarn was dyed, pieces were sewn together, and Charlie had a new cloak at the end of the story. There was only one main idea that was mentioned by Joseph (A2) that was not mentioned by the other two students; this idea was that Charlie was a shepherd. Every other main idea that he remembered was either mentioned by both Matthew (A1) and Chris (A3), or was mentioned by one or the other. The recorded responses were given by the students during the individual interviews about the story.

Matthew (A1) was asked specifically if the pictures helped him remember parts of the story. His initial answer was, “Not really.” After he thought about it for a few moments, however, he changed his answer to, “A little. Not a lot, but it [the pictures] did help me a little.” He was also asked if the pictures helped him understand the story and his response was, “Yes, Mam.” When Matthew was asked if he could think of parts of the story that the pictures helped him remember, his answer was a little different from the initial response of saying they did not. His comments to this last question were that they helped him think about, “when he [Charlie] was walking with that hook thing – I just remembered the picture of it,” that Charlie “had a few sheep,” that Charlie’s old cloak “was white (faded),” and his cloak “had a little hat.”

When Joseph (A2) was asked if the pictures helped him to later explain the story, he said “No.” When he was asked if the pictures helped him understand the story as it was being read to him, his answer was “Yes.” In Joseph’s case, like Matthew’s, his response to the second question was the opposite of the response he gave to the first question concerning the input received from the illustrations as he remembered the story. He was then asked if he thought about any of the



Table 1

Main Idea Comprehension of *Charlie Needs a Cloak* (dePaola, 1990)

Main Ideas	Matthew (A1)	Joseph (A2)	Chris (A3)
Charlie was a shepherd	X		
Had a house		X	X
Had a big hat			
Had a crook	X	X	
Had a flock of sheep	X	X	X
Had a cloak	X	X	X
Cloak was old	X	X	
Began in the spring			X
Sheared his sheep	X	X	X
Washed the wool		X	X
Carded the wool to straighten it			
Spun the wool into yarn			
Wanted a red cloak			
Picked berries	X		X
Boiled the berries in a big pot		X	X
Dyed the yarn	X	X	X
Put the yarn on a loom			
Wove the cloth			
Cut the cloth into pieces			
Pinned the pieces together			
Sewed the pieces together	X	X	X
Winter came	X		
Had a new cloak	X	X	X
Sheep bit his new cloak		X	X

pictures in the story as he was telling the researcher about it. His immediate answer was “Yes,” and his response also included “I looked at sheep, a cloak, and a farm, and red stuff.” He then made the statement that the pictures helped him understand the part “when he [Charlie] dyed the cloak.”

### **School A - Comparison of Students’ Personal Opinions**

All three students in School A were asked basically the same questions during the interview session. There was, however, flexibility within each individual interview. If a student made a comment that was unique then the various aspects of that comment were pursued by the researcher. If any of the students wished to elaborate on a topic then the interviewer/researcher gave them the opportunity to do so without limiting them in the amount of time they could use to answer questions.

Two of the students were asked if they thought Charlie enjoyed making his cloak. Both of them indicated that they thought he did. Matthew said that “He [Charlie] always had a smile on.” Joseph’s response was similar. He said that “He had a smile while he was making it.” Both of these answers were the student-participants’ opinions, but it can be deduced that both were based upon what was seen in the pictures of the story (because the main character, Charlie, is pictured smiling throughout most of the story). Chris (A3) was not asked this question.

Each student was asked if they enjoyed the story, and then asked to explain why they liked it. Matthew (A1) said he liked it because “I like the winter. And I like to sew with my grandmother and make stuff, like a jacket.” Joseph’s (A2) response was “Cause [*sic*] it had good pictures and pretty pictures and it was fun. And I liked the colors in the pictures.” When Chris was asked this question, his answer was “Because it had a bunch of sheep and I like farms. I have been to a farm and it had a bunch of sheep that I started petting. So I want to learn about sheep.”

Matthew and Joseph were asked if they liked the illustrations in the story. Both of them said that they did. They were asked to explain why they liked them. Matthew said he liked them “because they had nice pictures and they had nice colors. And I like how it was drawn and everything.” Joseph’s response was “Cause [*sic*] they were fun. The pictures are good to look at.”

Matthew and Joseph were asked the question, “If you had not been able to see the pictures while listening to this story do you think you would have enjoyed it as much?” Matthew’s (A1) initial response was “Yes.” He then clarified this by saying “Well, we have a little book we have to read and I enjoy that more than I enjoy the pictures.” Joseph’s (A2) answer to this question was “No.” He also responded with the answer “No” when asked if he would have understood the story as well as he did if he had not seen the pictures.

Chris was asked if he would have liked to have seen the pictures in this story as he was listening to it. His response was “Yes, Mam.” He was also asked how he felt about just listening to a story and not getting to see the pictures. He stated that “I think about other things and what the story is about. I’m thinking about what they look like.”

### **School A - Comparison of the Results of the Pre-Vocabulary Tests**

The pre-vocabulary assessment was composed of six target words that were found in the book, *Charlie Needs a Cloak* (dePaola, 1990). These six words were mentioned in the text, but not defined by the text. The words were, however, pictured in the illustrations with enough finesse, on the part of the illustrator, that a reader could ascertain the meaning of the word simply by examining the accompanying pictures. The words were: crook, carded, shepherd, cloak, sheared, and loom. Seven additional words were included on the assessment and were not included in the story text.

Matthew (A1), Joseph (A2), and Chris (A3) all made attempts at providing the researcher-recorder with some sort of definition for these words. If they did not know the answer they simply said that they did not know. Matthew gave an incorrect definition to one of the target words from the story. All three of them were able to define one of the additional words and two of them could define another additional word. Of the six target words taken from the study story none were correctly defined on the pre-test by any of the School A student-participants.

### **School A - Comparison of the Results of the Post-Vocabulary Tests**

The post-vocabulary assessment was the same assessment that was given to students as the pre-vocabulary test. This post-test was given in the same way that the pre-test was given. The results of the post-vocabulary test were obviously different from that of the pre-test.

Matthew, the student from the A1 group, which saw the pictures as the story was read and received no additional instructions to pay close attention to the pictures, was able to tell the researcher the basic meaning of three of the targeted words from the study story. It was, however, determined by the researcher during the interview session that Matthew had heard this story when he was in Kindergarten. One of the teachers in School A who had been questioned by the researcher before beginning the study had reported that she had not taught this book last year. The researcher, however, discovered while talking with Matthew that this teacher had been his Kindergarten teacher and they had studied this particular book. He explained that when the Media Specialist read the story to them he remembered the lessons they had discussed in class last year.

Joseph was the student from the A2 group. This group saw the pictures as the story was read and received additional instructions by the teacher to pay close attention to the pictures as the story was being read. During the post-test Joseph was able to tell the researcher the basic

meaning of three of the target words from the study story. It was not reported by Joseph that he had ever heard this story before it was read by the Media Specialist.

Chris was from the A3 class. This group of students was only able to hear the story as it was read and did not see the pictures. Chris was not able to give a correct meaning for any of the target words on the post-test. Chris did indicate that he had heard this story before. He said that he attended a different school last year and his kindergarten teacher read it to them while he was there.

### **School A - Comparison of the Pre- and Post-Vocabulary Tests**

When one considers the circumstances in which each of these students was allowed to experience the study story, a difference is visible. It can be seen that those students who were in groups A1 and A2 and able to see the illustrations as the story was read, were able to define more words during the post-test when compared to the pre-test. It can also be seen that those students who saw the pictures during the reading were able to define more words on the post-test than the student who was in class A3, the group which experienced the story by seeing no pictures at all. What is a little unusual is that Joseph (A2) was considered, from conferencing with the classroom teacher and the enrichment teacher, to be the weakest academically of the three who were chosen as case study students. It was Joseph, however, who actually performed better on the post-test (considering that he had never heard this story before) than the other two students (who had previously heard it).

### **School B - Comparison of Field Notes of Student-Participant Observations**

The three student participants in School B were all female subjects. The Media Specialist informed the researcher that all three students were well behaved and cooperative. She explained that Beth (B1) was an intelligent child and that Anna (B3) was a bright, above average student and would more than likely provide interesting conversation during the interview. The

researcher was also told that Katie (B2) was an average student who sometimes did not pay attention.

All three students were fairly attentive to the Media Specialist as she taught a lesson. Katie (B2) and Anna (B3) had a tendency to be distracted by older students who came in to use the library during the first-graders' class; Katie more so than Anna. Katie did not, however, talk to any of the students near her while the Media Specialist was lecturing and appeared to be paying close attention as her classmates took turns reading aloud. Beth (B1) did not seem to be as distracted by activity on the other side of the room as she was by the actions of her classmates. Anna also seemed very interested in the extra activities of her classmates. All three regularly raised their hand in order to answer questions. Katie (B2) raised her hand every time a question was asked whether she had just had a turn to answer or not. She always seemed eager to be called upon.

When the Media Specialist told the students they were going to take turns reading their library rules booklet, two of these three students raised their hands in order to have a turn. Beth read fairly well, but haltingly. She occasionally left out a word from the sentences she read, and the teacher would sometimes use her own finger as a pointer to some of the words on the page as Beth read them. When she was allowed to read a second time Beth used her own finger as a pointer. At times she needed assistance with pronunciation from the Media Specialist. Katie was a fairly good reader and asked to read more than once. She used her finger as a pointer for both words and syllables and stumbled a little over pronunciation of some words. Even though she needed some assistance from the librarian with the harder words she did not give up, and kept reading until she had finished the page. Anna did not volunteer to read. When she was called on, however, she read better than most of the other students in the class. Sometimes she pointed at the words as she read them and sometimes she did not.

When the class began to work on a new page in their booklet, Beth (B1) could not see the board where the librarian had written the new words for the day's lesson and asked that an object that was obscuring her vision be moved out to the way. After writing in the new words, she asked if she could color in the booklet and the Media Specialist told her she could. Katie (B2) was not overly involved with the written part of the sheet work and was distracted from it by older students milling around the room. She was, however, very neat and attentive to the coloring part of the assignment. She seemed to be thoughtful in her color choices and how she colored the spaces. She quietly chided a table-mate for singing too loudly during this work time. When the booklets were first passed out Anna (B3) immediately began to flip through it and showed the student next to her what they were going to be doing when they reached the end. As the Media Specialist began giving directions it was obvious that Anna was able to follow them better than many of her classmates. She appeared to be able to interpret information on the worksheets more quickly than others in order to answer questions the Media Specialist asked. She often began filling in the required missing words on a work sheet page before the librarian finished her explanation and then would turn ahead to the next page which she read aloud, but quietly, to herself. When she finished writing (ahead of time), during her class, she asked if she could color and the Media Specialist asked her to wait until they had all finished the discussion.

