Explicit Instruction in Story Structure: Effects on Preschoolers' Listening Comprehension (Story Grammar).

Joanne L. Ratliff

Louisiana State University and Agricultural & Mechanical College

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EXPLICIT INSTRUCTION IN STORY STRUCTURE: EFFECTS ON PRESCHOOLERS' LISTENING COMPREHENSION

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EXPLICIT INSTRUCTION IN STORY STRUCTURE:
EFFECTS ON PRESCHOOLERS' LISTENING COMPREHENSION

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
Education

by
Joanne L. Ratliff
B.S., Wright State University, 1974
M.Ed., Wright State University, 1983
August 1986
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ABSTRACT

The purpose of the present study was to examine whether instruction in story structure improved preschoolers' comprehension of stories. Preschool children were pretested on: (a) oral story production, (b) story rule knowledge (structural elements), (c) free recall of a story, and (d) probed recall. Students who were identified as less skilled by these four measures were randomly assigned to one of three groups: instruction, story, or control. The instruction group received two weeks of explicit instruction in story structure based on a story rule format. The story group listened to the same stories and the control group received no treatment. Following instruction, posttests and delayed tests (10 days) were administered. A complex pattern of results for the four measures occurred. Results for the oral story production, story rules, and probed recall measures indicated there were group differences and repeated time of test differences (pre, post, and delayed) for the story rules and free recall measures. In addition, the instruction group performed differentially on the story rules and probed recall measures as compared to the other two groups. Taken together, the results indicate that explicit instruction in story structure provides young children
with an organizational framework for comprehending stories, and may improve their story production abilities.
Chapter 1

INTRODUCTION

Comprehension of stories is a complex process. Indeed, Pearson (1984) described several processes which are involved in understanding what is read. He argued some processes in comprehension depend on characteristics of the text that is being read. For example, if the text presents information in a well organized fashion, readers remember more of that information than if the information is presented in a disorganized fashion (Thorndyke, 1977). Pearson suggested that other processes in comprehension depend on knowledge that readers bring to the text. One example of reader knowledge which he argued influences comprehension is what readers may know about the structure of stories (Stein & Glenn, 1979; Mendler & Johnson, 1977). Story structure refers to elements included in stories, such as setting, characters, plot, and resolution. Story structure also refers to how those elements are organized in a story. For example, characters have problems which they set out to solve. Research has shown that readers who know more about the structure of stories remember stories better than readers who have less knowledge about the structure of
stories (Mandler & Johnson, 1977). One inference that could be drawn from this research is that if children were taught about the structure of stories, then their comprehension of stories would improve. The purpose of this study is to investigate the effects of explicitly teaching preschool children to recognize the elements included in a well-formed story on their ability to remember and answer questions about stories.

Rationale

An assumption underlying some of the recent approaches to story understanding is that stories have a consistent identifiable structure. There are at least four different viewpoints which have been used to examine stories and identify their structures. One viewpoint from which story structure elements have been examined is the literary criticism approach. Lukens (1982) proposed a list of seven major literary elements included in stories. She suggested these concepts and terms can be taught to children, particularly in the upper grades, to enhance their understanding and appreciation of stories.

Another approach for examining the structural elements of stories has arisen from studies examining
fantasy narratives. Propp (1968) analyzed and compared 100 fairytales according to their structural elements. He argued these tales were composed of action elements, or "functions". Propp defined "function" as an act of a character. Prince (1982) argued that a minimal story consists of three chronologically ordered events or units. The first event must precede the second event and the second event must cause the third event. Applebee (1978), described a story as having a beginning and an ending which resolves some problem. Botvin and Sutton-Smith (1977) used a system similar to Propp's, to analyze fantasy narratives composed by children. Their minimal definition of a story consisted of a series of actions which occur in a more or less predictable manner.

A third view to story structure has arisen from the approach that stories are understood much the same way as problems are solved (Black, 1977; Black & Bower, 1980; Brewer & Lichtenstein, in press; Bruce & Newman, 1978). According to this view, a story consists of: (a) conflict, (b) character's feelings and thoughts, and (c) the point of view taken by the narrator (author). Readers are guided by conceiving of the
characters as trying to solve a problem (conflict) and achieve a goal.

The fourth approach which has been used to examine the structural elements of stories is the story structure, or story schema approach. Botvin and Sutton-Smith (1977) stated that the coincidence between the attributes found in children's narratives and the formal attributes found in fairy tales, as set forth by Propp (1968), indicates that at some point in learning to compose stories, children employ a narrative schema that is similar to tales they have heard and read. Several researchers have described this narrative schema in the form of story grammars (Mandler & Johnson, 1977; Rumelhart, 1975; Stein & Glenn, 1979; Thorndyke, 1977). A story schema can be defined as an idealized internal representation of the parts of a typical story and the relations among those parts (Mandler & Johnson, 1977). A story grammar, on the other hand, is a set of rules that will define both a text's structure and an individual's mental representation of story structure (Whaley, 1981).

An early grammar, developed by Rumelhart (1975), served as a basis for the subsequent development of later story grammars. Rumelhart's grammar is based on
syntactic rules which generate the internal structure of stories and a corresponding set of semantic interpretation rules. Thorndyke (1977) developed a story grammar similar to Rumelhart's rules, but added more detail. For example, Rumelhart's grammar states that a story is comprised of a setting plus an episode. Thorndyke's first rule states that a story is comprised of a setting plus a theme, a plot, and a resolution. A third grammar was developed by Mandler and Johnson (1977). Their grammar has a general framework including hierarchical ordering of story elements with basic components related causally or temporally. In the fourth grammar developed by Stein and Glenn (1979) "and", "then", and "cause" links are added in the grammar hierarchy. Figure 1 presents the six story elements included in the Stein and Glenn grammar and describes each element in detail. The order in which these elements occur in Figure 1 is the order prescribed for a well formed story, as defined by a grammar. Figure 2 is an example of a well formed story.

The story schema approach not only has implications for how stories are organized, but also has implications for how stories are understood.
Figure 1

Categories and Types of Causal Relations Occurring in a Simple Story *

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SETTING</td>
<td>Introduction of the protagonist; contains information about the social, physical, or temporal context in which the story events occur.</td>
</tr>
<tr>
<td>allow</td>
<td></td>
</tr>
<tr>
<td>allow</td>
<td></td>
</tr>
<tr>
<td>episode</td>
<td></td>
</tr>
<tr>
<td>2. INITIATING</td>
<td>An action, an internal event, or a physical event that serves to initiate the story line or cause the protagonist to respond emotionally and to formulate a goal.</td>
</tr>
<tr>
<td>EVENT</td>
<td></td>
</tr>
<tr>
<td>cause</td>
<td></td>
</tr>
<tr>
<td>3. INTERNAL</td>
<td>An emotional reaction and a goal, often incorporating the thought of the protagonist that cause him to initiate action.</td>
</tr>
<tr>
<td>RESPONSE</td>
<td></td>
</tr>
<tr>
<td>cause</td>
<td></td>
</tr>
<tr>
<td>4. ATTEMPT</td>
<td>An overt action or series of actions, carried out in the service of attaining a goal.</td>
</tr>
<tr>
<td>cause</td>
<td></td>
</tr>
<tr>
<td>or enable</td>
<td></td>
</tr>
<tr>
<td>5. CONSEQUENCE</td>
<td>An event, action, or endstate, marking the attainment or nonattainment of the protagonist's goal.</td>
</tr>
<tr>
<td>cause</td>
<td></td>
</tr>
<tr>
<td>6. REACTION</td>
<td>An internal response expressing the protagonist's feelings about the outcome of his actions or the occurrence of broader, general consequences resulting from the goal attainment or nonattainment of the protagonist.</td>
</tr>
</tbody>
</table>

* Stein and Glenn, 1979
Figure 2
Example of a Well Formed Story *

| Setting | 1. Once there was a big gray fish named Albert.  
2. He lived in a big city pond near the edge of a forest. |
|-----------------|-------------------------------------------------|
| Initiating Event | 3. One day, Albert was swimming around the pond.  
4. Then he spotted a big juicy worm on top of the water. |
| Internal Response | 5. Albert knew how delicious worms tasted.  
6. He wanted to eat one for his dinner. |
| Attempt | 7. So he swam very close to the worm.  
8. Then he bit into him. |
| Consequence | 9. Suddenly, Albert was pulled through the water into a boat.  
10. He had been caught by a fisherman. |
| Reaction | 11. Albert felt sad.  
12. He wished he had been more careful. |

* Stein and Policastro, in press
Research has shown that story schema plays a role in the processing of story information. For example, a schema for stories, represented by the story grammar, enables the reader to attend to certain aspects of the incoming story material while keeping track of what has gone on before (Mandler & Johnson, 1977; Stein & Glenn, 1979). The schema alerts the reader when a portion of the story is complete and can be stored in memory, or whether the information should be held until more can be added (Rand, 1984). Story schema also plays an important part in retrieval of story information. In order to recall the story information, the reader uses the framework of typical stories found in his internalized schema for stories. The more a story conforms to an ideal structure, the better the story is recalled (Mandler, 1978). In addition, the basic elements defined in the grammar will be recalled more frequently than elaborations and details because they are higher in the story structure hierarchy.

It is clear that some disagreement exists about the number of structural elements that are needed in order to consider a text a story. Two of the definitions (Prince, 1982; Botvin & Sutton-Smith, 1977) are the least complex. Their story definitions do not
include a goal element. Three of the story grammars (Rumelhart, 1975; Stein & Glenn, 1979; Thorndyke, 1977) require stories to include goal directed sequences in order to be labeled a story. The goal directed view of story structure defines a story in a similar manner to the definition of the story grammars. The present study employed the story schema definition of a story and its structural elements for two reasons. First, this approach ties story structure knowledge to understanding and comprehending stories. Since a goal of this study was to examine methods of improving comprehension, the story schema approach seemed beneficial. Second, this approach has previously been applied to instruction with success.

Research on Story Structure Instruction

Based on studies which found that comprehension and recall of stories was better when readers have well developed story schema (Mandler & Johnson, 1977; Stein & Glenn, 1979), researchers recently have begun to study the effects of instructing readers who did not have a well developed internalized structure for stories (Buss, Ratliff, & Irion, 1985; Fitzgerald & Teasley, 1985; Fitzgerald & Spiegel, 1983; Gordon &
Braun, 1983; Singer & Donlan, 1982). Several studies have shown that students who were explicitly instructed in story structure elements and organization of stories improve in their ability to recall and answer questions about stories. Buss, Ratliff, and Irion (1985) instructed third grade children in story structure elements and examined the effects of this instruction on children's story comprehension. All children were pre-, post- and delay-tested on knowledge of story structures and amount of story recall. After 10 days of instruction, results indicated that instruction in story structure increased knowledge of story structure and comprehension of stories.

Fitzgerald and Spiegel (1983) instructed fourth grade readers in narrative structure if pretest results indicated a lack of story structure knowledge. Instruction was conducted in two phases: the first consisting of six instructional periods over a two-week period, and the second consisted of instruction administered periodically over a five-week period. On comprehension posttests, story structure instruction was found to have a strong positive effect on reading comprehension.
Gordon and Braun (1982) used fables and a macrocloze procedure to instruct fifth-grade readers on the structural elements of a story. Instruction consisted of 15 sessions over a five-week period. Results from written recalls of both familiar and unfamiliar text indicated that children instructed in story structure employed the structure not only for recall of familiar text, but also for comprehension and recall of new and unfamiliar stories.

Singer and Donlan (1982) instructed eleventh-grade readers in story structure using schema general questions for each story element defined in a grammar. The students were taught to derive story specific questions from schema general questions as they read short stories. Six stories were read over a three-week period. Criterion-referenced tests administered after each story indicated significant gains in reading comprehension by the group receiving instruction in making schema general questions story specific.

Instruction in story structure has also been found to improve children's story writing. Fitzgerald and Teasley (1985) instructed fourth-grade readers, who were identified as lacking a keen sense of narrative structure, in story constituents and their
interrelations. Instruction in narrative structure had a strong positive effect on organization in story writing. Also, overall creativity was also enhanced.