### **School B - Comparison of the Results of the Comprehension and Retelling**

There were twenty-six main ideas in the story *Chopsticks* (Berkeley, 2005). These concepts were developed primarily from the text, but the illustrations were also considered as the list was made. They range from the fact that Chopsticks was a mouse, as one learns in the beginning of the book, to the scene close to the end of the book where Chopsticks is sleeping in the mouth of the wooden dragon, to the last page of the story where Chopsticks is sharing his

story with Old Fu. This main idea sheet is attached to this research study as Appendix E: ‘Comprehension Coding Sheet for Book #2 – *Chopsticks*.’

Beth was the case study student from class B1, the group that saw the pictures as the story was read and received no additional instructions to pay close attention to the pictures. She was able to name, through both free recall and queried responses, seven of the twenty-six main concepts, or 27% of them. Katie, the student-participant from class B2, who saw the pictures as the story was read and received additional instruction to pay close attention to the pictures, was able to name nine of the twenty-six main ideas, or 35% of them. Anna was the case study student participant from class B3. This class group heard the story as it was read and did not see the pictures which accompanied it. Anna was also able to name seven of the main concepts, or 27% of them.

Anna (B3), who only listened to the story, was able to remember as many of the main ideas as Beth (B1), who did see the pictures as the story was read. Katie (B2), who not only saw the pictures as the story was read but received explicit instructions to carefully examine the pictures she saw, was able to remember more main ideas than either student in the other two listening experiences [See Table 2]. When one examines the responses made by the students in School B it can be seen that each student was able to recall some main ideas that the other two did not. Katie (B2), however, remembered more main ideas than did Beth (B1) or Anna (B3). The collected responses were given by the students during the individual interviews about the story.

Beth (B1) was expressly asked if the pictures helped her understand the story. Her answer was “Yes.” She was also asked to tell about the parts of the story that the pictures helped her remember. She responded with “probably when the mouse was sleeping in the



Table 2

Main Idea Comprehension of *Chopsticks* (Berkeley, 2005)

Main Ideas	Beth (B1)	Katie (B2)	Anna (B3)
Chopsticks was a mouse			X
Lived in Hong Kong			
Lived on a floating restaurant		X	X
People came in sampans		X	X
Looked for scraps of food			
At entrance were two pillars			
Wooden dragons were on the pillars	X	X	
One dragon called to Chopsticks			X
Mouse climbed coiled dragon to talk with him		X	
Dragon said he never moved an inch	X		
Dragon wanted to be free to fly	X		
Asked the mouse to help set him free	X		
Told mouse to find man who carved him			
Old Fu knew the secret that would free the dragon			
Mouse went to the sampan of Old Fu	X	X	
Old Fu knew this dragon wished to be free	X	X	
He played a tune on a flute for the mouse			X
Told mouse to play it at next full moon			
Mouse played the flute for the dragon			X
Dragon came alive and unwound himself			X
Chopsticks climbed on his back			
Both flew into the sky		X	
When sun was at horizon they cam home and slept		X	
Mouse slept in the dragon's mouth	X	X	
They flew every full moon from the on			
Chopsticks shared stories with Old Fu			

dragon's mouth." Later she was asked if she specifically thought about any of the pictures as she was telling the researcher about the story and she answered "I can't remember."

When Katie (B2) was asked if she thought about the words or the pictures when she was telling the researcher what she remembered about the story she said that she "thought [sic] about both things." When she was asked which helped her in telling the story, she answered "the words." She was asked if she learned about the story from the words or the pictures, her answer was "both." She did say that the pictures helped her understand what was happening in the beginning of the story when "the mouse was walking somewhere and he saw the dragon." When she was asked what she saw in her mind when she was explaining the story her reply was "like the picture of the boats in all the water at the end of the story."

### **School B - Comparison of Students' Personal Opinions**

All of the students in School B were basically asked the same questions during the interview session. These questions pertained to the content of the study picture book and their personal opinions about some aspects of the story. In this school setting there also was flexibility within each individual interview. When a student-participant made a comment that was out of the ordinary then the different avenues relating to that comment were followed by the researcher. If a student wished to provide additional detail in any area then the interviewer/researcher gave them the opportunity to do so without limiting the amount of time they could use to answer questions.

The three students in School B were each asked if they enjoyed listening to this story, and why. Beth (B1) said "Yes, because the mouse was sleeping in the dragon's mouth." Katie (B2) said she liked it "because it has pretty pictures and it sounds good." Anna (B3) said that she liked the story because it "was very fun." It should be noted that the responses from the two

students who saw the pictures are their personal opinions that are partially based upon the illustrations from the book.

Both Beth and Katie were asked if they enjoyed the pictures in the storybook. Both of them indicated that they did. When asked to elaborate, Beth (B1) said she liked them “Cause [sic] there were things that I don’t know and I get to see in it.” Katie’s (B2) reply to this question was “Because they looked like Indian stuff and it looked good in all the pictures.” Beth and Katie were also asked if they would have enjoyed the story as much if they had not been able to see the pictures in this book. Beth said “No” and that she liked to see the pictures when she listened to stories. Katie said that she would have enjoyed hearing this story, but the pictures did help her enjoy it “more.”

Anna (B3) was asked if she would have liked to have seen the pictures in the story, and she said “yes.” She did, however, also say that she felt “good” from just having listened to the story and did not think she missed anything important because she did not get to see the pictures. She told the researcher that she felt good anytime she heard stories.

### **School B - Comparison of the Results of the Pre-Vocabulary Tests**

The pre-vocabulary assessment was composed of six target words that were found in the book, *Chopsticks* (Berkeley, 2005). These six words were mentioned in the text, but not defined by the text. The words were, however, pictured in the illustrations to the point that a reader could determine the meaning of the word simply by looking at the pictures. The words were: carve, sampans, horizon, pillar, lacquer, and coils. Seven additional, superfluous words were included on the assessment and not included in the story.

Beth (B1), Katie (B2), and Anna (B3) all made attempts at telling the researcher-recorder the meaning of some of the words on the test. Whenever they did not know the answer they just said that they did not know. Anna correctly defined one of the target words from the story.

Katie was able to define one of the additional words and Beth was able to define two of the additional words. Of the six target words taken from the study story for School B only one was correctly defined by Anna on the pre-test.

### **School B - Comparison of the Results of the Post-Vocabulary Tests**

The post-vocabulary assessment was the same assessment which was given to students as the pre-vocabulary test. The post-test was administered to the students in the same way the pretest was administered. The results of the post-vocabulary test were obviously different from those seen on the pre-test.

Beth was the student from the B1 group which saw the pictures as the story was read and received no additional instructions to pay close attention to the pictures. She was able to tell the researcher the basic meaning of one of the target words from the study story. She did make attempts to define other words, but none of those definitions was correct.

Katie was the student from the B2 class. This group saw the pictures as the story was read and received additional instructions by the teacher to pay close attention to the pictures as the story was being read. During the post-test Katie was able to tell the researcher the basic meaning of three of the target words from the study story. Not only did she correctly give the meaning of three of the target words, she attempted to tell the meaning of four other words. On the pre-test she only attempted to define one and simply said, "I don't know," for all the others.

Anna was from the B3 class. This group of students was only able to hear the story as it was read and did not see the pictures. Anna, who was determined by the researcher to be the brightest student of the three case studies (actually of all six case studies), was able to give a correct definition for one of the target words on the post-test (the same word she correctly defined on the pre-test). She did not even attempt to define any of those of which she was not sure. She simply responded that she did not know.

## **School B - Comparison of the Pre- and Post- Vocabulary Tests**

If one considers the circumstances in which each of these students was allowed to experience the study story, differences are apparent. The student (Katie) in class B2, who was able to see the illustrations and was instructed to pay close attention to the pictures as the story was read, was able to define more target words during the post-test than she was able to define on the pre-test that she took. It can also be seen that this student in the B2 group was able to define more words on the post-test than the student (Beth) in the B1 group, who saw the pictures but received no additional instructions, as well as, the student (Anna) in the B3 group, who experienced the story by seeing no pictures at all.

### **Comparisons of School A with School B**

#### **Pre-Vocabulary Tests**

The results for all six students in both schools were basically the same. Five of the student-participants were not able to define any of the target words that had been pulled from the text of their school study picture book. One of students in School B was able to define just one of the target words on the pre-test. The students in School A (all boys) made more attempts at giving meanings to the words on the pre-test than did the students from School B (all girls).

#### **Post-Vocabulary Tests**

The students in groups A1 and B1, who saw the pictures as the story was read, were able to give the definition to one or more words during the post-test. Matthew (A1) correctly gave the definition for three of the six target words. Beth (B1) was able to correctly define one of the six target words. The students in groups A2 and B2, who not only saw the pictures, but also received additional instructions to pay close attention to the illustrations, were able to give the meaning of some of the target words during the post-test. Joseph (A2) was able to define three of the six target words on his post-test and Katie (B2) was able to give the definition for two of

the six words on her post-test. The students from groups A3 and B3, who listened to the story but did not see the pictures, were not able to answer as many. Chris (A3) was not able to provide the definition to any of the words on his post-test, while Anna (B3) was able to give the meaning for one of the words on her post-test (the same word she defined on the pre-test). Again, the students in School A (all boys) made more attempts at giving meanings to the words on the post-test than did the students from School B (all girls).

### **Comprehension Comparisons**

In School A the student (Chris-A3) who did not see the illustrations was able to recall approximately .92% more of the main ideas than the student (Matthew-A1) who saw the illustrations as the story was being read. The student (Joseph-A2) who saw the pictures and received instructions to be attentive to them recalled, however, approximately .92% more of the main ideas than the student (Chris-A3) who did not see the illustrations. In School B each student (Beth-B1 & Katie-B2) who saw the illustrations as the story was read was able to recall approximately 29% more main ideas than the student (Anna-B3) who did not see the illustrations from the story.

The two girls in School B, who were able to see the pictures during the story, seemed to have a better understanding from the beginning that the illustrations did help them when they were trying to retell the story to the researcher. The two boys in School A, who were able to see the pictures during the story, did not initially see the connection, but the more specific the questions became about their comprehension and how it related to the pictures, the more often their answers indicated that the pictures did help them remember.

### **Personal Comments Concerning Personal Listening/Viewing Experiences**

When asked why they liked the story the two students from School A and the two students from School B, who were able to see the pictures as the story was read, based part of

their answer on the illustrations that they saw in the books. Both of the students who were in the groups that only listened to the story said that they would like to have seen the pictures as the story was being read. Both of these students also said that they still enjoyed listening to the story even though they had not seen the pictures.

Both student-participants from School A, who saw the pictures during the reading, said they enjoyed them. They both explained that they liked the colors as well as the overall pictures. Matthew (A1) did make the comment that he enjoyed the words more than the pictures when he was in his regular classroom participating in their reading lessons. Joseph (A2) said that he did not think he would have understood the story as much as he did if he had not been able to see the pictures. Chris (A3) stated that he would like to have seen the pictures, but that he just thought about what things in the story looked like since he could not see them. Anna (B3) also indicated that she spent her time thinking about what the characters in the story looked like while she was listening.

## CHAPTER V

### SUMMARY AND CONCLUSIONS

#### Introduction

The purpose of this research study was to determine whether illustrations that are included in reading materials impact the learning of beginning readers. Two primary areas were considered during the study; the first being the impact of the pictures on students' abilities at recall and comprehension of a story and the second being the impact of the pictures that accompany a story on indirect vocabulary development. Three different classes of first-grade students were selected in each of two different schools to participate. All of the students in the classes, that were labeled A1 and B1, A2 and B2, A3 and B3, heard the same story book at their individual school a different way, relating particularly to how those experiences involved the books' pictures.

By referring back to the original research questions a framework can be used for the development of the summary of findings. When considering those questions presented in this research study in Chapter I, an understanding can be developed concerning the impact of illustrations associated with stories that are read to beginning readers. The three cases studies conducted in each school helped provide awareness and understanding as each set of questions, the first dealing with comprehension and recall and the second dealing with indirect vocabulary development, is examined.

#### **Questions 1 through 3**

How was comprehension and retelling of an emergent reader impacted, if at all, by seeing the illustrations as the story was being read to them? How was comprehension and retelling of an emergent reader impacted, if at all, by instructing students to attend to the illustrations they are exposed to as the story was being read to them? How was an emergent reader's ability to



comprehend and retell a story impacted, if at all, when the illustrations were not shown to the listener as the story was being read?

### **School A**

The students experienced the story in three separated groups. Class A1 saw the pictures as the story was read and receive no additional instructions to pay close attention to the pictures. Class, or group, A2 saw the pictures as the story was read and received additional instruction to pay close attention to the pictures, especially if information was presented that was new to the listener. Class A3 heard the story as it was read and did not see any of the pictures associated with the story.

The student-participant in A1 was able to recall eleven of the twenty-four main ideas from the story. The student-participant in A2 was able to remember thirteen of the twenty-four main ideas. The student-participant in A3 was able to recall twelve of the main ideas. It needs to be remembered here that it was discovered after the study was underway that the students in the A1 group and the A3 group were introduced to this book in kindergarten. It was also determined during the interview that the student in A1 just heard the story in class when he was in kindergarten, whereas the student in A3 suggested that his kindergarten class studied this book fairly extensively. It also needs to be restated that the student in the A2 group was considered by the teachers in his school to be the lowest performing student of the three students in School A. In addition, he had never heard this story before it was read in class for this study.

### **School B**

These students also experienced the story in three separated groups. Class B1 saw the pictures as the story was read and receive no additional instructions to pay close attention to the pictures. Class, or group, B2 saw the pictures as the story was read and received additional instruction to pay close attention to the pictures, because they can teach the listener about things

which he or she may be unfamiliar. Class B3 heard the story as it was read and did not see any of the pictures associated with the story.

The student-participant in B1 recalled seven of the twenty-six main ideas in this story. The student in B2 was able to remember nine of the twenty-six main ideas. The student-participant in B3 was able to recall seven of the twenty-six main ideas. In this case it was the opinion of the researcher that the student who represented the B3 group was the brightest of all six of the student-participants who took part in the study, and that the student in B2 may have been the most average of the three students from School B.

### **Comparison of School A and School B – Recall and Comprehension**

The students in the A1 and the B1 groups who saw the illustrations as the story was being read did not have a better level of recall than the groups (A2 and B2) who saw the pictures and was given additional instructions to examine them closely. They, also, did not have better levels of recall than those students (A3 and B3) who did not see any of the pictures. This may be an indication that students have been conditioned to simply listen as stories are read to them. They, sometimes, are not really expected to think too much about what they hear and see, but to sit back and be entertained. I believe that training children to examine the illustrations as a process of developing visual literacy can be done in such a way that it would also be entertaining.

It can be seen that the students in the A2 and the B2 groups were able to recall more main ideas than either of the students in the other two groups. The differences in recall levels in the two school groups are not great, and they are consistent with each other. The results from this research study indicate that there may indeed be a benefit derived when students are not just shown the illustrations as a story is read to them, but are expected to also critically examine those illustrations that accompany stories to which they are exposed.

Students in the A3 and the B3 groups, who were not able to see the illustrations as they listened to the stories, did not recall as many main ideas as those students in the A2 and B2 groups, but did as well or better than those students (A1 and B1) who were able to see the pictures. When children are only listening to a story they may be concentrating more on what is being read, or producing mental images of characters and events in the story, as a means of organizing and remembering what they are hearing. It can also be seen, however, that they may be, at times, missing an important element that may contribute to recall abilities when they do not see the illustrations from a story.

#### **Questions 4 through 6**

How was the ability to indirectly develop vocabulary in an emergent reader impacted, if at all, by seeing the illustrations as the story was being read to them? How was the ability to indirectly develop vocabulary in an emergent reader impacted, if at all, by instructing students to attend to the illustrations they are exposed to as the story was being read to them? How was an emergent reader's ability to indirectly develop vocabulary impacted, if at all, by not seeing the illustrations as the story was being read to them?

#### **School A**

The student (A1) who saw the illustrations as the story was read did not know the meaning of any of the target words on the pre-test but was able to define three of the six words from the story on the post-test. The student (A2) who saw the pictures as the story was read and who received additional instructions to pay close attention to the illustrations was not able to define any of the target words on the pre-test but was able to define three of the six target words from the story on the post-test. The student (A3) who was in the situation where he only listened to the story and did not see the pictures was not able to define any of the target words on the pretest or the post-test.

It was learned during the interview sessions that two of the students actually heard this story in kindergarten. Because of this previous experience the student in the A1 group had prior knowledge of it. Being placed in a situation where he was reminded of the story may be the reason he performed so well on the post-test. The student in the A3 group was also introduced to this book in kindergarten and indicated that his class had studied it fairly extensively. This may be the reason why he did well in the recall portion of the study. He surprisingly, however, did not do well at all on the indirect vocabulary development section, indicating to the researcher that a lack of exposure to the illustrations may have had an impact on his learning abilities in this part of the study.

The student (A2) who had never heard this story before was also the one who experienced the story with pictures and explicit instructions. Since the story was new to him the results of his pre- and post-test are obviously more significant. It is believed by this researcher that exposure to the illustrations and directions to carefully study them may have contributed to his ability at having performed as well as he did on the post-test.

### **School B**

The student (B1) who saw the illustrations as the story was being read was not able to define any of the target words on the pre-test but was able to define one of the target words on the post-vocabulary test. The student (B2) in the group that saw the pictures and was given additional instructions to pay close attention to the pictures was not able to give the definition for any of the target words on the pre-test, but was able to define two of the target words from the story on the post-test. The student (B3) who was in the group that only heard the story and did not see the pictures was able to define one of the target words on the pre-test and was only able to give the definition for the same word on the post-test.

What was a little unusual in School B was that Katie, the student in class B2, was considered by the classroom teacher and the Media Specialist to be the weakest academically of the three who were randomly chosen to be the case study students. This result could possibly corroborate the initial question raised by the researcher concerning the use of visual literacy as a tool in teaching emergent readers as they are learning how to read.

### **Comparison of School A and School B – Indirect Vocabulary Development**

The A1 and the B1 groups saw the illustrations as the story was being read. The student from the A1 group was able to define as many words as the student in the A2 group, who saw the pictures and was given additional instructions to examine the pictures closely. The student from the B1 group did not, however, define as many words as the student from the B2 group. Even though the student from the B3 group knew one of the target words on the pre-test it can be seen that she did not learn any new vocabulary words from the story, as can also be seen with the student from the A3 group, who learn no new words.

It can be seen that the student in the B1 group and the students in the A2 and B2 groups did learn the meaning of new vocabulary words in an indirect manner, where the students in the A3, and the B3 groups did not. The student in the A1 group may have been reminded of words he previously knew when he was reintroduced to the story. In School A the level of learning for the student in class A2 increased, as shown in the test scores. The original score was 0% (zero out of six words) and the score on the post-test was 50% (three out of six words), indicating a significant improvement when considering the fact that explicit visual literacy instruction was given before reading with emergent readers. In School B the level of learning for the student in group B2 improved, as seen in the test scores. The score on the pre-test was 0% (zero out of six words) and the score on the post-test was 33% (two out of six words). The

results for this group may also be considered noteworthy since specific visual literacy instructions were used with this group before the reading, as well.

It needs to be restated here that the book used in School A was rated as having a third-grade reading level, whereas the book used in School B was rated as having a fifth-grade reading level. On one hand, the fact that there was a difference may not be important since there was an increased level of learning in both the A2 and the B2 groups. On the other hand, however, these different situations may be considered to have relevance when it is understood that students are learning vocabulary words because of a direct connection to seeing the illustrations. Even though students learned difficult words from a book that was above their reading level, the students in this research study learned more words, through this visual literary instruction method, when the text was closer to their own reading level.