The results of these studies indicate that direct instruction in story structure improves comprehension and writing abilities of school age readers. Only one study (Dreher & Singer, 1980) found nonsignificant results after instructing fifth-grade subjects in story structure. However, the results may have been attenuated because the researchers did not pretest their subjects to determine the existing level of story structure knowledge, and thus determine who would benefit from instruction.

Although these instructional studies have been conducted with school age readers, other researchers have examined preschoolers' and prereaders' story knowledge or sense of story (Dunning & Mason, 1984; Morrow, 1985, 1984; Nurss, Hough, & Goodson, 1981; Pelligrini & Galda, 1982; Roser & Martinez, 1985). These studies found that even young children are beginning to develop story knowledge.

Nurss, Hough, and Goodson (1981) examined four-year-old children's oral compositions for presence of a main character, sequence of events, indications of
feelings, setting, plot, and story time. They found that sequence of events was the most well developed story element. All children told a sequence of events after viewing a wordless picture book. However, none of the subjects told complete stories (analyzed for presence of a main character, sequence of events, indication of feelings, setting, plot, and story time). Despite this poor performance, being able to tell a story, even an incomplete story as defined by a grammar, is an indication that four-year-olds have some intuitive story knowledge.

Roser and Martinez (1985) transcribed preschool children's language responses—comments, questions, and answers about different aspects of text—that were recorded over a 10 month period. Transcriptions were analyzed and categorized into types of story talk and focus of story talk. They found that children's story talk, after oral reading, focused on story structure elements, indicating some intuitive knowledge of story structure.

Despite not teaching children about story structure in an explicit way, several studies involved instruction which could have influenced young children's knowledge of stories. For instance,
Pelligrini and Galda (1982) assessed the effects of three modes of story reconstruction training on the development of kindergarten children's story comprehension. On separate occasions, three stories were read to three groups of children. After hearing the story, one group, the fantasy play group, verbally reconstructed the story through peer interaction. The discussion group also had children reconstruct the story verbally, but as the result of adult questions. They did not engage in fantasy reconstruction or accommodate to the views of the others in the discussion group. Children in the drawing group reconstructed the story graphically. Children were given a 10 question multiple-choice test and a recall task. The recalls were scored for constituents according to Thorndyke's (1977) grammar, and for sequence of constituents recalled in their immediate temporal order. Results indicated that the children in the fantasy play group performed better on the comprehension measures.

Dunning and Mason (1984) assessed whether the way in which a teacher focuses on the connections between story characters' actions and their underlying internal states could influence children's retellings after...
hearing a story. They found that the teacher's story presentation did make a difference as measured by completeness of story grammar (how many story grammar elements were included in the retelling), order of story grammar components (points if the story grammar components were retold in sequence), and the quality of children's story retellings.

Morrow (1984, 1985) examined whether questions based on story structure would improve kindergartner's listening comprehension. One treatment group discussed stories read to them based on teacher questions that focused on story structure elements of setting, theme, plot, and resolution. A second group of children heard stories and discussed them based on teacher questions of literal, inferential, and critical content. A third group heard stories and discussed them based on a combination of story structure questions and the traditional comprehension questions of literal, inferential, and critical content. Posttest results were obtained by reading an unfamiliar story to the children, followed by oral questions consisting of five story structure questions and five traditional comprehension questions. Posttest results indicated that the group receiving combination questions
performed better on the comprehension measure; however, on a one-month delayed test, the group receiving only story structure questions performed better on the comprehension measure.

Ratliff (1985) explicitly instructed preschool children in story structure elements. In this study, four-year-olds were pretested to assess their story structure knowledge and listening comprehension ability on five measures: (a) story production, (b) picture arrangement, (c) story rules knowledge (structural elements), (d) free recall of a story, and (e) probed recall. Subjects who were lacking in story structure knowledge, as determined by a cut-off score of 15 on the total of the five tasks, were assigned to either a treatment group that received explicit instruction in story elements, or one of two control groups. The first control group, judged to be less skilled in story knowledge and listening comprehension, received no treatment. The second control group, judged to be skilled in story knowledge and listening comprehension, also did not receive treatment. Subjects in the instructional group received seven periods of instruction that focused on eight rules about stories that were adapted from a grammar (Stein & Glenn, 1979)
to a rule format by McGee and Tompkins (1981). These rules included that (a) stories have characters, stories have a setting: (b) when and (c) where, (d) stories have a problem, (e) stories have a solution, and (f), (g), and (h) stories have a beginning, a middle, and an end. After explicit instruction of a rule, the children participated in reinforcement activities such as puppetry and book making. Following instruction, all children were posttested on the same five measures used during pretesting. Posttest results indicated that the effects of instruction were significant in improving performance on both the story rules questions (structural elements) and the probed recall tasks. The present study is based on Ratliff (1985), but has three major changes: (a) addition of a delayed test to determine the subsequent use of the instructed story elements as well as to ascertain the generalizability of the methods used for instruction; (b) addition of the story group who listened to the stories used during instruction, in order to determine the effects of exposure to well formed stories on story structure knowledge; and (c) revision of the instruction--one additional day of instruction,
changing the sequence of the story rule presentation, and addition of more story production activities.

In summary, preschool children have begun to acquire knowledge of how stories are organized, what elements are included in a story, and how those elements are ordered. However, not all young children enter school with the same abilities. The children in the present study, as well as in Ratliff (1985), were all enrolled in a preschool program for economically disadvantaged. Researchers have reported social class differences in the kinds of behaviors parents exhibit in reading to their young children (Heath, 1982; Ninio, 1980). Others have attributed differences in school performance in reading achievement to characteristics of the literacy backgrounds of children (Heath, 1982; McCormick & Mason, in press), therefore it was assumed that children in this preschool might not have well developed story structure knowledge, and would benefit from the instruction. It may be important for young children's future reading development to help them acquire more explicit knowledge about stories and their structure as early as possible. Indeed, research has shown that young children in kindergarten and preschool have benefitted from instruction based on story
structure (Morrow 1984, 1985), and from explicit instruction in story structure (Ratliff, 1985). The focus of the present study is to extend research on story structure knowledge instruction.

Research on Listening to Stories

Although research has shown both school age and preschool children benefit from explicit instruction in story structure, the results of these studies could be due to a confounding factor. That is, in all the instructional studies, children were exposed to well formed stories. In most cases, the stories were short and conformed perfectly to a story grammar definition of story structure. It could be that listening to or reading well formed stories produced enhanced comprehension rather than the explicit instruction.

Home literacy research has suggested that reading to a preschool child is a valuable activity. Durkin (1966), Clark (1976), and Bissex (1980) found that children who were successful in school were read to at home. By reading aloud to their children, parents assist in developing literacy concepts such as book handling and print awareness (Clay, 1979; Smith, 1978), structuring the reading event (Ninio & Bruner, 1978;
Snow & Goldfield, 1982), and matching the orthography with sounds (Schickedanz, 1981). Being read to can also have an important influence on a child's attitude toward reading (Hiebert, 1981).

In summary, although children can learn to read without having been read to, there is evidence that such experience has numerous facilitative effects on literacy development. It would seem to be a reasonable assumption that listening to stories could familiarize children with certain literary conventions and serve to develop the child's schema for stories.

Purpose

The purpose of this study was to examine the effects of explicit instruction in story structure on the immediate and delayed listening comprehension of preschoolers. Explicit story structure instruction focused on teaching children eight story rules adapted from a story grammar (McGee & Tompkins, 1981; Tompkins, 1979). The results of the explicit instruction were compared to the results of a group who just listened to stories, and to a control group. Three groups of approximately 15 children were included in the study. One group of less skilled children in story structure
knowledge and listening comprehension comprised the instructional group. A second group of less skilled children in story structure and listening comprehension heard all of the stories read to the instructional group, but did not participate in any of the rules instruction or in the story related activities. This group was included to examine the effects of exposure to well formed stories on the listening comprehension and story knowledge of prereaders. Finally, a third group of unskilled children in story structure knowledge and listening comprehension received neither instruction nor story reading. All students were pretested on two listening comprehension measures--(a) free recall and (b) probed recall of a story--and two story knowledge measures--(c) story production and (d) story rules knowledge. Students were posttested, immediately after the instructional phase, using the same four measures used at pretesting. In addition, all students were posttested again 10 days after the first posttest to ascertain the generalizability of the instruction as well as the subsequent use of the instructed story elements.

Hypotheses

The following hypotheses were tested:
1. After the treatment phase, children instructed in story structure will receive higher ratings on their story productions than either a group receiving oral story reading or a group receiving no treatment.

2. After the treatment phase, children instructed in story structure will correctly answer more questions about story rules than either a group receiving oral story reading or a group receiving no treatment.

3. After the treatment phase, children instructed in story structure will recall more ideas after listening to a story than either a group receiving oral story reading or a group receiving no treatment.

4. After the treatment phase, children instructed in story structure will correctly answer more questions after listening to a story than either a group receiving oral story reading or a group receiving no treatment.
Chapter 2

REVIEW OF THE RELATED LITERATURE

The purpose of this study was to examine the effects of explicit instruction in story structure and listening to stories on the listening comprehension of preschoolers. The first portion of the review of the literature delineates the terminology used in story structure research. The second portion of the review of literature reviews how stories have been analyzed from four different viewpoints. The third portion of the review of the literature delineates the research on story schema in four sections: (a) the development of story grammars, (b) the influence of story schema on comprehension and recall, (c) the effects of instructing children in story structure and its effect on comprehension of stories, and (d) story structure knowledge in prereaders. The fourth portion of the review focuses on a variety of instructional techniques that have been reported in the literature that directly focus on enhancing story structure knowledge. Finally, this literature review includes research investigating the effect of reading stories to young children. This portion is included in order to delineate what may be the effects of reading well formed stories to children who lack story structure knowledge.
Terminology

Although much of the literature uses the terms "story schema" and "concept of story" interchangeably, it may be of value to more clearly define those terms for the purpose of this study. Stein and her colleagues (Stein & Policastro, 1982; Stein & Trabasso, 1981) define a story concept as those aspects of story knowledge which are used to make decisions about what constitutes a story. In contrast, they argue story schema includes all knowledge related to stories. They further state that the knowledge of stories that a child has may or may not be used when deciding what constitutes a story or when composing a story.

Applebee (1978) interchanged the terms "concept of story" and "sense of story" when discussing a structured set of expectations that children have about stories. In examining children's compositions, he found that children create stories with more complex organizational structures as they get older and that their compositions more closely conform to the structure of a narrative with increasing age. He concluded that children's concept of story grows firmer with age as their experience with stories increases.
The present study will use the term "story schema" to mean children's internalized knowledge about the structure of stories. A story grammar is a concrete representation of the structural elements or categories of story information thought to be included in a story schema as well as relations which occur among those categories (Stein & Glenn, 1979).

Analysis of Narratives

Several approaches have been used to analyze the structural elements of stories. This section of the review of the literature delineates four of those approaches: (a) literary criticism, (b) fantasy narrative analysis, (c) understanding stories as problem solving or goal directed, and (d) story schema. The purpose of examining these approaches is to build a framework for the methods used in the present study.

The first approach to analyzing the structure of stories is the literary criticism approach. Lukens (1982) suggests seven literary elements are included in stories: (a) character, the person, animal, or object involved in the action of the story; (b) plot, the problem requiring some action by the character; (c) setting, when and where the story takes place;
(d) theme, the idea that connects the other elements in the story; (e) point of view, the story telling perspective; (f) style, the use of language by the author to create an effect; and (g) tone, using a particular style to convey the feelings of the author. Lukens suggests teaching these elements to children to enhance story understanding, as well as an appreciation of stories.