### **Implications for the Classroom**

Teachers need to spend time in the classroom directly teaching children how to see what they are looking at in pictures. This can be accomplished using a variety of methods, which would include modeling and by explicitly and clearly showing students how to examine the illustrations accompanying the text. It is not just necessary for students to understand the literal meanings of pictures, like who is standing there and what is in their hand. It is also necessary for students to be able to understand the more subtle, or non-literal, meanings associated with pictures, like facial expression or the position of an object or character on the page.

A better understanding of page layout and design can also benefit students when they are learning how to read. Teachers may find that it improves students' understanding of what they are reading if they are allowed to examine the layout and the illustrations in the story one or more times before the actual reading of words begins. By practicing 'reading' the pictures

before the story is read, students may develop a stronger knowledge base that helps them understand some of the vocabulary in a story.

The pleasure of a child in kindergarten or first grade that is derived from listening to a picture book as it is read to them is not usually increased by a surprise ending, as it may for an older student or an adult. Children who are of this age do not mind knowing the ending to some stories in order to enjoy them. In fact, they usually derive pleasure from hearing a story numerous times. There may be some learning benefit to showing children all of the pictures in a story that they will hear for pleasure before the text is read to them. The pictures, in this situation, may provide some children with a background knowledge that they can refer to as the story is then being read aloud.

I believe that this study specifically provides information to authors and illustrators of children's books. This work is proof that the illustrations found in those books need to not just be ornamentation for the story, but that they should also provide a second layer of potential knowledge to students who read them or who listen to them. Taking time to create illustrations that add to the visual literacy development, as well as the vocabulary development of emergent readers can also provide superior teaching tools for educators.

### **Limitations**

The task of selecting a Book Evaluation committee seemed to be a simple one, but it proved to cause minor problems. As an attempt to prevent prejudicial judgments from the Book Evaluation Committee members, the premise of the research study was not explained to or discussed with them prior to their reading the seven pre-selected books. After reading and returning the books to the researcher, two of the three evaluators, never-the-less, said that they tried to figure out what the study was about and they tried to evaluate the books with their own preconceived ideas in mind. This was kept somewhat in check, however, due to the fact that the

researcher made the final decision as to which of the reviewed books best met the needed criteria for the study. It may be beneficial to provide the committee members with more information about the research project so they can consider this information when evaluating materials.

Schools today are truly test-driven, even in kindergarten and first-grade classrooms. The promise of anonymity does little to keep teachers from worrying about how their students will perform in any type of study. Teachers in schools (not just classroom teachers but enrichment teachers and specialists, also) appear to be so overly consumed with test scores and how their school will be reflected in a study, they are reluctant to allow students who do not perform well in class to even be the subjects in research. In four of the six situations the classroom teacher did not indicate to the researcher that any of her students should not be considered as a participant for this research study. Two of the classroom teachers (one from each school site), however, included several names on this list, indicating that those students would not be helpful participants. The researcher had no way of knowing the reason why so many students were eliminated from these two classes, other than the teachers' explanation that those who were eliminated were immature or would not cooperate. It must be said, however, that the student-participants who did take part in this study were able to answer questions and make reasonable responses to the questions they were asked, thus adding important information for the researcher to review and use to draw conclusions. A brief, related pre-study was conducted some time before this formal research was undertaken. In this first situation students who were beginning kindergarten were chosen from classes on a random basis. It was discovered at that time that students who were this age did not respond well during interviews, due to their lack of needed vocabulary and the ability to express themselves articulately.

There arose for this researcher a problem, after the fact, with the book, *Charlie Needs a Cloak* (dePaola, 1979), used in the School A study. Even though exploratory, pre-interviews



were conducted concerning the use of this book in kindergarten classes, it was discovered after the student interviews began that a teacher who had reported she had not used this book last year with her class, actually had. It was not evident that this student's prior knowledge of the story affected this research when considering the indirect learning of new vocabulary words, but more than likely did influence recall and comprehension levels. If a researcher has an unlimited amount of time, it may be beneficial to interview several students from a class and then choose the one for case study who was not familiar with the story being used.

The readability level of the two books chosen for the study was not the same grade level. The readability level of *Charlie Needs a Cloak* (dePaola, 1979) was determined to be at a third-grade level and the readability level for *Chopsticks* (Berkeley, 2005) was estimated to be at an upper fifth-grade grade level. In this study the books were read to the students; they were not expected to read them independently. It has, also, been shown that students can benefit from listening to material and information that is above their grade level, when it is presented by teachers as a means of emphasizing upper levels of competence (Bransford, Brown, & Cocking, 2000). The vocabulary in the School B picture book was on a more difficult level than the vocabulary included in the School A picture book. Even though the two study books were on different readability levels they were chosen specifically for the relationship of vocabulary words to the illustrations. The difference in readability level was not that significant in this research study because when the results obtained in the two schools were examined the results were similar, with the students in the A2 and the B2 groups knowing the definition of a larger number of target words on the post-test than they did on the pre-test. The primary purpose for replicating this study in a second school setting was to specifically determine if the results would be similar. It may be necessary to find two books on the same reading level that can be used in two different settings in order to truly duplicate the study.

One of the main problems I had was with the teacher/librarians who helped with the study. Veteran teachers gave credence to the study because they are well aware of how to teach and how to manage a classroom, but they also had a tendency to not follow the explicit directions given to them by the researcher. Both of the media specialists used in the study, more than likely because they are excellent teachers, went beyond the specific instructions given to them by the researcher and provided students with information that they thought might be of relevance to what they were teaching. It is unsure how this extra information, given to all students, may have affected the student-participants' answers and reactions in this particular study. As an example; when the teacher in School A read the story for the A3 group (those who did not see the illustrations), she did so using an exaggeratedly slow tempo, much slower than she did for the other two classes. While doing this she deliberately pronounced each word carefully and precisely so students would not miss anything that was said. In School B when the teacher read to the B3 group she decided, at the last minute, to change her voice as she read the dialogue from different characters. These two deviations from the pattern of relative neutrality the researcher wanted during each reading may have influenced the students in the A3 and B3 groups in some way that the other four groups were not influenced. In this study it did not seem to have any effect on the indirect vocabulary learning, but may have affected the level of comprehension and recall. It is known that when students have learning experiences that are out of the ordinary or are a little unusual, they have a tendency to remember what was presented to them at that particular time.

At first, I felt that the environment in which the study took place might negatively affect the results obtained from some of the student-participants. The library in both schools was a busy place, with students and teachers coming and going at all times. Although this may have had an effect on some students most of them seemed to be acclimated to the noise and movement

to the point where they would notice it but would continue to be attentive to the media specialists' lessons. Since the situation was extremely similar in both schools, with each being just as busy and noisy as the other, no class had any type of advantage or disadvantage over any of the others.

The administration of the pre-test to all students in both schools was off-set because of the unexpected fire drill in School A. Because of this, the amount of time between the pre-test and the post-test was different for one student in School A. At first, I thought this may affect the outcome of the test results. In this particular study it did not seem to have any effect at all. This could, however, possibly skew results for other researchers in other settings.

In each school the actual story presentation time was different in one class when compared to the other two classes. In both schools the media specialist read the study story first and then proceeded to teach her scheduled lesson. In one class at each school, however, the story was read after the lesson had been completed, leaving less time between hearing the story and taking the post-vocabulary test and being asked to remember the story during the interviewed session. This happened in School A because of a fire drill and in School B because of a meeting the librarian had to attend. It is unsure if this shortened time period between hearing the story and completing follow-up activities affected the outcomes pertaining to these two student-participants. One of these cases was the student in class A1 (pictures only). In the recall of main ideas he remembered fewer main points than the other two students from this school. In the vocabulary post-test, however, he was able to define as many target words as the student in the A2 (pictures and instructions to attend to them) group. The other student in this situation was in the B3 (no pictures) group. In this case she was not able to define any of the target words after the story but was able to recall as many main ideas as the student in the B1 (pictures only) group.

These delayed times of presentation by the teacher proved to provide opposite results in these two case study situations, but they may have had an effect in both schools.

### **Suggestions for Further Research**

New word/picture association studies may be beneficial. As can be seen in Chapter II of this research study, several other studies relating to this topic have been conducted in the past. None, of them, however, specifically addresses the need for the development of visual literacy in emergent and beginning readers.

An interesting topic which may be undertaken would involve the study of wordless picture books. An understanding of how they may contribute to the development of improved comprehension and indirect vocabulary learning could be uncovered. In a similar vein, a study conducted to determine the impact of the illustrations of black and white, or monochromatic, picture books on young readers would provide information to educators.

Comparative gender studies or cross cultural studies approaches in relation to visual bombardment of children today may be important. These would be informative to those who teach, as well as, those who work in the field of educational development.

Studies comparing visual literacy and visual imagery and how these can be developed in young readers would be interesting. This study would also be valuable for those who assume the responsibilities of teaching the reading process to children.

### **Conclusions**

It is obvious to most educators that learning sounds and visually seeing words is the most effective way to teach the vast majority of children how to read. A multimodal approach, however, incorporating a variety of tools should to be considered by those who teach reading to emergent and beginning readers. Sometimes, to a teacher, these tools appear to be logical and

easy to employ. At other times, however, they may not initially understand the significance of the tool without meaningful training.

Children today are more graphically oriented than any other generation in modern history. Students in our society expect the immediate experience of pictures and images in almost all learning they encounter. Educators need to take advantage of this graphic orientation by incorporating various aspects of it into the educational process in ways that can be beneficial to learning environments in our schools. Reading programs need to expand their methodologies by including various approaches and uses of illustrations and graphics that prove to be advantageous to the development of children. Paivio's (1986, 1969) work on the theory of dual coding explained to educators how young children use two different approaches simultaneously to help understand their existing world. One of these approaches is verbal and the other visual. Children learned how to develop and use both of these aspects of learning in order to absorb the most meaning out of what is around them. Most children are taught by their parents from a very early age, by way of example and modeling, how to verbally communicate. At the same time, children see the world around them but are not necessarily taught how to critically observe that visual world. The findings of this research study showed that children are capable of using visual literacy to improve their learning levels and abilities during the early years when they are beginning to learn the reading process. This study also illustrated the importance for present school systems to begin serious instruction for young children on how to become more visually literate.

The research study of Arizpe and Styles (2003) explained that children at a variety of ages can benefit from learning how to critically examine the illustrations in picture books. Understanding what pictures tell the viewer is a process that should be developed at an early age, so that the ability can develop and mature along with the viewer. It has been shown in Arizpe

and Styles' (2003) work that this type of training will significantly contribute to the visual pleasure of the viewer. Likewise, it has been shown in the present research study that visual literacy should also be developed within children as an acumen which can help the student improve his or her reading abilities.

The impression I developed from the line of questions used during the interviews, concerning the relevance of the story illustrations in comprehension and the answers given by the student-participants, is that young students do not have the experiences or the vocabulary necessary to explain exactly what they are thinking about this particular issue. First-graders are so satiated, and not unjustifiably, with the reading of words at this time in their life they may no longer see the importance that the pictures accompanying a story may still provide them. Teachers can become so concerned with the reading of words that they tend to overlook the need of reminding students to visually focus on the pictures. This research study showed, however, that the illustrations may indeed be an important, necessary element to some children in their reading development.

Those who are training to become elementary school teachers usually take a rudimentary course in art methods. One way to help insure that a child's visual literacy is developed in his or her early years in school is to provide specialized instruction in this area for pre-service teachers, with specific emphasis on how this particular area of study contributes to the reading process and development of emergent readers. A secondary recommendation this research study makes is that those who are currently teaching young children how to read should be offered in-service classes or specialized training in how to teach their students the aspects and elements of understanding visual literacy and how to apply it to their learning and study.

## REFERENCES

- Aanstoos, J. (2003). Visual Literacy: An Overview. 32nd Applied Imagery Pattern Recognition Workshop (AIPR '03), p. 189.
- Advantage learning gives you a break: Accelerated reader (2007). Teachnet Search. Retrieved 2/24/07, from: <http://www.teachnet.com/how-to/manage/advantage.html>
- Allen, R.E. (Ed.). (1990). *The concise Oxford dictionary of current English*. Oxford: Clarendon Press.
- Arizpe, E. & Styles, M. (2003). *Children reading pictures: Interpreting visual texts*. London: RoutledgeFalmer.
- Arnheim, R. (1993). Learning by looking and thinking. *Educational Horizons*, 71 (2), 94-98.
- Bader, B. (1976). *American picturebooks from Noah's ark to the beast within*. New York: Macmillan.
- Beck, I.L & McKeown, M.G. (2001). Text talk: Capturing the benefits of read-aloud experiences for young children. *The Reading Teacher*, 55 (1), p.10, 11p.
- Berkeley, J. (2005). *Chopsticks*. New York: Random House.
- Bogdan, R.C. & Biklen, S.K. (2003). *Qualitative research for education: An introduction to theory and methods*. (4<sup>th</sup>. ed.). Boston: Allyn and Bacon.
- Bransford, J.D., Brown, A.L., & Cocking, R.R. (2000). *How people learn: Brain, mind, experiences, and school*. (Expanded ed.). Washington, D.C.: National Academy Press.
- Brett, J. (1993). *Christmas trolls*. New York: G.P. Putnam's Sons.
- Brody, P.J. (1981). Research on pictures in instructional texts: The need for a broadened perspective. *Educational Communication and Technology Journal*, 29 (2), 93-100.
- Browne, A. (1989). *The tunnel*. London: Julia MacRae Books.
- Browne, A. (1994). *Zoo*. London: Julia MacRae Books.
- Butler, D. (1987). Early friendships. *Innocence and experience: Essays and conversations on children's literature*. New York: Lothrop, Lee & Shepard.
- Caldecott terms and criteria: Randolph Caldecott medal. (1987). American Library Association. Retrieved 5/22/06, from: [www.ala.org/ala/alsc/awardsscholarships/literaryawds/caldecottmedal/caldecottterms](http://www.ala.org/ala/alsc/awardsscholarships/literaryawds/caldecottmedal/caldecottterms)
- Carroll, L. (1941). *Alice's adventure in Wonderland*. New York: Heritage Illustrated Bookshelf.

- Center, Y. (2005). *Beginning reading: A balanced approach to teaching literacy during the first three years at school*. London: Continuum.
- Christelow, E. (2001). *The great pig escape*. Boston: Clarion.
- Collins, M.D. & Cheek, E.H. (1999). *Assessing & guiding reading instruction*. New York: McGraw-Hill.
- The compact edition of the Oxford English dictionary: Complete text reproduced micrographically*. (1981). New York; Oxford University Press.
- Considine, D.M. (1986). Visual literacy and children's books: An integrated approach. *School Library Journal*, 33 (1), 38-42.
- Creswell, J.W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, California: Sage Publications.
- Debes, J.L. (1968). Some foundations for visual literacy. *Audiovisual Instruction*, 13 (9), 961-64.
- Debes, J.L. (1969). The loom of visual literacy. *Audiovisual Instruction*, 14 (8), 25-27.
- Denburg, S.D. (1976-1977). The interaction of picture and print in reading instruction. *Reading Research Quarterly*, 12 (2), 176-189.
- dePaola, T. (1990). "Charlie needs a cloak." New York: Scholastic.
- dePaola, T. (1975). *Strega Nona*. New York: Prentice Hall.
- Doll, W.E., Fleener, M.J., Trueit, D., & St. Julien, J. (2005). *Chaos, complexity, curriculum, and culture: A conversation*. New York: Peter Lang.
- Dondis, D.A. (1973). *A primer of visual literacy*. Cambridge: MIT Press.
- Doonan, J. (1993). *Looking at pictures in picture books*. Exeter: Thimble Press.
- Eaker, J.G. (1938). The aesthetic approach to reading. *The Journal of Higher Education*, 9 (4), 183-189.
- Eisner, E.W. (Ed.). (1978). *Reading, the arts, and the creation of meaning*. National Art Education Association.
- Eisner, E.W. (1993). The education of vision. *Educational Horizons*, 7 (2), 80-85.
- Eller, R.G., Pappas, C.C., & Brown, E. (1988). The lexical development of kindergarteners: Learning from written context. *Journal of Reading Behavior*, 20 (1), 5-23.



- Elster, C. & Simons, H.D. (1985). How important are illustrations in children's readers? *The Reading Teacher*, 39 (2), 148-152.
- Fang, Z. (1996). Illustrations, text, and the child reader: What are pictures in storybooks for? *Reading Horizons*, 37 (2), 130-142.
- Fletcher, K.L. & Reese, E. (2004). Picture book reading with young children: A conceptual framework. *Developmental Review*, 25 (1), 64-103.
- Fry, E. (1968). A readability formula that saves time. *Journal of Reading*, 11 (7), 265-271.
- Galda, L. & Cullinan, B.E. (2006). *Literature and the child*. Belmont, CA: Wadsworth Thomson Learning.
- Gambrell, L.B. & Jawitz, P.B. (1993). Mental imagery, text illustrations, and children's story comprehension and recall. *Reading Research Quarterly*, 28 (3), 265-273.
- Geertz, C. (1973). *The interpretation of cultures: Selected essays*. New York: Basic Books.
- Giverny book award. (2006). Retrieved 6/5/06, from: [www.15degreelab.com/award.html](http://www.15degreelab.com/award.html)
- Goins, S.L. (2004). Botany in children's literature: A content analysis of plant-centered children's picture books that have a plot and characters (Doctoral dissertation). Baton Rouge: Louisiana State University Press. (URN etd-04012004-202528)
- Goldstone, B.P (2002). Whaz up with our books? Changing picture book codes and teaching implications. *The Reading Teacher*, 55 (4), 362-370.
- Haring, M.J & Fry, M.A. (1979). Effect of pictures on children's comprehension of written text. *Educational Communication and Technology*, 27 (1), 185-190.
- Harms, J.M. (1998). Book design elements. *Childhood Education*, 75 (1). Article 1844708. Retrieved 2/8/06, from: [www.web9.epnet.com/resultslist.asp?tb](http://www.web9.epnet.com/resultslist.asp?tb)
- Heins, E. (1987). Motion and rest: The art of illustration: introduction. *Innocence and experience: Essays and conversations on children's literature*. New York: Lothrop, Lee & Shepard.
- Hibbing, A.N. & Rankin-Erickson, J.L. (2003). A picture is worth a thousand words: using visual images to improve comprehension for middle school struggling readers. *The Reading Teacher*, 56 (8). Article A101762236. Retrieved. 2/7/06, from: [www.web1.infotrac.galegroup.com/itw/infomark/535/938](http://www.web1.infotrac.galegroup.com/itw/infomark/535/938).
- Hinkle, D.E., Wiersma, W., & Jurs, S.G. (2003). *Applied statistics for the behavioral sciences*, (5<sup>th</sup> Ed.). Boston: Houghton Mifflin.

- Isbell, R., Sobol, J., Lindauer, L., & Lowrance, L. (2004). The effects of storytelling and story reading on the oral language complexity and story comprehension of young children. *Early Childhood Education Journal*, 32 (3), 157-163.
- Johnson, D.D. & Pearson, P.D. (1984). *Teaching reading vocabulary*. (2<sup>nd</sup> ed.). New York: Holt, Rinehart and Winston.
- Kiefer, B. (1993). Children's responses to picture books: A developmental perspective. In K.A. Holland, R.A. Hungerford, & S.B. Ernst (Eds.), *Journeying: Children responding to literature*. Portsmouth, NH: Heinemann.
- Kimball, R. (2001). Schiller's "aesthetic education." *New Criterion*, 19 (7). Article A72685450. Retrieved September 19, 2005, from <http://infotrac-college.thomsonlearning.com/itw/infomark>
- Kitamura, S. (1997). *Lily takes a walk*. London: Happy Cat Books.
- Klein, M.L. (1988). *Teaching reading comprehension and vocabulary: A guide for teachers*. Englewood Cliffs, New Jersey: Prentice Hall.
- Landers, S. (1987). Picture books as literature. *Innocence and experience: Essays and conversations on children's literature*. New York: Lothrop, Lee & Shepard.
- Lanes, S.G. (1980). *The art of Maurice Sendak*. New York: Abradale/Abrams.
- Lesgold, A.M., DeGood, H. & Levin, J.R. (1997). Pictures and young children's prose learning. *Journal of Reading Behavior*, 9 (4), 353-364.
- Levin, J.R. & Lesgold, A.M. (1977). On pictures in prose: Theoretical paper no. 69. Madison; University of Wisconsin.
- Lewis, D. (2001). *Reading contemporary picture books: Picturing text*. London: RoutledgeFalmer.
- Lincoln, Y.S & Guba, E.G. (1985). *Naturalistic inquiry*. Thousand Oaks, CA: Sage.
- Manning, M. (2004). Visual cues. *Teaching K-8*, 34 (6), 91-92.
- Marshall, C. & Rossman, G.B. (1999). *Designing qualitative research*. Thousand Oaks, CA: Sage.
- Meynell, H.A. (1993). The good art. *Arts Education Policy Review*, 95 (2). Retrieved November 15, 2005, from <http://infotrac-college.thomsonlearning.com/itw/infomark>
- Moebius, W. (1986). Introduction to picturebook codes. *Word & Image*, 2 (2), 141-158, found in *The cool web: The patterns of children's reading* (1978) by M. Meek, A. Warlow, and G. Barton.