A second approach to analyzing the structure of stories is the fantasy narrative approach. Several theorists have examined fantasy narratives in order to describe their structure. One aspect of story structure that has been studied using this approach is plot. Aristotle stated that the "fable" or plot is the governing element of narrative (Butcher, 1955). The types of actions that occur, or plot, was also examined by Propp (1968). When analyzing structures in 100 Russian fairy tales, Propp identified 31 main types of actions that might occur in such stories; however, not all functions must occur in a single tale. He defined these action elements as "functions", or an act of a character. Each of the 31 functions was identified according to its significance for the course of events, independent of the fulfillment of the function or who
brings about the fulfillment. For example, a person who helps the hero satisfy a need can vary from tale to tale. The helper could be a friend or a stranger and the underlying action remains the same. Propp defines plot as linked functions. He argues that two functions are mandatory elements of stories: (a) lack, where one character of a group or family lacks or desires something, and (b) villainy, where the villain causes harm or injury to a member of the group or family. From his analysis, Propp concluded that the number of basic functions usually appear in a particular order, making another required element. For example, help cannot be given without some preexisting need for it, thus order grows out of the logic of events, not convention.

Prince (1982) defined plot in terms of events. An event is defined as the basic unit of narrative discourse and the selection and ordering of events is the task of plot construction. A unit is any event which can be expressed as a sentence. Sentence connectors are either causal or temporal. Plot construction selects and orders the events into a story. A "minimal story" is defined by Prince as consisting of three chronologically ordered events in
which the first event must precede the second in time. The second event precedes the third but also causes the third event to occur. The third event must be the inverse of the first event. The following is an example of Prince's minimal story: Peter was sad. Then Peter got a new toy. As a result, Peter was happy.

Todorov (1971) distinguishes five elements of narrative: (a) a state of equilibrium, or satisfaction, at the outset, (b) a disruption or complication of the equilibrium, (c) recognition of the disequilibrium state by the protagonist, (d) an action aimed at repairing or remedying the disruption, and (e) a reinstatement of the initial equilibrium. He argues that a narrative must have all five elements. A tale that begins in disequilibrium or one that ends in tragedy is an incomplete narrative.

At least two researchers have examined fantasy narratives created by children. Applebee (1978) described a six stage developmental scale for complexity, or imposition of structure, for examining the plots of children's stories. These progressively complex stages are: (a) kegs, immediate perceptions with few links; (b) sequences, concrete and factually similar perceptions without causality; (c) primitive
narratives which contain a concrete central situation; (d) unfocused chains, connected incidents that lack focus to the story; (e) focused chains containing a main character and a series of events; and (f) narratives, in which incidents develop from the previous action in the story and elaborate a new aspect of the theme. The narrative also contains a climax. A sense of story, as described by Applebee, must have a beginning and an ending that resolves the problem.

Botvin and Sutton-Smith (1977) also analyzed fantasy narratives, composed by children, using a system similar to Propp's (1968). Their definition of a story included a series of actions, temporally or causally related, which occur in a predictable manner. The relations between story events were not specified, nor was it specified if alternative sequences can occur in stories. After examining the structural complexity of children's story productions, they found that children were able to compose simple narratives as early as age five. Results of their study indicated that the structural complexity of children's fantasy narratives progressively increases with age.

A third approach to understanding the structure of stories is derived from theories of story understanding.
from a goal directed view (Black, 1977; Black & Bower, 1980; Brewer & Lichtenstein, in press; Bruce and Newman, 1978). This approach has the underlying assumption that understanding stories is similar to problem solving (Black, 1978). In addition, knowledge held by both reader and writer subtly influences comprehension. Two factors that are considered are (a) the relationship between the author and the reader, and (b) their goals and beliefs. The structure of a story is described by three elements—conflict, character's feelings and thoughts, and the point of view taken by the author (who the narrator is and how he relates to the characters and events in the story). Black, Turner, and Bower (1979) found that narratives with a consistent point of view were more coherent than those with a change in point of view. They found that subjects read consistent point of view stories faster than stories with a change in point of view, and remembered them better. Bower (1978) found that if a reader conceives the main character as trying to solve a problem, he uses that as an organizational framework for interpreting actions and events in a story for deciding what is relevant and important, and for inferring what must have occurred between the lines and
why. The character's problem provides the reader with a point of view that influences the way he interprets the story and thus the meaning derived from the text. A problem solving approach, inferring that all actions of the protagonist are intentional, is a crucial element in story understanding (Black, 1977).

The fourth approach to examining the structure of stories is the story schema approach. Botvin and Sutton-Smith (1977) state that the similarity of the attributes in children's narratives and the attributes found in fairy tales, as defined by Propp (1968), indicates that at some point in learning to compose stories, children employ a narrative schema similar to stories they have heard. A narrative story schema is an idealized internal representation of the parts of a typical story and the relations among those parts (Mandler & Johnson, 1977). Recent researchers have described this story schema in the form of a story grammar (Mandler & Johnson, 1977; Rumelhart, 1975; Stein & Glenn, 1979; Thorndyke, 1977). A story grammar is a set of rules that define both a text's structure and an individual's mental representation of story structure (Whaley, 1981). In other words, story grammars are a concrete representation of a story
schema. Although the four grammars (Mandler & Johnson, 1977; Rumelhart, 1975; Stein & Glenn, 1979; Thorndyke, 1977) differ somewhat, they share some similarities. In general, the grammars define a story as well formed if they include a setting (time, place, and characters), a theme (a goal or problem faced by the main character), at least one plot episode (an event in which the main character tries to attain a goal or solve a problem), and a resolution (the attainment of the goal or the resolution of the problem). The differences of the four grammars will be explored in the next section.

It is clear that there are at least four perspectives from which to examine the structural elements in a story. Differences among the perspectives include the number of elements that are necessary to define a specification of text as a well formed story. However, in general, from most perspectives, a text must include a character, an event which triggers action on a problem or a goal, an action of a character and a resolution of the triggering action. The present study used the approach of defining story structure from the story schema perspective. This perspective was selected because it
links story structure and knowledge of story structure (schema) to the comprehension of stories, a goal of the instruction incorporated in this study. The remainder of the review will focus on the development of story grammars as well as current research that has involved story structure knowledge development in children.

Story Schema Research

The story schema is a set of expectations about the internalized structure of stories that make comprehension and recall more efficient (Mandler & Johnson, 1977; Stein & Glenn, 1979). Research in information processing suggests that a schema for stories enables readers to recall more specific elements in a story (Bartlett, 1932; Mandler & Johnson, 1977). The following section of the review of the literature will examine research on a schema for stories.

The Development of Story Grammars

Story grammars are a concrete representation of a story schema (Whaley, 1981). Four grammars have been developed which identify the structural elements in stories and how they are organized (Mandler & Johnson,
The first of these grammars to be developed (Rumelhart, 1975) served as a base for the subsequent development of the three later grammars. His grammar is based on eleven syntactic rules which generate the internal structure of stories and a corresponding set of semantic interpretation rules which determine the semantic representation of the story. Figure 3 presents Rumelhart's grammar. Rumelhart described his grammar as a systematization of Propp's (1968) analysis of Russian folk tales. The rules were designed to capture the relations among the structures developed by Propp.

Thorndyke (1977) developed a story grammar with rules similar to Rumelhart's rules. Figure 4 displays Thorndyke's grammar. Thorndyke focused on a more abstract level of structure: how common features of narrative text organization influence recall of entire propositions and sets of propositions rather than analyzing the content of individual propositions as Rumelhart did. For example, Rumelhart, in rule one, stated that a story is a setting (a statement of the time and place of a story as well as an introduction to
Figure 3
Rumelhart's Syntactic Rules and Semantic Interpretation Rules

(1) Story -> Setting + Episode
=> ALLOW (Setting, Episode)

(2) Setting -> (States)*
=> AND (State, state, ....)

(3) Episode -> Event + Reaction
=> INITIATE (Event, Reaction)

(4) Event -> {Episode | Change-of-state | Action | Event + Event}
=> CAUSE (Event 1, Event 2) or ALLOW (Event 1, Event 2)

(5) Reaction -> Internal Response + Overt Response
=> MOTIVATE (Internal-Response, Overt-Response)

(6) Internal Response -> {Emotion | Desire}

(7) Overt Response -> {Action | Attempt}* 
=> THEN (Attempt 1 | Attempt 2....)

(8) Attempt -> Plan + Application
=> MOTIVATE (Plan, Application)

(9) Application -> (Preaction)* + Action + Consequence
=> ALLOW (AND (Preaction, Preaction....), 
{CAUSE | INITIATE | ALLOW} (Action,Consequence))

(10) Preaction -> Subgoal + (Attempt)*
=> MOTIVATE [Subgoal, THEN (Attempt,...)]

(11) Consequence -> {Reaction | Event}
Figure 4

Thorndyke's Grammar Rules for Simple Stories

(1) STORY → SETTING ' + (THEME + PLOT + RESOLUTION)
(2) SETTING → CHARACTERS + LOCATION + TIME
(3) THEME → (EVENT)* + GOAL
(4) PLOT → EPISODE*
(5) EPISODE → SUBGOAL + ATTEMPT* + OUTCOME
(6) ATTEMPT → EVENT*, EPISODE
(7) OUTCOME → EVENT*, STATE
(8) RESOLUTION → EVENT, STATE
(9) SUBGOAL, GOAL → DESIRED STATE
(10) CHARACTERS, LOCATION, TIME → STATE
its main characters) plus an episode (the rest of the story). The first rule of the Thorndyke grammar stated that a story is a setting (location, time, main characters) plus a theme (general focus to which the plot adheres, goal), a plot (indefinite number of attempts to achieve the goal) and a resolution (final result of the story). Deletion of a few structural components simplifies this grammar in comparison to the grammar of Rumelhart. This grammar characterizes a narrative with a single goal and a single protagonist. The third grammar, developed by Mandler and Johnson (1977), describes a general framework including hierarchical ordering of story elements with basic components related causally or temporally. This grammar is also based on Rumelhart's (1975) story structure. Their grammar is presented in Figure 5. They defined a story as a simple reactive sequence if there is an emotional reaction and response of the protagonist. Their definition does not require goal motivated events in order to characterize text as a story, as other definitions of stories from three grammars do. The Mandler and Johnson grammar broadened the range of stories to which the analyses could be applied. In addition, their grammar specified the
Mandler and Johnson's Rules for a Simple Story Grammar

FABLE --> STORY AND MORAL

STORY --> SETTING AND EVENT STRUCTURE

SETTING --> STATE* (AND EVENT*), EVENT

STATE* --> STATE ((AND STATE)*)

EVENT* --> EVENT [[(AND, THEN, CAUSE) EVENT]*]

EVENT STRUCTURE --> EPISODE ((THEN EPISODE)*)

EPISODE --> BEGINNING CAUSE DEVELOPMENT CAUSE ENDING

BEGINNING --> EVENT, EPISODE

DEVELOPMENT --> SIMPLE REACTION CAUSE ACTION, COMPLEX REACTION CAUSE GOAL PATH

SIMPLE REACTION --> INTERNAL EVENT ((CAUSE INTERNAL EVENT)*)

ACTION --> EVENT

COMPLEX REACTION --> SIMPLE REACTION CAUSE GOAL

GOAL --> INTERNAL STATE

GOAL PATH --> ATTEMPT CAUSE OUTCOME, GOAL PATH (CAUSE GOAL PATH)*

ATTEMPT --> EVENT*

OUTCOME --> EVENT*, EPISODE

ENDING --> EVENT* (AND EMPHASIS), EMPHASIS, EPISODE

EMPHASIS --> STATE
structures in enough detail that their use doesn't rest on the intuitive knowledge of the user. Additionally, the relations between the underlying structures of stories and their surface structures were specified. Their grammar is designed to represent the structure of a simple story, or a story with one protagonist. Johnson and Mandler (1980) extended their grammar so it could incorporate more than one character and more than one goal. This subsequent grammar defined complex stories in which a number of episodes may be embedded.