- Moore, R. (2004). Aesthetic experience in the world of visual culture. *Arts Education Policy Review*, 105 (6). Article A121447987. Retrieved November 15, 2005, from <http://infotrac-college.thomsonlearning.com/itw/infomark>
- Moss, B. (1995). Using children's nonfiction tradebooks as read-alouds. *Language Arts*, 72.
- Munro, T. (1964). Recent developments in aesthetics in America. *The Journal of Aesthetics and Art Criticism*, 23 (2), 251-260.
- Musgrove, M. (1977). *Ashanti to Zulu: African traditions*. New York: Dial.
- NCTE. (2001). NCTE names notable children's books for 2000. *Reading Today*, 18 (4), 12.
- Nikolajev, M. & Scott, C. (2000). The dynamics of picturebook communication. *Children's Literature in Education*, 31 (4), 225-239.
- The Oxford English dictionary on-line (1990). Retrieved 2/20/2006 from, <http://www.oed.com/>
- Paivio, A. (1986). *Mental representations: A dual coding approach*. New York; Oxford University Press.
- Paivio, A. (1969). Mental imagery in associative learning and memory. *Psychology Review*, 76, 241-263.
- Peeck, J. (1974). Retention of pictorial and verbal content of text with illustrations. *Journal of Educational Psychology*, 66 (6).
- Pinar, W.F., Reynolds, W.M., Slattery, P., & Taubman, P.M. (2004). *Understanding curriculum: An introduction to the study of historical and contemporary curriculum discourses*. New York: Peter Lang.
- Random House Webster's College Dictionary*. (2000). New York; Random House.
- Rathmann, P. (1996). *Officer Buckle and Gloria*. New York: Putnam.
- Raymond, A. (1995). Author, editor-in-chief, teacher: Patricia Lee Gauch. *Teaching K-8*, 26 (1), 62-64.
- Robbins, C. & Ehri, L.C. (1994). Reading storybooks to kindergarteners helps them learn new vocabulary words. *Journal of Educational Psychology*, 86 (1), 54-64.
- Rohmann, E. (2003). *My friend Rabbit*. Roaring Brook Press.
- Sadoski, M. (1985). The natural use of imagery in story comprehension and recall: Replication and extension. *Reading Research Quarterly*, 10 (5), 658-667.

- Sadoski, M. (1983). An exploratory study of the relationships between reported imagery and the comprehension and recall of a story. *Reading Research Quarterly*, 19 (1), 110-123.
- Sadoski, M. & Paivio, A. (2001). *Imagery and text: A dual coding theory of reading and writing*. Mahwah, NJ; Lawrence Erlbaum.
- Salinger, T. (1993). *Models of literacy instruction*. New York: Merrill/Macmillan.
- Samuels, S.J. (1970). Effects of pictures on learning to read: Comprehension and attitudes. *Review of Educational Research*, 40, 397-408.
- Santa, J.L. (1977). Spatial transformations of words and pictures. *Journal of Experimental Psychology: Human Learning and Memory*, 3, 418-427.
- Schallert, D.L. (1980). The role of illustrations in reading comprehension. In *Comprehension: Perspectives from cognitive psychology, linguistics, artificial intelligence, and education*. Hillsdale, NJ: Lawrence Erlbaum.
- Searfoss, L.W. & Readence, J.E. (1994). *Helping children learn to read*. (3<sup>rd</sup>. ed.). Boston: Allyn and Bacon.
- Sibert medal terms and criteria. (2000). American Library Association. Retrieved 5/22/06, from: [www.ala.org/ala/alsc/awardsscholarships/literaryawds/sibertmedal/sibertterms/sibert](http://www.ala.org/ala/alsc/awardsscholarships/literaryawds/sibertmedal/sibertterms/sibert)
- Sims, E., O'Leary, R., Cook, J., & Butland, G. (2002). *Visual literacy: What is it and do we need it to use learning technologies effectively?* Document from Presentation at 2002 ASCILITE Conference.
- Smerdon, G. (1976). Children's preferences in illustration. *Children's Literature in Education*, 20, 17-31.
- Stripling, B.K. & Hughes-Hassell, S., (Eds.). (2003). *Curriculum connections through the library*. Westport, CN; Libraries Unlimited.
- Sutherland, Z. & Arbuthnot. (1977). *Children and books*. Dallas: Scott, Foresman.
- Swanborn, M.S.L. & deGlopper, K. (1999). Incidental word learning while reading: A meta-analysis. *Review of Educational Research*, 69 (3), 261-285.
- Thomassie, T. (1995). *Feliciana Feydra LeRoux*. Boston: Little, Brown, and Co.
- Tyler, R.W. (1969). *Basic principles of curriculum and instruction*. Chicago: The University of Chicago Press.
- Vallance, E. (2004). Seeing alternative worlds well: Three books about teaching art (in the context of a fourth): Book review. *Curriculum Inquiry*, 34 (4), 514-525.

- Van Camp, J.C. (2004). Visual culture and aesthetics: Everything old is new again... or is it? *Arts Education Policy Review*, 106. Article A123085189. Retrieved November 15, 2005, from <http://infotrac-college.thomsonlearning.com/itw/infomark>
- Vincent, J. (2005). Multimodal literacies in the school curriculum: an urgent matter of equity. Retrieved June 2, 2006, from: <http://www.formatex.org/micte2005>
- Walsh, M. (November 2003). 'Reading' pictures: what do they reveal? Young children's reading of visual texts. *Reading Literacy and Language*, 123-130.
- Wolfe, P. & Nevills, P. (2004). *Building the reading brain, preK-3*. Thousand Oaks: Corwin/Sage.
- Zacharias, M.E. (2004). Moving beyond with Maxine Greene: Integrating curriculum and consciousness. *Educational Insights*, 9 (1). Retrieved September 6, 2005, from <http://ccfi.educ.uba.ca/publication/insights/v09n01/articles/zacharias.html>
- Zemelman, S., Daniels, H., & Hyde, A. (1998). *Best practice: New standards for teaching and learning in America's schools*. (2<sup>nd</sup> Ed.). Portsmouth, NH; Heinemann.

APPENDIX A

LETTER GRANTING PERMISSION TO USE DEPAOLA ILLUSTRATION



S I M O N & S C H U S T E R

1230 Avenue of the Americas  
New York, NY 10020  
212-698-7262 • Fax: 212-698-7284  
E-Mail: edith.golub@simonandschuster.com

Edith Golub  
Permissions

September 11, 2006

Judy Nicholas  
9922 Wallace Lake Rd.  
Shreveport, LA 71106

Re: Dissertation

Dear Judy Nicholas:

You may have our permission to use, in the English language only, material in the manner and for the purpose specified in your request from the following book:

Reprinted with the permission of Simon & Schuster Books for Young Readers, an imprint of Simon & Schuster Children's Publishing Division from CHARLIE NEEDS A CLOAK by Tomie dePaola. Copyright © 1973 Thomas dePaola.

Subject to the following conditions:

Amount of Material:	illustration as submitted
Scope:	one-time use only – to be reprinted in your dissertation and in all copies to meet degree requirements including University Microfilms edition. New permission is required if the dissertation is to be later published.
Territory:	United States, its territories and dependencies, the Philippines and Canada
Credit and Copyright:	Full credit must be given to author and publisher on every copy reproduced. The title, copyright notice and date must appear on every copy reproduced exactly as it appears in our book(s).

This permission does not extend to any copyrighted material from other sources which may be incorporated in the book(s) in question, nor to any illustrations or charts, nor to poetry, unless otherwise specified above.

Sincerely,

Edith Golub  
Permissions Dept.

## APPENDIX B

### GENERAL “CHECKLIST FOR EVALUATING PICTURE BOOKS” (GALDA & CULLINAN, 2006)

#### All Picture Books

- \_\_\_\_\_ The language is rich, with interesting words used in interesting ways.
- \_\_\_\_\_ Illustrations are artistically excellent.

#### Elements of Fiction

- \_\_\_\_\_ Text and illustrations establish the mood, setting, characters, and theme of the story.
- \_\_\_\_\_ Illustrations expand on the story appropriately.
- \_\_\_\_\_ Layout and design are visually appealing.

#### Nonfiction Picture Books

- \_\_\_\_\_ Text and illustrations are accurate.
- \_\_\_\_\_ Text and illustrations are organized in an appropriate manner.
- \_\_\_\_\_ Text and illustrations are attractive, and show verve and style.

#### Picture Books of Poetry and Song

- \_\_\_\_\_ The language is lyrical.
- \_\_\_\_\_ Illustrations match the feeling established by the text.

#### *Using Children’s Nonfiction Tradebooks as Read-alouds. Moss (1995)*

- \_\_\_\_\_ Quality of literature, including integrity of the author
- \_\_\_\_\_ Interest to students

## APPENDIX C

### CRITERIA FOR EVALUATING ILLUSTRATIONS, TEXT, AND OVERALL VALUE OF PICTURE BOOKS FOR EMERGENT READERS

Book Title \_\_\_\_\_

Evaluator's Name \_\_\_\_\_

Directions: Considering a scale of 1 to 5 (inferior to superior), place a number by each statement for the book you are reviewing.