The fourth grammar, developed by Stein and Glenn (1979), adds "and", "then", and "cause" connectors between episodes to the grammar developed by Rumelhart (1975). (Their grammar was presented in Figure 1. See Chapter 1.) They specified the variety of causal links that occur within each category of structural elements and between episodes of a story. They also specified the structural variations that can occur within a single episode. Category distinctions were deleted, new ones added, and broadened to include more types of information in certain categories. One reason for changing the categories of Rumelhart was that Stein and Glenn attempted to combine the semantic and syntactic
story structures into one structure (grammar) rather than identifying them separately as Rumelhart did.

In summary, story structure knowledge, or a schema for stories, is the internalized representation of a story grammar. Teaching a story grammar to children may enhance their schema for stories. The present study will use the Stein and Glenn grammar, adapted to a story rule format (McGee & Tompkins, 1981), during the instructional phase.

Effects of Story Structure Knowledge on Comprehension

This section of the research review delineates studies that have examined the effects of story structure knowledge, or schema for stories, on story comprehension and recall.

The first studies examined which categories of story information are structurally important in a story (Mandler & Johnson, 1977; Stein & Glenn, 1979). Other studies examined the effects of scrambling the sequence of the categories to determine whether readers would reorder the information in recall to more closely resemble the order of the structural elements in a well formed story (Buss, Yussen, Mathews, Miller, & Rembold, 1983; Stein & Nezworski, 1978). Other early studies
investigated the episode as serving an organizational role in the story, as well as in memory, by manipulating the number and the length of story episodes and the presentation format (Glenn, 1978; Mandler, 1978). In general, the findings of these studies indicate that both adults and children can better comprehend a story that conforms to the structure defined in a story grammar. Story comprehension is inhibited when the sequence of story elements is out of ideal order or lacks appropriate temporal or causal relations.

Fitzgerald, Spiegel, and Webb (1985) investigated the development of intermediate grade children's knowledge of both structural features and content of stories. They found that children acquired greater knowledge about structural complexity in stories, as evidenced in reorganization of recall of scrambled stories as well as structural complexity in story productions. However, growth was minimal in knowledge of content as measured by the amount and nature of conflict, characters' response to conflict, conflict resolutions, and analyses of actions occurring in their story productions.
This body of research suggests that children who have knowledge of story structure, or a well developed story schema, better comprehend stories. Schema helps readers recall more of a story by providing a framework that enables story information to be ordered. In addition, children with a well developed story schema, write stories with more complex organizational structures that conform to the structures defined in a story grammar.

**Instructional Research With Readers**

If children do not have a well formed schema for stories, could instruction increase this knowledge? If it can, does this increase comprehension ability? This section of the literature review will examine studies that involve teaching readers about story structure.

**Effects on Comprehension**

Two dissertation studies (Gordon, 1980; McDonell, 1978) involved instructing children in story structure, and examined the effects on children's comprehension. Both studies found significant improvement in comprehension scores, measured on a retelling task, following the instruction. McDonell, in a delayed
test, found retelling scores decreased, but a significant instructional effect was maintained, indicating that the group receiving instruction in story structure recalled more story ideas than the group who did not receive instruction. Gordon did not include a delayed test in the design of her study. Students were not pretested on story structure knowledge in either study, nor was a measure given that directly assessed whether the structure was learned.

Three additional studies that explicitly instructed children in story structure (Buss, Ratliff, & Irion, 1985; Fitzgerald & Spiegel, 1983; Greenewald & Rossing, 1985) found significant effects on comprehension abilities following the instructional period. Both Fitzgerald and Spiegel, and Greenwald and Rossing, used fourth grade subjects. Fitzgerald and Spiegel (1983) pretested subjects on story structure knowledge, using a story production task and a scrambled story recall task, and then randomly assigned those subjects who had the least developed knowledge of story structure to either a treatment or control group. The treatment group received explicit instruction in story elements while the control group performed dictionary related activities. Two phases of
instruction included a phase of six sessions over a two-week period and a distributed practice phase over five weeks. Each session in the first phase emphasized one story structure element (defined according to the Stein and Glenn grammar) and its temporal relation to other story parts. Phase two instruction provided reinforcement of story elements and stressed the relation between comprehension of a story and the specific story parts and their temporal relations. Results from a 17-question written comprehension test, administered after reading a story, indicated that story structure instruction had a strong positive effect on both literal and inferential reading comprehension.

Greenewald and Rossing (1985) did not pretest subjects on story structure knowledge, but rather randomly assigned intact reading groups to either experimental or control groups. Instruction consisted of three thirty-minute sessions per week over a four-week period. A story map, a flow chart illustrating the story structure elements, was used to teach the story constituents, along with a chart designed to improve self-monitoring of comprehension during story reading by focusing on story components.
be a guide to story components) and written retelling posttests yielded significant differences between the instructional and control groups. The instructional group correctly answered more of the guided recall questions than the control group. In addition, the instructional group recalled more propositions in the written recall task. In a four-week delayed test, the instructional group continued to perform better on both of the recall tasks.

Both Fitzgerald and Spiegel (1983), and Greenwald and Rossing (1985) used children's basal stories for instruction and testing. Buss, Ratliff, and Irion (1985) used children's literature in their instruction. In this study, third grade children were pretested on story structure knowledge with three tasks—story production, picture arrangement, and scrambled story arrangement—and two comprehension tasks—free recall and probed recall. Those subjects judged to be lacking in story structure knowledge (subjects whose total scores for the five tasks were less than 50%) were randomly assigned to either an instructional or a control group. A second control group of students judged to be skilled in story structure knowledge was also established. Daily instruction over a two-week
period focused on teaching story elements as story rules, followed by reinforcement activities. Posttest scores indicated that there were significant gains for the treatment group relative to the control groups on the probed recall task. Also, the group receiving instruction in story structure answered more story questions than the control groups. These researchers noted the overall lack of adequate story structure knowledge in their sample of third grade students. Considering the results of the previous studies that indicate that those children with story structure knowledge better comprehend stories, there is some indication that this particular type of instruction is needed for some children.

Singer and his colleagues conducted two studies (Dreher & Singer, 1980; Singer & Donlan, 1982) instructing children in story structure knowledge. Singer and Donlan (1982) instructed eleventh-grade subjects, twice weekly for three weeks, on a strategy involving a problem-solving schema with schema-general questions (questions that can be used for any story that focus on story constituents). The students were taught to generate story-specific questions (questions that focus on the elements of a specific story) from
the schema-general questions as they read short
stories. Prior to the strategy training, students were
explicitly taught the story structure elements. The
control group answered story-specific questions
(comprehension questions designed for a specific story)
for the same stories used during instruction.
Criterion-referenced posttests were administered after
each story. Results indicated that the group receiving
instruction in story structure, answered more questions
correctly.

Dreher and Singer (1980) taught fifth-grade
students the elements of a story, as defined in a story
grammar, using three stories and a story structure
chart which contained the elements of a story. One
control group read the same three stories but did not
receive the story structure instruction, and a second
control group received no treatment. Written recalls
did not show any significant differences between the
instruction and control groups. However, these
results may have occurred because the researchers did
not pretest students to determine those students who
lacked story structure knowledge. It may be the
students already had adequate story structure knowledge
and could not benefit from the instruction.
Tackett, Patberg, and Dewitz (1984) expanded upon Dreher and Singer's (1980) study. Sixth-grade students were pretested for story structure knowledge using a story production task. Those students who were identified as having a poorly developed story concept were assigned to one of three groups---instructional treatment, story reading group, and control. Following six days of instruction in story structure using the chart developed by Dreher and Singer, a free recall measure was administered. Results showed that subjects who received instruction in story structure recalled more information than did subjects who read the stories. The subjects in the treatment group recalled more information, but the number of propositions recalled which were high in the story hierarchy did not differ from the story group. In an earlier study (Dewitz, 1981) after an initial instructional period, treatment subjects were given six additional instructional sessions to determine if extended treatment time as well as a transfer step with an emphasis on recall would yield significant results for the students in the experimental group. The results of the analysis showed a significant gain in the total number of propositions recalled for the students with
the lowest story concept. Students with a high story concept showed no significant increase.

Finally, three studies (Buss, Yussen, Mathews, Miller, & Rembold, 1983; Sebesta, Calder, & Cleland, 1982; Short & Ryan, 1982) instructed children in the use of a story structure strategy, but did not explicitly teach the story structure elements. Sebesta, Calder, and Cleland (1982) trained both teachers and children in using a story chart, developed by Applebee (1978), designed to enhance the understanding of story structure and improve recall of stories. Teachers were posttested on a retelling measure, which showed significant results. The posttest measure for the children was an 11-question multiple choice test, given orally. The children's scores did not show significant results, in fact their scores declined, although not significantly. No comparison groups were used in this study.

Short and Ryan (1982) trained fourth-grade boys, judged to be skilled or less skilled based on a comprehension subtest, during seven instructional sessions. Training involved modeling a game format focusing on predicting story events based on clues found in the story. Results indicated less skilled,
strategy-trained readers do not differ from skilled readers in their ability to utilize story schemata to aid their comprehension of new information. The trained, unskilled students were no different in posttest oral recalls than the untrained, skilled story group. Thus strategy training made less skilled readers performance indistinguishable from skilled readers.

Buss, et al. (1983) trained second grade children in a three step method in sequencing scrambled stories into a canonical form. A control group received no instruction. Subsequently, oral recalls of three scrambled stories were analyzed. The results suggested that brief training in sequencing story propositions so that they conform to the canonical order increased the student's ability to recall stories.

The results of studies that have examined the effects of explicitly instructing children in story structure have generally found significant results that indicate that children can be taught the structural elements defined in a grammar, and that this instruction does improve comprehension of stories. The studies that did not find significant results may have problems in the design of their studies. For instance,
Dreher and Singer (1980) did not pretest students to find those who were lacking in story structure knowledge, and would therefore benefit from explicit instruction. Other studies did not control the readability of the stories used during instruction and testing, or that the stories used were examples of well formed stories as defined in a story grammar. One final comment concerns the measures used during testing. In order to generalize the effects of instruction, a measure should be administered that tests whether the story structure knowledge was in fact learned or not. Some of the previously reviewed studies did not include a measure of story grammar knowledge during testing.

**Effects on Children's Writing**

As children grow older, they create stories with more complex organizational structures, which closely conform to a complete narrative as defined by a story grammar (Applebee, 1978, Botvin & Sutton-Smith, 1977; Stein & Glenn, 1982). Theorists (Botvin & Sutton-Smith, 1977) have speculated that children's story schema also influences the stories they create.
McGee, Ratliff, Sinex, Head, and LaCroix (1984) investigated whether children who create stories which conform to a narrative structural form have a more elaborate schema for stories than children who create stories with organizational forms which do not conform closely to a narrative structural form. The results of that study indicated that there is not a clear relation between knowledge of story components and the type of organization in children's story compositions. Despite these results, four studies have investigated the effects of explicitly teaching children in story structure on their story writing (Braun & Gordon, 1984; Edmonson, 1983; Fitzgerald & Teasley, 1985; Gordon & Braun, 1982). These studies are similar in design, using intermediate aged students, and providing training in story structure knowledge. However, not all of the studies obtained significant results.

Fitzgerald and Teasley (1985) randomly assigned 19 fourth-grade students, identified as lacking a keen sense of narrative structure, to one of two treatment groups. The groups received either instruction in story knowledge or instruction in dictionary usage. There were two phases of instruction, a short term intensive phase and a long term phase with intermittent
reinforcement sessions. Before instruction and at the end of each phase of instruction, students produced two stories. The instruction in narrative structure had a positive effect on the organization of children's compositions. After instruction, the instruction group wrote stories that were organized like abbreviated episodes (goal explicitly stated but some story categories not stated), while the control group still wrote stories that were reactive sequences (no clear goal was expressed in the story). The incidence of overtly noncohesive stories, stories containing cohesion errors such as no pronoun present for a referent or missing conjunctions, was lower in the instruction group than the control group. Finally, overall creativity scores (uniqueness, idea production, language usage, originality) were higher on the stories produced in the instruction group.

Edmonson (1983) assigned fifth-grade students to one of two groups, receiving either instruction to enhance the use of story structure as an aid to reading and writing, or group activities in literature and drama. Students produced stories from a one line story starter. Results indicated the two groups were not significantly different on the number of text structure
categories present in their stories. Edmonson concluded that if students do transfer their knowledge of story structure from reading to writing, they do so intuitively. It is not clear that any transfer training was done in the instructional phase however, as was advocated by Dewitz (1981).

Gordon and Braun (1982) randomly assigned 57 fifth-grade students to either an instructional or control group. The instructional group were first exposed to a global organization of narratives using templates with text structure categories containing specific story content and categories left open to be completed by the children. These categories were intended to guide the students in finding information contained in specific text structure categories. Students then produced stories, first with teacher guidance, then independently. Instruction consisted of 15 sessions, 30 minutes in length, over a five-week period. Significant results were obtained on written recalls indicating that the instructional group recalled more text structure categories than the control group.

In a subsequent study, Braun and Gordon (1984) varied the instruction by adding a modeling phase,
followed by writing class narratives, diagraming the class narratives according to the macrocloze system used in the previous study, and finally, group and indepentent writing. The compositions were again diagramed in order to highlight the structure of students' narratives relative to an "ideal" text structure. The control group used the same general instructions but they produced poetry rather than narratives. Propositions in written recalls were compared to diagrams illustrating the structure of each narrative as one posttest measure. Other measures included wh-probes, independent compositions scored for number of text structure categories, and a holistic score for global impression of composition quality. Initial analyses showed no significant differences between groups. The instruction group did receive higher scores on the comprehension subtest of the Gates-MacGinite Test, but did not reveal differences on total number of text structure categories recalled, wh-probes, or in the use of specific text structure categories. Both groups increased the number of text categories in their recalls on the posttest, but dropped on the delayed test. Holistic writing scores did increase for the instructional group; however, they
were not significant. Although these studies examined the effects of modeling the use of story components, it is not clear if explicit instruction of the story components occurred.

The vast majority of studies examining the effects of explicit story structure instruction on the comprehension of stories indicate that either explicit instruction in story structure, or instruction involving the use of a story structure strategy enhances readers' comprehension ability. Research focusing on improving children's writing of well organized narratives is not so conclusive. However, fewer studies have examined the effects of story structure knowledge on prereaders' comprehension ability.

**Prereaders' Story Structure Knowledge**

The following portion of this literature review will examine the research that has focused on story structure knowledge in young children. First, studies which examine the extent to which preschoolers have acquired story structure knowledge are reviewed. Then studies which have trained preschoolers in story structure knowledge are discussed.
Some research indicates preschoolers have acquired some story knowledge or sense of story (Dunning & Mason, 1984; Morrow, 1984a, 1984b, 1985; Nurss, Hough, & Goodson, 1981; Pelligrini & Galda, 1982; Roser & Martinez, 1985). Nurss, Hough, and Goodson (1981) examined four-year-old children's oral compositions for presence of a main character, sequence of events, indications of feelings, setting, plot, and story time. They found that sequence of events was the most well developed story element. All children told a sequence of events after viewing a wordless picture book. None of the subjects told complete stories, as defined by a grammar. Also, none of the children included feelings or a plot in their stories. Being able to tell a story, even an incomplete story as defined by a grammar, is an ability present in some four-year-olds and is an indication of some intuitive story knowledge.

Roser and Martinez (1985) transcribed preschool children's language responses—comments, questions, and answers about different aspects of text—that were recorded over a 10 month period. Transcriptions were analyzed and categorized into types of story talk and focus of story talk. They found that children's story talk, after oral reading, focused on story structure.
Piaget (1955) found that young children are incapable of making a coherent whole out of a story or explanation. They tend to break up the whole into a series of fragmentary and incoherent statements. In addition, manipulation of temporal relations does not appear in children's stories before the age of nine or ten. Botvin and Sutton-Smith (1977) and Leondar (1977) confirmed Piaget's observations, for the most part, in their observations of children's story making. However, Botvin and Sutton-Smith (1977) found that although Piaget observed that children weren't able to organize a story or explanation into a coherent whole until the age of eight, their subjects were able to compose simple narratives as early as five. Applebee (1978) also found that at an early age, young children use their understanding of stories to produce stories.

Although not teaching children about story structure in any explicit way, several studies involved instruction which could have influenced young children's knowledge of stories. For instance, Pelligrini and Galda (1982) assessed the effects of three modes of story reconstruction training on the
development of kindergarten children's story comprehension. On separate occasions, three stories were read to three groups of children. After hearing the story, one group, the fantasy play group, verbally reconstructed the story through peer interaction. The discussion group also had children reconstruct the story verbally, but as the result of adult questions. They did not engage in fantasy reconstruction or accommodate the views of others in the discussion group. Children in the drawing group reconstructed the story graphically. Children were given a 10 question multiple-choice test and a recall task. The recalls were scored for elements included according to Thorndyke's (1977) grammar, and for sequence of elements recalled in their immediate temporal order. Results indicated that the children in the fantasy play group performed better on the comprehension measures.

Dunning and Mason (1984) assessed whether the way in which a teacher focuses on the connections between story characters' actions and their underlying internal states could influence children's retellings after hearing a story. They found that the teacher's story presentation makes a difference as measured by completeness of story grammar (how many story grammar
elements were included in the retelling). The presentation also influenced the order of story grammar components (points if the story grammar components were retold in sequence). Finally, the presentation influenced the quality of children's story retellings. The quality of retelling score was a composite score of story grammar completeness score plus possible points for four of the seven possible components—the goal, the problem, the consequences, and the resolution.

Morrow (1984a, 1985) examined whether questions based on story structure would improve kindergartner's listening comprehension. One treatment group discussed stories read to them based on teacher questions that focused on story structure elements of setting, theme, plot, and resolution. A second group of children heard stories and discussed them based on teacher questions of literal, inferential, and critical content. A third group heard stories and discussed them based on a combination of story structure questions and the traditional comprehension questions of literal, inferential, and critical content. Posttest results were obtained by reading an unfamiliar story to the children, followed by oral questions consisting of five story structure questions and five traditional
comprehension questions. Responses were recorded and scored for correct responses. Incorrect probed responses were followed with a multiple-choice question and scored for correctness. Posttest results indicated that the group receiving combination questions performed better on the comprehension measure; however, on a one-month delayed test, the group receiving only story structure questions performed better on the comprehension measure. In another study, Morrow (1984b) examined the effects of story retelling on young children's comprehension and sense of story. Training involved reading stories to kindergarten children, followed by retelling the story with teacher prompts that focused on story structure elements. Comprehension and retelling posttests indicated significant gains for the experimental group over the control group in traditional questions scores, story structure question scores, and on the combined test scores.

Ratliff (1985) explicitly instructed preschool children in six story structure elements. In this study, four-year-olds were pretested to assess their story structure knowledge and listening comprehension ability on four measures: (a) oral story production,
(b) story rules knowledge (structural elements), (c) free recall of a story, and (d) probed recall.
Subjects who were lacking in story structure knowledge, determined by a cutoff score of 15 when the scores were totaled for the four tasks, were assigned to either a treatment group that received explicit instruction in story elements, or one of two control groups. The first control group, judged to be less skilled in story knowledge and listening comprehension, received no treatment. The second control group, judged to be skilled in story knowledge and listening comprehension (i.e. scores greater than 15), also did not receive treatment. Subjects in the instructional group received seven periods of instruction that focused on eight rules about stories that were adapted from a grammar (Stein & Glenn, 1979) to a rule format (McGee & Tompkins, 1981). For example, one rule states that the characters are the people and animals in the story. After explicit instruction of a rule, reinforcement activities such as puppetry and book making were completed. Following instruction, all children were posttested on the same four measures administered at the pretest. Posttest results indicated the effects of instruction were significant in improving the level of
story knowledge. The instruction group correctly answered significantly more story rules questions than the control group. In addition, the instruction group answered significantly more questions than the control group on the probed recall task. A delayed test was not administered to ascertain the generalizability of the instruction or the retention of the instruction. Perhaps additional practice in story production during instruction would produce significant results.

Research has demonstrated that preschool children have begun to develop a schema for stories, and that this schema can be enriched through explicit instruction in story structure. The value of story structure knowledge in school age children has been noted in several studies. Further examination of instructing preschool children in story structure, and the subsequent effects on their comprehension of stories would be necessary before any generalizations could be made concerning the importance of this knowledge for young children prior to learning to read.

One difficulty in incorporating story structure instruction in the classroom is the lack of available materials that focus on story elements. However, the literature contains several strategies that have been
developed for the classroom that might aid the instruction of story structure. The purpose of the next section of the literature review is to delineate instructional strategies that have been developed that could provide ways of instructing and reinforcing story structure instruction.

Instructional Strategies

This section of the literature review delineates several instructional strategies that have been developed to explicitly teach story structure to children who lack this knowledge. While these strategies are not generally from research articles, their inclusion in this review is to determine what instructional strategies have been developed that have proved to be effective in explicitly teaching story structure, and would therefore be of importance to the present study because of its instructional design. These strategies are grouped according to whether the thrust of the strategy involves (a) the development of questions centered on structural elements, (b) the use of visual representation of the structure elements on charts or maps, or (c) the use of writing as a means of teaching children story structure.
Questioning Strategies

Several strategies have been developed that involve questioning techniques (Gordon & Braun, 1982; Marshall, 1983; Mavrogenes, 1983; McConaughy, 1982; Sadow, 1982; Singer & Donlan, 1982). McConaughy (1982) outlined a general set of comprehension questions which can be used for helping children focus on story elements. Included are specific questions for the causal chain of events (what happened) and a set of social inferences (why it happened). Within each set of questions is a hierarchy between the most important elements for the structural organization of the story and the supporting details. This framework represents an orderly progression for teachers to use in planning questions to ask children about stories they have read.

Both Beck and McKeown (1981), and Gordon and Braun (1982) developed diagrams that illustrate a network of story categories and the relations that connect episodes. From the diagram teachers can develop questions that focus on the story's structure. First, questions related to the story schema on the diagram are developed. Then questions that are story specific based on the schema questions are developed. Gordon and Braun suggested that the diagram be completed in
class with the students, the story summarized, and then followed by inferential questions developed in advance. They also described 11 stages that are aimed at transferring knowledge of story schema to comprehending unfamiliar selections and then to generating new stories.

Sadow (1982) used the story grammar of Rumelhart (1975) to design questions. These questions help children develop expectations for stories. Teachers can use these questions to guide reading and analyzing of stories, to create an outline of events in a story, and then to write questions that reflect their outline. These questions are used with children as they read this story. They are designed to elicit both literal and inferential levels of thought. In addition, they highlight the information that makes a story coherent and helps children understand the sense of story that a grammar describes. Mavrogenes (1983) suggests letting students compose their own questions before reading that focus on story parts through the inquiry method.

Singer and Donlan (1982) developed a questioning strategy to use with older children. This strategy teaches students to use a chart of story schema general questions (questions focusing on specific story
structure elements that can be used for any story) to generate story specific questions (questions for a particular story).

Marshall (1983) developed a method of using story grammar to assess reading comprehension through the use of story frames. In this method questions are generated for the organization of the story based on story grammar. Blanks are present for the teacher to fill in the names and actions of the characters in any story. Questions are then generated that focus attention on the organization of the story and the explicitness of the information. A checklist for retellings of stories can be generated from the story frames to assess reading comprehension after reading a story.

Whaley (1981) also incorporated retelling of stories in her suggested strategies. Retelling stories allows students to retell simple stories to develop their awareness of common story structures. Children can substitute their own story elements as they become proficient in retelling stories. She suggested several other instructional tasks to use in the classroom. These tasks can be used as reading tasks, or as listening tasks for young children and poor readers.
In the prediction task, children read incomplete stories and orally or in writing, predict what they think comes next. Following discussion, children may revise their predictions. The macrocloze task is a method of presenting a story with sections corresponding to the structural elements deleted. Students read the text and supply the missing information. For the scrambled stories task, students read a story with scrambled story categories, and reorder it to make a "good story". In a similar task, students can read a story, then sort sentence strips into story components.