#### Child Appropriateness:

- \_\_\_\_\_ Children are the primary intended audience for the book.
- \_\_\_\_\_ The book displays respect for a child's understandings, abilities, and appreciations.

#### Visual Appropriateness:

- \_\_\_\_\_ The book essentially provides a child with a visual experience.
- \_\_\_\_\_ Collective unity of story-line, theme, or concept, developed through the pictures is apparent.
- \_\_\_\_\_ Excellence of execution in the artistic technique is apparent.
- \_\_\_\_\_ Excellence of pictorial interpretation of story, theme, or concept is displayed is apparent.
- \_\_\_\_\_ Excellence of appropriateness of style of illustration to the story, theme, or concept is apparent.
- \_\_\_\_\_ Excellence of delineation of plot, theme, characters, setting mood or information through the pictures is apparent.
- \_\_\_\_\_ Illustrations match the feeling established by the text.

#### Text Appropriateness:

- \_\_\_\_\_ The text demonstrate uniqueness in the use of language and style.
- \_\_\_\_\_ The book offers engaging writing and illustrations, inviting a child's response or participation.
- \_\_\_\_\_ The text provides stimulating presentation of facts, concepts, and ideas.

#### Overall Value:

- \_\_\_\_\_ Clarity and accuracy (when appropriate) of presentation in text and illustrations
- \_\_\_\_\_ The book is rich in visual imagery and language, with interesting pictures and words used in interesting ways.



**APPENDIX D**

**COMPREHENSION CODING SHEET FOR BOOK #1 –  
*CHARLIE NEEDS A CLOAK***

- \_\_\_ Charlie was a shepherd
- \_\_\_ he had a house
- \_\_\_ he had a big hat
- \_\_\_ he had a crook
- \_\_\_ he had a flock of sheep
- \_\_\_ he needed a cloak
- \_\_\_ his cloak was old
- \_\_\_ in the spring
- \_\_\_ he sheared his sheep
- \_\_\_ he washed the wool
- \_\_\_ he carded the wool to straighten it
- \_\_\_ he spun the wool into yarn
- \_\_\_ he wanted a red cloak
- \_\_\_ he picked berries
- \_\_\_ he boiled them over a fire
- \_\_\_ he dyed the yarn red
- \_\_\_ he put the yarn on a loom
- \_\_\_ he wove the cloth
- \_\_\_ he cut the cloth into pieces
- \_\_\_ he pinned the pieces together
- \_\_\_ he sewed them
- \_\_\_ when winter came
- \_\_\_ he had a new cloak
- \_\_\_ the sheep bit it

## APPENDIX E

### COMPREHENSION CODING SHEET FOR BOOK #2 – *CHOPSTICKS*

- \_\_\_ Chopsticks was a mouse
- \_\_\_ he lived in Hong Kong
- \_\_\_ he lived on a floating restaurant
- \_\_\_ people came in sampans (boats)
- \_\_\_ he lived on the restaurant barge
- \_\_\_ he looked for scraps of food
- \_\_\_ at the entrance were 2 pillars
- \_\_\_ on these pillars were wooden dragons
- \_\_\_ 1 of the dragons called to Chopsticks
- \_\_\_ the mouse climbed up the pillars to talk with the dragon
- \_\_\_ the dragon said he never moved an inch
- \_\_\_ dragon wanted to be free to fly over the cities and mountains
- \_\_\_ asked the mouse to help him get free
- \_\_\_ dragon told mouse to go see his maker, Old Fu
- \_\_\_ Old Fu knew the secret that would set the dragon free
- \_\_\_ mouse went over boats to the sampan of Old Fu
- \_\_\_ Old Fu knew this dragon wanted to be free
- \_\_\_ Old Fu played a tune on a wooden flute for the mouse
- \_\_\_ he told the mouse to play it for the dragon at the next full moon
- \_\_\_ the mouse played the tune
- \_\_\_ the dragon unwound himself from the pillar
- \_\_\_ Chopsticks climbed on his back
- \_\_\_ both flew up into the sky over lands and waters
- \_\_\_ when the sun peaked over the horizon they went home to sleep
- \_\_\_ the mouse slept in the dragon's open mouth
- \_\_\_ They went flying every full moon
- \_\_\_ the mouse went back to share each experience with Old Fu

## **APPENDIX F**

### **BASIC INTERVIEW QUESTIONS FOR BOTH GROUPS**

1. Can you tell me what happened?
2. Can you tell me what happened next?
3. If you were going to tell someone else about this book, what would you tell them?
4. Have you told me everything that you remember?
5. Did you like the story? Why?
6. Can you tell me what helped you remember the things that happened in the story?

#### **Questions for those who saw the pictures**

1. Can you explain what the pictures showed you about -----?
2. Tell me what you thought about the picture that showed us -----
3. Did you like the illustrations? Why?
4. Did the pictures help you understand the story? Did they help you in explaining the story after it was read to you?.
5. If you had not been able to see the pictures would you still have enjoyed this story as much?

#### **Questions for those who did not see the pictures**

1. Even though you didn't get to see the pictures can you still tell me what this story is about?
2. Name some of the things you could not see, but heard about?
3. If you had been able to see the pictures would you still have enjoyed this story?
4. Would you have liked to have seen the pictures during the story?
5. What are your feelings about not being able to see the pictures?

**APPENDIX G**

**VOCABULARY PRE-/POST-TEST FOR BOOK #1 – *CHARLIE NEEDS A CLOAK***

crook

parsnip

carded

porcelain

catalog

shepherd

pasture

cloak

briefcase

ottoman

sheared

unicycle

loom

## APPENDIX H

### VOCABULARY PRE-/POST-TEST FOR BOOK #2 – *CHOPSTICKS*

carve

patchwork

sampans

editor

horizon

pillar

pasture

lacquer

briefcase

coils

ottoman

unicycle

parsnip

## APPENDIX I

### REQUEST TO CONDUCT STUDY

Judy L. Nicholas  
9922 Wallace Lake Rd.  
Shreveport, LA 71106  
September 5, 2006

Mrs. Wanda Gunn,  
Assistant Superintendent of Curriculum and Instruction  
Caddo Parish School Board  
1961 Midway  
Shreveport, LA 71130-2000

Mrs. Gunn:

I am currently a doctoral candidate in the department of curriculum and instruction at Louisiana State University. Presently, I am in the process of working on my dissertation. In order to complete this document it is necessary that I conduct a research study. I have contacted the principals, first grade teachers, and media specialists at two local elementary schools concerning the topic of my study and they are willing to help me with this endeavor.

Please accept this letter as my request for permission to conduct a study on the relevance of and impact of visual literacy to vocabulary expansion and comprehension skills in the developmental reading program of emergent readers. I plan to conduct this study at Riverside Elementary and University Elementary with three first grade classes in each school, beginning in September 2006. As part of the study, I intend to administer an oral pre- and post-test to students, conduct observations of students as they are being read a story, and interview students and teachers. The identity of all participants will remain anonymous and all information collected will be kept confidential.

A letter explaining the study and requesting permission to participate will be sent to the families of each selected student. A copy of the permission letter is attached to this letter of request. Although all students in the class will be observed during story time, only the pre-selected students whose parents have signed letters of permission will participate in the assessment or be interviewed. Every effort will be made to minimize disruption to the educational process and to maintain the ethical principals of the study and the University's Institutional Review Board.

I appreciate your consideration of my request and would be happy to talk with you if you have any questions or need additional information.

Sincerely,

Judy L. Nicholas, M.Ed.

APPENDIX J

PARISH PERMISSION LETTER TO CONDUCT STUDY



Ollie S. Tyler  
Superintendent

**CADDO PARISH SCHOOL BOARD**  
POST OFFICE BOX 32000 • 1961 MIDWAY STREET • SHREVEPORT, LOUISIANA 71130-2000  
AREA CODE 318 • TELEPHONE 603-6300 • FAX 631-5241

September 11, 2006

District 1  
PHILIP R. GUIN

Judy L. Nicholas  
9922 Wallace Lake Road  
Shreveport, LA 71106

District 2  
EUNSLA D. HARDY

Dear Judy:

District 3  
WILLIE D. BURTON

This letter is in reference to your request to conduct a research study at Riverside and University Elementary Schools as part of your dissertation. Your request is approved based on the following professional criteria:

District 4  
CHARLOTTE CRAWLEY

- o Confidentiality of all information must be maintained.
- o Identity of all participants must remain anonymous.
- o Parental written permission must be obtained for students to participate.
- o Disruption of the educational process must be minimized.
- o Communication with the principals of Riverside and University Elementary schools.

District 5  
LOLA MAY

District 6  
TAMMY T. PHELPS

District 7  
LILLIAN PRIEST

Congratulations on your professional growth plan and good luck as you work on your dissertation.

District 8  
BONITA CRAWFORD

Sincerely,

District 9  
BARRY F. RAUHAL

Handwritten signature of Wanda Gunn in cursive.

Wanda Gunn  
Assistant Superintendent of Academics

District 10  
LARRY RAMSEY

CC: Ollie Tyler, Superintendent  
Charlotte Watson, University Elementary Principal  
Christy Terrill, Riverside Elementary Principal

District 11  
GINGER ARMSTRONG

District 12  
WILLIE HENDERSON

WG:cc

**APPENDIX K**

**PARENT PERMISSION LETTER**

Judy L. Nicholas  
9922 Wallace Lake Rd.  
Shreveport, LA 71106

Parents  
Address  
Dear :

I am currently a doctoral candidate working on my dissertation in curriculum and instruction at Louisiana State University. I am studying the significance that visual literacy may have for emergent readers and am conducting research that involves first-grade children's responses to a story and the pictures from the story, which will be read to them. In the study the Library Media Specialist would read the story aloud to the entire class. A small sample of students has been selected to take an oral (I will read to them) pre-test and post-test concerning the book. This pre- and post-test will in no way be reflected in your child's grade. It is simply a means of collecting data for my study. They will also be asked some questions, by me, about the book after class is over. The pre- and post-tests and the interview of your child will take place in the library setting, while Mrs. \_\_\_\_\_ is present.