**Strategies Incorporating Visual Media**

Many students need a visual representation of ideas that are to be learned. The following strategies involve a "product" that students can use for independent reinforcement of instruction in story structure.

Cunningham and Foster (1978) developed a story chart in which the students fill in the parts. On the chart a slot is open for each story element. The result is a study guide for students to use that can be incorporated during reading of any story. Included in
this article is a dialog between Cunningham and a classroom teacher which explains how to use this chart in its adapted form with children.

Widomski (1983) advocated the use of semantic webbing with the DRTA technique to enhance story structure knowledge. The semantic web allows the student to see literally the relations between the story structure constituents. Discussion begins with a core question. The discussion of the core question draws attention to the elements of the story. Constructing the web involves drawing lines between story ideas that are related. These ideas include explicit and implicit ideas, concepts, and generalizations inherent in the story. Combining semantic webbing with the DRTA, the teacher helps the reader bring cognitive abilities and inferential abilities to the DRTA task. Widomski claimed that the reader who can predict can transfer and apply those skills in analyzing relationships among story elements for the web construction. Discussion resulting from creating the web supports the conceptual development of story grammar through a comparison of similarities.

Reutzel (1985) has developed a similar strategy that incorporates a story map similar to a web. The
map can be constructed to illustrate a main idea-sequential detail relation, character comparisons, or cause-effect relations. After story reading, students use the story map to monitor their story comprehension. They can check the map to see if they can retell something about the story that corresponds to each of the story elements incorporated on the map.

Smith and Bean (1983) describe four strategies that help primary grade children comprehend story events and causes. Through the strategies, children acquire the ability to predict events and outcomes in a variety of stories and to guide the production of original stories. "Story Patterns" is a strategy that combines reading, writing, listening, and speaking with a visual diagram. It provides a common language for reading and discussing future stories in terms of cause-effect relations. "Circle Stories" is similar to the story pattern strategy in the use of a visual diagram (Jett-Simpson, 1981). After story reading, the teacher guides the drawing of a circle depicting the story events around the circumference. The third strategy, "Story Pictures", involves transferring story elements to a diagram. The teacher reads a rhyme and children brainstorm which part of the rhyme the pictures
represent. Teacher guidance provides conclusions about which story elements are represented in the diagram. This diagram is used to provide a base for identification of corresponding parts in stories, writing stories, or as an aid to book discussions. The final strategy, "Story Maker", is a more complex tree diagram with many simultaneous story lines that can be used as an ongoing story writing project (Rubin, 1980).

Wood (1984) developed a strategy called probable passages. In this strategy, the teacher pulls terms from a selection, and with the students, categorizes them according to the elements of a story grammar to develop a "probable passage". They predict what the passage will be. After reading the passage, the student modifies the predicted passage to correspond to what actually occurred. Wood claims that to predict a probable passage, students must use their knowledge of story grammar to anticipate what might occur. In probable passages, students learn about story grammar elements and their relevance to a coherent passage. A series of eight steps that incorporate a preparation stage, prereading stage, reading, and postreading are described.
Finally, McGee and Tompkins (1981) suggested a strategy for teachers that involves the use of videotapes. Teachers can make videotapes of themselves reading stories. The videotapes should include directions for follow-up activities to be performed by the students. In this article a chart is presented detailing books to highlight story grammar elements in story reading and follow-up activities.

**Strategies Incorporating Writing**

Dreher and Singer (1980), Fowler (1982), Wood (1984), and Olson (1984) have developed strategies that incorporate children's writing as a way to approach story structure. Dreher and Singer developed a story structure chart in which students are instructed in the story elements. Then students use the chart to write answers to questions about a story. Fowler (1982) devised a similar strategy using a story frame. Rather than write on a chart, children write answers on a series of frames. Each frame is like a fill-in-the blank focusing on one story element. The story frame itself is a sequence of spaces hooked together by key story elements. Use of the frame may be helpful to students who have trouble keeping to the point of a
question or who write conversationally rather than in the style of written language. Story frames are first used in direct teaching to help children construct models of appropriate sets of responses and to guide them to places in the stories where information can be found. Once children can use the story frames effectively, they can then be taught to use them independently.

Olsen (1984) suggested that written book reports could be improved if students were required to incorporate story grammar knowledge. In this strategy a framework story outline is provided by the teacher. In the outline Roman numerals signal a new paragraph, with each numeral corresponding to the story grammar element which the students have previously discussed. Olsen also suggested a wall map showing a pathway to follow from reading the book to "Book Report Park" should be constructed. An illustration at each stop along the path provides a visual reminder for a particular story grammar element such as "The Setting House", "Story Starter School", "City of Attempts", etc. Using the story structure categories, students focus on central story elements, sequence of events, and have a logical framework in which to compose. In
the process, the child's confidence and understanding of story structure is strengthened, and the quality of the reports improve.

In summary, professional opinion about methods of teaching story structure during reading and writing suggests there are three important elements of instruction. First, questioning strategies have been suggested as effective means of teaching and reinforcing story elements. In the present study, questioning was employed during the instruction of the story elements as well as during story reading to focus the children's attention on the parts of the story that illustrated the story element that had been explicitly instructed. In addition, the measures used to test both story knowledge and story comprehension involved questions that were designed to focus on story elements.

Second, strategies that employed the use of visual representations of the story structure elements were suggested. In the present study, the story rules were presented on a chart so the children could review them each day of instruction. Other charts were used during instruction to reinforce a story rule. For example, the children illustrated a chart about the characters
in a story by drawing pictures of how the characters look and what they did in the story.

Finally, strategies that use writing as a means of teaching children story structure were suggested. In the present study, the four-year-olds could not write stories; however, they did orally compose stories. For example, trains were made to illustrate the beginning, middle, and the end of a story. On each of the three train cars, the children illustrated an event that happened in the story at the beginning, middle, or end of the story. When the illustrations were complete, the children dictated sentences to the investigator that were recorded on the trains. Oral story productions were also one measure used to assess story knowledge in the testing phases of the present study.

Research on Listening to Stories

There are many instructional strategies designed to enhance story structure knowledge as well as to improve comprehension abilities. And, research has shown both school-age and preschool children benefit from explicit instruction in story structure. However, the results of these studies could be due to a confounding factor. That is, in all the instructional
studies, children were exposed to well formed stories. In most cases, the stories were short and conformed perfectly to a story grammar definition of story structure. The possibility exists that listening to or reading well formed stories produced enhanced comprehension rather than the explicit instruction. This final section of the research review will delineate studies that examine the benefits of listening to stories.

The benefits of early exposure to literature have been well reported in the literature. Durkin (1966), Clark (1976), and Bissex (1980) found that children who were successful in readiness as well as beginning reading in school were read to at home. Bissex, in reading to her son, found that reading to children develops a global sense of what reading is. By reading aloud to their children, parents assist in developing literacy concepts such as book handling and print awareness (Clay, 1979; Smith, 1978). Smith suggested that being read to is a means by which children learn the functions and structures of written language. Moreover, Clay argued that children learn that: (a) print can be turned into speech, (b) there is a message
in the print, and (c) some language is more likely to occur than others.

Other research has focused on children's storybook reading behaviors after listening to a book (Rossman, 1980; Sulzby, 1982). These studies indicate a developmental progression from attending to pictures and story understanding, to understanding how print represents the story. Rossman (1980) found that the progression of reading behaviors was affected by the structural patterns of the storybooks used in her study. Being read to can also have an important influence on a child's attitude toward reading (Hiebert, 1981). This is of importance because there are important cognitive dimensions of attitude that relate directly to what children perceive to be the functions and uses of literacy (Teale & Lewis, 1981). Role models are important in the process of learning to read, and book reading is one way children see adults engage in and enjoy reading.

In summary, although children can learn to read without having been read to (Teale, Anderson, Cole, & Stokes, 1981), there is evidence that such experience has numerous facilitative effects on literacy development. There is still much to be learned about
the relation between patterns of organization and language use in book reading and the specific effects on children's knowledge. However, it seems reasonable to assume that listening to stories could familiarize children with literary conventions and thus enhance the development of the child's schema for stories.

Summary and Research Implications

Studies have examined the effects of story structure knowledge on the comprehension abilities of readers (Mandler & Johnson, 1977; Stein & Glenn, 1979). They found that children with a well developed story schema better comprehend stories. The results of those studies prompted researchers to examine the effects of instructing readers in story structure (Buss, Ratliff, & Irion, 1985; Fitzgerald & Spiegel, 1983). Generally, those studies indicated that not only does story structure knowledge enhance comprehension, but that students who lack story structure knowledge can learn story structure which will in turn enhance their comprehension ability.

Other studies have examined prereaders' story structure knowledge (Morrow, 1984a, 1984b, 1985; Nurss, Hough, & Goodson, 1981; Pelligrini & Galda, 1982).
These studies indicate that preschool children have begun to acquire knowledge of how stories are organized, what elements are included in a story, and how those elements are ordered. However, only one study explicitly taught story structure to prereaders (Ratliff, 1985). Results of that study indicated the effects of instruction were significant in improving the level of story structure knowledge and listening comprehension of four-year-olds. However, further examination of the effects of story structure knowledge prior to reading is needed.

In conclusion, this study expanded on the present research in four ways. First, a delayed test was included in the design to ascertain the long term effects and the generalizability of the instruction. Second, the addition of the story group that listened to the stories used for instruction to examine the exposure to well formed stories on the listening comprehension and story knowledge of prereaders. Third, the instruction was modified from Ratliff (1985) to focus more directly on story production and sequencing of events within the story structure. Finally, an additional day of instruction was added for additional reinforcement of the story rules.
Chapter 3

METHOD

This study investigated the effects of explicit instruction focusing on story structure and listening to stories on preschoolers' comprehension of stories they have heard. One group of children were taught six essential story elements (Stein & Glenn, 1979) and applied their knowledge of these elements by retelling stories and participating in related activities such as puppetry, book making, and drawing. Results obtained from this instructional group were compared to the results of a group of students who listened to the same stories, but who did not receive instruction or participate in the story related activities. Finally, the results obtained from the instructional group were compared to the results of a third group. This group, the control group, received no instruction or exposure to the stories. This chapter describes the subjects, instruments, and scoring; procedures for the pre-, post-, and delayed-testing; and the instructional procedures. Additionally, the analyses used in this study are described.
Subjects

Initially, 65 four-year-olds were pretested. The children were drawn from a Headstart Center located in a large city in Louisiana. These children were pretested on four measures to determine those children who had little story structure knowledge and poor listening comprehension ability. The pretesting was designed to identify children who would benefit from story structure instruction. All children were pretested on two story structure knowledge measures: (a) oral story production, and (b) story rules knowledge, and two listening comprehension measures: (c) free recall, and (d) probed recall. Children were then identified as being skilled or less skilled in story structure knowledge and listening comprehension ability based on their performance on these four measures. A cutoff score of 15 points, when the four individual scores were totalled, was used as a criteria for selecting children included in the sample (Ratliff, 1985). Of the 61 children receiving a score of 15 or less, forty-eight children, identified as being less skilled, were randomly assigned to an instructional (n=16), a story (n=15), or a control (n=17) group. Originally, each of the three groups was randomly
assigned 17 subjects; however, the instructional group lost one member due to absence of the child during the instructional phase. Two members of the story group were dropped due to absences during story reading, as well as absence in the testing phase.

**Instruments**

**Story production.** The instruments used in the story production task consisted of three sets of pictures. Each picture set consisted of four pictures that illustrated four of the elements contained in a story grammar (Stein & Glenn, 1979). Each picture set contained a picture depicting a setting, initiating event, attempts made by the character to solve the problem, and consequence. The three sets of pictures were taken from three wordless picture books, *The Bear and the Fly* (1976), *Frog Goes to Dinner* (1974), and *Frog, Where Are You* (1969). These books were selected because they contain pictures that clearly represent the four elements needed for this task. These picture sets appear in Appendix A.