Your child's teacher, Ms. \_\_\_\_\_ and Mrs. \_\_\_\_\_, the librarian, have agreed to help me with this study. At this time, I would like to obtain your permission to have your child participate in the small group sample study and to record your child's responses during the pre- and post-tests and the interview session. The identities of all of the children participating in this study will remain confidential. Please indicate your response on the form below and return it to Ms. \_\_\_\_\_. If you have any questions or concerns, please feel free to contact me at 686-5020.

Thank you for your cooperation and support.

Sincerely,

Judy L. Nicholas

\*\*\*\*\*

Return this portion to Ms. \_\_\_\_\_ by \_\_\_\_\_. Thank you.

My child, \_\_\_\_\_, **CAN** participate in the study.

My child, \_\_\_\_\_, **CANNOT** participate in the study.

Parent or guardian's signature: \_\_\_\_\_

Date: \_\_\_\_\_



**APPENDIX L**  
**CHILD ASSENT FORM**

School:

Group:

Class:

Child:

I understand that this is a study about how children learn to read.

I understand that if I am uncomfortable with the questions during the study, I can stop at any time without getting into trouble.

I agree to help with this study on reading by answering some questions about a story and by telling how I feel about what we did.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## APPENDIX M

### CODES FOR DATA ANALYSIS OF *CHARLIE NEEDS A CLOAK*

Background information

Charlie's opinion about making his cloak

Charlie's persona

Charlie's relationship with his sheep

Enjoyed story

Evaluate the illustrations

Express feelings and opinions

Illustrations helped in understanding

Liked illustrations

Mental images of objects used to explain story

Opinion of not seeing illustrations

Relate to characters

Understanding words without seeing them

**APPENDIX N**  
**CODES FOR DATA ANALYSIS OF *CHOPSTICKS***

Background information

Enjoyed story

Evaluate the illustrations

Express feelings and opinions

Illustrations helped you understand

Liked illustrations

Mental images of objects used to explain story

Mouse and dragon's relationship

Mouse and Old Fu's relationship

Opinion of not seeing illustrations

Relate to characters

Understanding words without seeing them

## APPENDIX O

### EXAMPLES OF TRANSCRIPTS OF INTERVIEWS WITH STUDENT-PARTICIPANTS

#### School A – (A1) – ‘Matthew’ interview transcript (10-4-06)

- I Did you like this story?  
M Yes mam.  
I Why did you like this story?  
M I like the winter. And I like to sew with my grandmother and make stuff, like a jacket.  
I Did your grandmother make you a jacket?  
M She made me a little... not a big one... she made me a little toy.  
I Can you tell me some of the things you thought about that helped you remember the story?  
M That little stick that goes around that has a little hook on it.  
I Did you learn about that today when Mrs. M. was reading the story?  
M Yes mam.  
I What helped you remember that particular thing?  
M Because I remembered the little hook and that it had a straight line.  
I Did you just remember the word that told about the object or did you just remember the picture of it?  
M I just remembered the picture of it.

- I Do you think Charlie enjoyed making this cloak?  
M Yes mam.  
I How do you know that he enjoyed making it?  
M He sewed it back and he picked all the berries and he made the yarn red.  
I How did you get the idea that he enjoyed making the cloak?  
M He always had a smile on.  
I That's a good answer. Did you like the illustrations in this book?  
M Yes mam.  
I Can you tell me a reason why you liked them?  
M Because they had nice pictures and they had nice colors. And I like how it was drawn and everything.  
I Did the pictures help you understand the story?  
M Yes mam.  
I Can you think of some parts of the story that they helped you remember?  
M When he was walking with that hook thing, it made me think about it. When he had that thing on it, made me think about it, too. I was thinking about what that kind of was and what it looked like.

#### School A – (A2) – ‘Joseph’ interview transcript (10-2-06)

- I Tell me you thought about the picture that showed you about Charlie's old cloak.  
J White? It was white? Ahh...I don't know.

I Do you think Charlie enjoyed making his cloak?  
J Yes.  
I How do you know? What did you see that told you this?  
J He had a smile while he was making it.  
I That's a very good answer. Where did Charlie live?  
J A farm.  
I And how did you know that?  
J Cause he had sheep and sheep live in a farm.

-----  
I Did the pictures help you to understand the story?  
J Yes.  
I What part of the story did they help you understand?  
J When he dyed the cloak.  
I So they helped you understand how people dye...  
J Stuff!  
I Did the pictures help to explain the story after it was read to you? After the story was read and I asked you to tell me about it, do you remember seeing any of the pictures in your head as you were telling me about the story?  
J No.  
I You don't remember any of the pictures you saw in the story when you were telling about it?  
J I looked at the sheep, a cloak, and a farm, and red stuff.  
I Did the pictures help you remember these things?  
J Yes.  
I If you had not been able to see the pictures while you listened to this story, would you have enjoyed it as much?  
J No.

School A – (A3) – ‘Chris’ interview transcript (10-3-06)

I When Mrs. M. read the story, if you had been able to see the pictures would you have enjoyed it more?  
C Yes mam.  
I So you would have liked to see the pictures today?  
C Yes mam.  
I How do you feel about listening to a story like that and not being able to see the pictures?  
C I think about other things and what the story is about.  
I So you think about other things when the story is being read when you don't get to see the pictures. Is that it?  
C I'm thinking about what they look like.  
I Oh. You're thinking in your head about how things look when you're hearing the story? That's a very good answer. Do you do that a lot when people are just telling you a story?  
C Yes mam.

School B – (B1) – ‘Beth’ interview transcript (10-2-06)

- I Can you tell me something about the story?  
B The mouse was getting in the dragon’s mouth to sleep and the mouse got to a wooden dragon. And the dragon couldn’t move.  
I Why couldn’t he move?  
B Because he was wooden. He was made out of wood.  
I If you were going to tell your friend about this story, what else would you tell them?  
B That the mouse was named... I don’t remember his name.  
I His name was Chopstick.  
B And what the dragon was made of and how the story was about the mouse and stuff.  
I What did the mouse help the dragon do?  
B Get him out and free to fly and slither all around or something.  
I And how did the mouse do that?  
B Because he goed [sic] talk to the man and the man said he always wanted to be free.

- I Did you like the pictures in this book?  
B Yes.  
I Why did you like them?  
B Cause there were things that I don’t know and I get to see in it.  
I Pictures showed you those things?  
B Yes.  
I Did the pictures in this book help you understand the story?  
B Yes.  
I What part of the story did they help you understand?  
B Probably when the mouse was sleeping in the dragon’s mouth.  
I Did you like that part?  
B Yes.

School B – (B2) – ‘Katie’ interview transcript (10-5-06)

- I If you were going to tell your friend about this story, someone who has not heard it, is there anything else you would tell her?  
K I probably wouldn’t tell them the whole entire story.  
I You wouldn’t tell them the whole story?  
K I don’t really know the whole story.  
I Is there something you remember that you might tell them that you didn’t talk to me about? Anything else that happened? What else did they do?  
K They flied [sic] off over the dark woods and the mountain. That’s all I know.  
I Did they stop flying after a while?  
K They went to sleep?  
I Where did they go to sleep?  
K The mouse went to sleep in the dragon’s mouth.
-

- I If you had to tell me some part of this story that was confusing that the pictures helped you understand better, what would that be?
- K In the first part of the story the mouse was walking somewhere and he saw the dragon.
- I So, the pictures helped you understand when the mouse met the dragon?
- K Uh huh.
- I When I said, "Explain the story to me," did you think about the pictures sometimes to help you understand the story? (Had to repeat the question because she was distracted by classmates in the other room.)
- K The pictures, ahh... like the picture of the boats in all the water at the end of the story.

School B – (B3) – ‘Anna’ interview transcript (10-2-06)

- I Do you remember the name of the story you just heard?
- A Chopsticks.
- I Can you tell me what happened in the story?
- A Chopsticks freed the dragon.
- I Do you remember how he did that?
- A He played a song of blackbird.
- I And how did he play the song?
- A He learned from Old Fu.
- 
- I When I asked you to tell me what happened in the story, what did you think about in your head?
- A What Chopsticks looked like.
- I What do you think he looked like?
- A A little mouse.
- I Did you imagine a color?
- A He was gray and had pink feet and a pink tail and pink hands.
- I You have a good imagination. Even though you didn't get to see the pictures, you were still able to tell me about this story, right?
- A Uh huh.
- I Can you name some of the things you could not see in the story but you heard about as you were listening?
- A The dragon and chopsticks and the restaurant.
- I You just pictured all of those things in your head as you heard the story?
- A Uh huh.
- I So, you know how to picture those things even though you haven't seen them in this story? You can think about what those things look like?
- A [Nods head, yes]
- I What happens when you hear about something in a story that you don't know how to see in your head because you can't see the pictures, what do you do?
- A Make up a word.
- 
- I Just from listening to this story, did you get an idea of what Old Fu looked like?
- A A chickmunk.
- I He looked like a chipmunk?

A He's a chickmunk.  
I Instead of a person? Why?  
A Cause the guy [the mouse] couldn't hear him if he was a person.  
I You mean that if Old Fu was a person he wouldn't be able to hear a mouse?  
Old Fu was a chipmunk so he could hear another animal speak?  
A Yea.  
I That's a pretty good answer, too. If you had been able to see the pictures when  
this story was read to you, do you think you would have enjoyed it more?  
A Yes.  
I Do you like to see the pictures in stories?  
A Yes.



## VITA

Judy Lavender Nicholas has been a librarian for more than 20 years. She has also taught art at the elementary school level and in city programs in Shreveport, Louisiana. She is currently in a position which provides technical support and assistance to librarians in Caddo parish. She has also taught children's literature at Louisiana State University in Baton Rouge.

Judy received her Bachelor of Science in art education from Louisiana State University, with a minor in English, in 1973. In 1980 she was certified in school library science at Louisiana State University in Shreveport. In 1999 she received a Master of Education degree from Louisiana State University in Shreveport, with a concentration in library science. Her thesis topic was *Modern Authors Who Are Promoting the Culture and Folklife of Louisiana*. She received a Master of Educational Administration from Centenary College of Louisiana in Shreveport in 2004. An Education Specialist Certification in Reading was received in 2005 from Louisiana State University, Baton Rouge.

Judy presently resides in Shreveport, Louisiana with her husband.