Each picture set was rated by five adults, experienced with children and familiar with the Stein and Glenn (1979) grammar. Individually, each adult was
given the picture sets, one at a time. They were asked to arrange the pictures to tell a good story. Adults were then asked to write a story about the pictures, in order to assure that the pictures not only could be arranged to tell a story, but that a complete story could be produced based on the pictures. All five adults were able to arrange the pictures in the correct sequential order. Their story productions were rated on the scale developed by Stein and Glenn (1982). All of the stories received a score of at least five, indicating that a complete episode can be produced from the picture stimuli.

**Story rules.** The instruments used in the story rules task consisted of three books and a set of story rule questions. The books used in this task were *Hester the Jester* (1977), *Barkley* (1975), and *Mother Rabbit's Son* (1977). The story rule questions, found in Appendix B, consisted of five questions based on story grammar structures. These questions were adapted from a story rule format (McGee & Tompkins, 1981). The story rules can also be found in Appendix B. These questions related directly to the instruction in story structure received by the instruction group. The first three questions asked for information corresponding to
the setting element defined by Stein and Glenn (1979). One question asked children to identify the characters in the story. The second question asked when the story took place. The third question asked where the story took place. The fourth question, involving the problem in the story, corresponded to Stein and Glenn's initiating event and the internal response of the protagonist. The fifth question dealt with how the problem was solved in the story. This question corresponds to Stein and Glenn's story elements of consequence and attempts. An additional three questions on beginning, middle, and end were included using a format designed by Tompkins (1979). The beginning, middle, and end questions asked children to tell something that happened at the beginning, middle, and end of the story. The beginning of a story incorporates the character and setting introduction. The middle of a story introduces the problem and what the character does to try and solve the problem. The end of a story details the outcome, how the problem was solved. The addition of these three questions is not only to ascertain the child's knowledge of the story elements, but also puts the individual elements into a time frame, or a sequence of events corresponding to
Stein and Glenn's story structure elements which are also sequentially arranged. The Kuder-Richardson reliability coefficient for this instrument, based on pretest scores, was .61 for the eight items.

**Free recall.** The instruments used in the recall task consisted of three stories, "Tiger's Whiskers", "Judy's Birthday", and "Fox and Bear". These stories, adapted from Stein and Glenn (1979), can be found in Appendix C. The number of words and idea units included in the stories were similar. The stories were already parsed into idea units (Stein and Glenn, 1979). "Tiger's Whiskers" and "Fox and Bear" both contain 167 words and 26 idea units. "Judy's Birthday" contains 172 words and 25 idea units. Appendix D presents each story parsed into idea units. The Kuder-Richardson reliability coefficient for this instrument was .66 for the 26 items, based on the pretest scores.

**Probed recall.** The instruments used in the probed recall task consisted of three sets of six questions, selected from Stein and Glenn (1979), for each of the three stories used in the free recall task. The questions were used by Stein and Glenn to assess children's comprehension of causal relations which connect statements within an episode or statements that
connect two episodes. These questions can be found in Appendix E. Five adults judged the questions selected to correspond to the six elements defined in the Stein and Glenn grammar for grammar correspondence. Each adult read the three stories and identified the grammar element to which each of the questions corresponded. All six questions were correctly labeled by all of the adult raters. The Kuder-Richardson reliability coefficient was .71 for the six items, based on pretest scores.

Procedure

Story production. The procedure for the story production task first involved the investigator arranging three pictures in sequence—an apple, an apple with a bite out of it, and an apple core. The investigator then modeled telling a story about the apple pictures. The children were then given one of the picture sets and were told to arrange the four pictures in order so that they tell a story. After arranging the pictures, children were told to create a story about the pictures. Stories were tape recorded and later transcribed.
**Story rules.** The procedure followed for the story rules task was first, the investigator orally read one of the story rules books. Immediately after the oral reading, each child was asked to orally answer the 10 story rules questions.

**Free recall.** One of the three free recall stories was orally read to the child. Immediately after the presentation of the story, each child was asked to recall as much of the story as possible.

**Probed recall.** The probed questions are asked immediately following the free recall task. Responses were recorded by the investigator.

All measures were administered three times. There was a pretest given prior to the instructional phase. The pretesting phase lasted seven consecutive school days, then the instructional phase began. The instructional phase was eight sessions in length (Thursday and Friday, Monday through Friday, and the following Monday) followed immediately by a posttest. The posttesting phase was completed in six days. A delayed test, which was administered approximately two weeks following the immediate posttest, was completed in seven days. Although the posttest took several days to complete, each child, regardless of which group they
were assigned to, had an equal opportunity to be selected for testing each day. The children were selected for testing, in the delayed tests, in the same sequence that occurred in the posttest phase. This was done in an attempt to keep time intervals between test periods as equal as possible.

The tasks at each testing period were identical; however, the content of the materials differed at each testing session. The stories were randomly presented during testing. The tests were administered individually at each testing period. All children performed the oral production task first to eliminate possible cueing of story elements and structure necessary to perform the subsequent tasks. Two of the other tasks, free recall and story rules questions were presented randomly. The probed recall task was always presented immediately following the free recall task.

Scoring

**Story production.** The oral story productions were assigned a score of 0 through 7 using a story structure complexity scale developed by Stein and Glenn (1982). Using this scale children's stories were rated for how closely the organizational structures found in their
compositions approximated a complex narrative form. A story which was complex and included all story elements received a score of 7. A story with none of the story elements received a score of 0. This scale appears in Appendix F. Interrater agreement was established at .93 by having a second rater independently score a random sample of 10% of the story productions. Of the 16 stories that were rated by both raters, only one received differing scores.

**Story rules.** The story rules task had a maximum score of 8, one point for each of the questions correctly answered. Interrater agreement was established at .93 by a second rater independently scoring a random sample of 10% of the tests.

**Free recall.** Scores for the free recall task were assigned for the total number of idea units recalled. The idea units in each story have been identified by Stein and Glenn (1979). The maximum number of idea units is 26, for 26 possible points.

**Probed recall.** Each probed question was scored one point for each correct answer, for a maximum score of 6 points. On both recall tasks, perfect interrater agreement was established after a second rater
independently scored a random sample of 10% of the tests.

**Instructional Procedures**

After pretest scores were obtained, the children comprising the instructional group received eight periods of instruction in story structure elements over a two-week period. Instructional periods were 45 minutes a day, and took place in a room outside of the regular classrooms. Instruction focused on teaching the five story rules (McGee & Tompkins, 1981) which correspond to the six elements included in the Stein and Glenn (1979) grammar.

The story rule format was adapted for instruction because it was judged to be more appropriate for four-year-olds. The story rule format incorporates the essential story elements without using the specific terminology the grammar defines. Although studies with older students have used story grammar labels (Dreher & Singer, 1980; Fitzgerald & Spiegel, 1982), it was felt by the researcher that this would not be appropriate with four-year-olds.

During instruction, the rules were explicitly taught, one per day. On day one the researcher taught...
the character rule, on day two the setting rule, on day three the problem rule, on day four the solution rule, and on day five the beginning, middle, and end rule. After discussion of the rule, children listened to a story selected from children's literature which illustrated the rule taught that day. These stories, listed in Appendix G, were selected for their illustration of a particular story element and for their emphasis on one or more story elements. A variety of follow-up activities were used to reinforce the rule being introduced. The final three days of instruction involved reinforcement activities such as story reading, oral story production, puppetry, and making books. A detailed description of the eight instructional periods is contained in Appendix H.

During the two-week period of instruction, children in the story group were orally read each of the stories that were heard by the instructional group. No rules were taught and no follow-up activities were used. The control group performed only their regular classroom activities during the eight instructional periods.
Experimental Design

The design of the study included a pretest period, an instructional period, an immediate posttest, and a delayed test (two weeks). Initially, pretests were administered to determine which children would benefit from the instruction. Then children to be included were selected and randomly assigned to one of the three groups. Then two weeks of instruction followed. Posttests were administered immediately following the instructional phase. After a 10 day period, delayed tests were administered.

Analysis of the Data

Data was analyzed using a mixed 3 x 3 multivariate analyses of variance. Examined were effects for group (instructional, story, and control) and time (pre-, post-, and delayed-test), and their interaction. Separate follow-up univariate analyses of variance and Scheffe post hoc analyses were also conducted (when appropriate) for the four tasks (story questions, story production, free recall, and probed recall) to more closely examine performance on those measures.
Chapter 4

RESULTS

The purpose of this study was to examine the effects of instruction in story structure knowledge and listening to stories on the listening comprehension of preschoolers. This study investigated the effects of explicitly teaching the story structure elements, defined in a story grammar (Stein & Glenn, 1979), to four-year-olds who lacked story structure knowledge. Four tests were administered during pre-, post-, and delayed posttesting. These tests were designed to measure two areas: story structure knowledge and listening comprehension abilities. Two tests were used for each area: (a) story production ability, and (b) knowledge of the story rules were used to test story structure knowledge; and (c) free recall and (d) probed recall of a story, after listening to a story, were used to assess listening comprehension ability.

Children's scores on the four tasks (story production, story rules, free recall, and probed recall) were analyzed using a mixed multivariate analysis of variance (Kirk, 1982). This analysis tested the effects of group (instruction, story, control), time (of test), and the univariate group by time interaction. Separate follow-up analyses were...
conducted for each of the four dependent measures to more closely examine performance on each of the tasks. Results of these analyses will be presented in the next section. First in this section, the results of the multivariate analysis of variance are reported. Results relative to hypothesis one which predicted that instruction would significantly increase story production ability for the treatment group receiving explicit instruction in story structure over the group listening to stories or the control group will be examined second. Results relative to hypothesis two which predicted children in the instruction group would answer more questions about the story rules than either of the other two groups will be examined third. Results analyzing scores for free recall, which hypothesis three predicted would be significantly higher for children instructed in story structure than either of the other two groups will be discussed fourth. Finally, hypothesis four, predicting that children in the instruction groups will answer more probed questions than either of the other two groups, will be discussed.
Results of Story Knowledge and Listening Comprehension Tasks

The results from a mixed multivariate analysis of variance indicated that both main effects and the interaction were significant. First, there was a significant group effect, multivariate $F(8, 84) = 7.29$, $p < .0001$. Moreover, there was a significant time effect, multivariate $F(8, 174) = 8.39$, $p < .0001$. The interaction of group by time was also significant, multivariate $F(16, 267) = 4.60$, $p < .0001$. To more closely examine performance for the groups, the results of the separate univariate analyses of variance conducted for each of the four dependent measures follows.

**Hypothesis One: Story Production**

Children's story productions, rated on a story production scale (Stein & Glenn, 1982), were examined in hypothesis one. It was predicted that children, explicitly instructed in story structure, would produce better oral stories, from a picture stimulus, than either a group that listened to well formed stories, or a group receiving no treatment.
Table 1 displays the means for each group on the story production task. Results of the analysis indicate that the main effect for group was significant, $F(2, 45) = 3.83, p < .03$. Scheffe post hoc analyses demonstrated that the instructional group ($M = 2.25$) produced stories with a higher rating than the control group ($M = 1.22$) stories ($p < .05$), but the other two groups did not differ. The effect of time, $F(2, 90) = .57, p < .57$; and the interaction of group by time, $F(4, 90) = 1.03, p < .40$, were not significant.

Hypothesis Two: Story Rules Knowledge

Children's knowledge of story rules was examined in hypothesis two. It was predicted that children instructed in story structure would correctly answer more questions about story rules than either children who listened to stories, or children who received no treatment. Answers to the story rule questions, which focus on structural elements, were scored one point for each correct answer for a total maximum score of eight.

Table 2 displays the means of the three groups on the story rules knowledge task. Results indicate that effects for group were significant, $F(2, 45) = 23.44$, 

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Table 1


<table>
<thead>
<tr>
<th>Group</th>
<th>Time-of-Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
</tr>
<tr>
<td>Instruction</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>1.69</td>
</tr>
<tr>
<td>SD</td>
<td>1.92</td>
</tr>
<tr>
<td>Story</td>
<td></td>
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<tr>
<td>M</td>
<td>1.87</td>
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<tr>
<td>SD</td>
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<tr>
<td>Control</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>1.29</td>
</tr>
<tr>
<td>SD</td>
<td>1.72</td>
</tr>
</tbody>
</table>

\(^a\) n = 16 instruction
n = 15 story
n = 17 control
Scheffe post hoc analyses revealed that the treatment group ($M = 3.08$) correctly answered more story rules questions than the control ($M = .64$) group ($p < .05$) and the story ($M = 1.07$) group ($p < .05$). The story group means did not differ from the control group means. The effect for time was also significant, $F(2, 90) = 23.49$, $p < .0001$. Scheffe post hoc analyses revealed that children answered more story rules questions at the post- ($M = 2.21$) and delayed- ($M = 1.77$) than at the pre-test ($M = .79$), $p < .05$. Finally, the interaction was also significant, $F(4, 90), = 15.39$, $p < .0001$. Figure 3 graphically represents the interaction of group by time for the story rules task. In order to examine the interaction, simple effects tests were performed comparing group means at each of the three time periods. At time one, there were no significant differences among means. However, at the posttest, the treatment group ($M = 4.69$) performed better than the story group ($M = 1.20$) and the control group ($M = .76$), $p < .05$. At the delayed test, the treatment group ($M = 3.56$) performed better than the control group ($M = .76$) and the story group ($M = 1.00$) group on the story rules task, $p < .05$. 

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Table 2

**Story Rules Task Means and Standard Deviations by Group and Time-of-Testing.**

<table>
<thead>
<tr>
<th>Group</th>
<th>Time-of Testing</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction</td>
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<td>1.00</td>
<td>4.69</td>
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<tr>
<td>Story</td>
<td></td>
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<tr>
<td>M</td>
<td>SD</td>
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<td>1.26</td>
<td>1.00</td>
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<tr>
<td>Control</td>
<td></td>
<td>.41</td>
<td>.76</td>
<td>.76</td>
</tr>
<tr>
<td>M</td>
<td>SD</td>
<td>.87</td>
<td>1.09</td>
<td>1.15</td>
</tr>
</tbody>
</table>

\[\text{an} = 16 \text{ instruction} \]

\[\text{n} = 15 \text{ story} \]

\[\text{an} = 17 \text{ control} \]
Figure 6

Interaction of Group X Time-of-Testing for the Story Rules Task
Hypothesis Three: Free Recall

The free recall task, performed after listening to a story, was examined in hypothesis three. It was predicted that children instructed in story structure would recall more ideas than either a group that listened to well formed stories, or a group receiving no treatment. Table 3 displays the means for each group on the free recall task. Results of the analysis indicate that the main effect for group, $F(2, 45) = 2.60, p < .08$, and the interaction of group by time, $F(4, 90) = 1.78, p < .14$, were not significant. The main effect for time was significant, $F(2, 90) = 12.64, p < .0001$. Scheffe comparisons ($p < .05$) indicated that students recalled more ideas at post- ($M = 2.35$) and delayed- ($M = 3.06$) than at the pre-test ($M = 1.46$).

Hypothesis Four: Probed Recall

Hypothesis four predicted that children who received instruction in story structure would correctly answer more questions after listening to a story than either a group that listens to well formed stories or a group receiving no treatment. Six probe questions (Stein & Glenn, 1979) were asked of each
Table 3

**Free Recall Task Means and Standard Deviations by Group and Time-of-Testing.**

<table>
<thead>
<tr>
<th>Group</th>
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<tbody>
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<td></td>
<td>Pretest</td>
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<tr>
<td>----------------</td>
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</tr>
<tr>
<td><strong>Instruction</strong></td>
<td></td>
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<tr>
<td><strong>M</strong></td>
<td>1.75</td>
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<tr>
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<tr>
<td><strong>Story</strong></td>
<td></td>
</tr>
<tr>
<td><strong>M</strong></td>
<td>1.53</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>1.24</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td></td>
</tr>
<tr>
<td><strong>M</strong></td>
<td>1.12</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>1.96</td>
</tr>
</tbody>
</table>

^an = 16 instruction
^n = 15 story
^n = 17 control
child after the free recall task. Answers were scored one point for each correct answer for a maximum score of six. 

Table 4 displays the means for each group on the probed recall task. Results of the analysis indicate the main effects of group $F(2, 45) = 2.73, p < .07$, and time, $F(2, 90) = 2.63, p < .07$, were not significant. The interaction of group by time was significant, $F(4, 90) = 3.48, p < .01$. Figure 4 graphically represents the interaction of group by time for the probed recall task. In order to examine the interaction, simple effects tests were performed on group means for each of the three time periods. Results indicated that at the pretest there were no significant differences among the group means. At the posttest, the treatment group ($M = 2.50$) correctly answered more probed questions than either the story group ($M = .87$) or the control group ($M = 1.24$). At the delayed test, the treatment group ($M = 2.19$) correctly answered more probed questions than the control group ($M = 1.06$).
Table 4


<table>
<thead>
<tr>
<th>Group</th>
<th>Time-of-Testing</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
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<tr>
<td>Instruction</td>
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<tr>
<td>M</td>
<td>1.25</td>
</tr>
<tr>
<td>SD</td>
<td>1.29</td>
</tr>
<tr>
<td>Story</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>1.53</td>
</tr>
<tr>
<td>SD</td>
<td>1.59</td>
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<tr>
<td>Control</td>
<td></td>
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<tr>
<td>M</td>
<td>.76</td>
</tr>
<tr>
<td>SD</td>
<td>1.15</td>
</tr>
</tbody>
</table>

\( n = 16 \) instruction
\( n = 15 \) story
\( n = 17 \) control
Figure 7

Interaction of Group X Time-of-Testing in the Probed Recall Task

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This study examined the effect of instruction in story structure on the listening comprehension of preschoolers. It was hypothesized that after the treatment phase preschool children who were instructed in story structure following a story rule format, would perform significantly better on tests of story production, story rules knowledge, free recall of a story, and probed recall than preschool children who listened to well formed stories, or preschool children who received no treatment. Therefore it was expected that there would be significant interaction effects between group and time for each of the four dependent measures. Interactions were expected because the three groups were not expected to differ at the pretest. However, groups were expected to differ at the post- and delayed-tests. Observation of these interactions are indicative of the hypothesized differences between the groups on each of the four dependent measures.

This chapter includes a discussion of the results of this study, limitations of the study, recommendations for classroom application,
recommendations for further research, and a summary with conclusions.

Discussion of Results

On the story production task it was predicted that after the treatment phase the group receiving instruction in story structure would produce better stories than either a group listening to well formed stories or a group receiving no treatment. The results of the analyses indicated that the instruction group produced stories with a higher rating (i.e. better) than the control group over all three times. On the story production task listening to well formed stories (story) did not appear to enhance story production over the control group.

The second story schema measure was the story rules knowledge task. It was hypothesized that after the treatment phase children who received explicit instruction in story structure would be able to answer more story rules questions than either a group listening to stories, or a group receiving no treatment. The predicted interaction between group and time was found. At pretest there were no significant differences among the means of the three groups.
However at the post- and the delayed-test, the instruction group answered more story rules questions than either of the other two groups. These results provide support for the predicted results. Children who received instruction in story structure answered more story rules questions than either the group listening to stories or the group receiving no treatment. This indicates that the training in story structure using a story rule format is an effective method of teaching story structure to children and that this knowledge is retained over time.

Free recall of a story was included as a measure of comprehension. It was predicted that after the treatment phase, children who received explicit instruction in story structure would recall more idea units after listening to a story than either of the other two groups, one listening to stories and the other receiving no treatment. The results did not confirm this hypothesis. Only the time effect was significant, indicating that all children recalled more ideas at the post- and the delayed-test than at the pretest. Neither a group effect nor an interaction was found. This indicates that instruction in story structure, using the story rule format, was not an
effective method of increasing story retelling scores. Future research with young children should perhaps include more practice retelling stories or transfer training in an effort to increase story retelling scores. Morrow (1985) incorporated retelling practice during the instructional phase, and results indicated improved comprehension scores.

The final task, probed recall, was also included as a measure of comprehension. It was predicted that after the treatment phase children who received explicit instruction in story structure would be able to answer more probe questions after listening to a story than either the story or the control groups. Results of the analyses indicated that the interaction between group and time was significant. At pretest, there were no differences among the groups. At the posttest, the treatment group answered more probe questions than either the story group or the control group. At the delayed posttest, the treatment group continued to answer more probe questions than the control group. This result indicates that story structure knowledge instruction aides children in answering questions about stories. The story group did not differ from the control group. Caution must be
taken to interpret this that listening to stories is of no benefit. The story group also did not differ from the treatment group. It is clear that listening to stories and receiving instruction in story structure is better than not hearing stories or learning about stories. The instruction may have produced the expected increase in story knowledge as evidenced in the greater story production ratings for the treatment group than the control.

It was predicted that instructing children in story structure would improve story knowledge (story production and story questions) and would transfer to the comprehension of stories (free and probed recall). The instruction produced the desired results in improving comprehension but only on probed recall. The treatment group answered more probe questions than the control group.

In examining the scores on these measures, it is apparent that the children in this study scored extremely low on the four tasks. Of more importance are the scores after treatment. It appears that even after the instructional phase, the children's scores were low. Because this study has indicated that the explicit instruction did significantly increase
performance in story rule knowledge and listening comprehension, perhaps extending the length of the treatment time would allow more opportunity for the children to interact with stories.

Limitations of the Study

There were some factors that occurred during the present investigation that may have influenced the results. This section will delineate these factors. The first limitation of the present study involves the location where the study took place. The only available space for instruction was in the gym of the school building, where the acoustics created a difficult situation. Although the gym was not an ideal situation in which to provide instruction, adjustments were made as needed.

A second limitation involves the possible interference caused as an outside person coming into a school. The novelty of being involved in the study was both an asset and a limitation. Motivation was high for being included in the study because instruction and testing were conducted outside of the classrooms. However, attending to the task at hand was sometimes
difficult for these young children who were excited by
the change of locale.

The language of instruction was a limitation of
the free recall task. It became apparent that the
children may not have understood what was expected of
them when asked to "tell me everything you can remember
about the story". This limitation was further
reinforced when the children could answer the probe
questions immediately following the free recall task.
If the probe questions could be answered correctly, it
is apparent that the story was comprehended. Perhaps
the request to recall the story was not understood. A
second possibility is that a free recall task may be
too difficult for young children, where they must
generate information and recognize whether the
information is part of the story that is to be
recalled.

The final limitation of the present study involves
the influence of teachers reading stories in the
classroom during the school day. This factor was not
controlled for; however, listening to well formed
stories did not prove to be a significant method for
improving children's schema for stories or listening
comprehension. This may indicate that teacher story reading was not a confounding factor.

Instructional Implications

This study, along with others (Morrow, 1984, 1985; Ratliff, 1985), suggests that teaching children explicitly about story structure is beneficial for improving listening comprehension ability. The present study indicates such instruction can benefit preschoolers. Therefore, explicit instruction in story structure can be beneficial and can be implemented by the classroom teacher. An underlying assumption in the present study and other studies is that the structural elements in a story, as defined by a grammar, need to be explicitly taught to children. Strategies for reinforcement and transfer practice of that knowledge into other skills such as story production or retelling of stories are also crucial.

Focusing questions after story reading on the structural elements of stories may be one aspect of developing a schema for stories that can be implemented by the classroom teacher. This questioning technique may be applied not only to teacher generated questions, but also to student generated questions. Providing a
visual framework for students from which to generate story questions may be beneficial either in the form of a story rules chart or a chart that illustrates the structural elements of a story.

Providing increased time for oral story reading in the classroom could possibly produce children with a better defined story schema. However, the transfer of that story knowledge to other tasks requires specific instruction and reinforcement, as in the case of retelling stories.

Explicitly instructing children in story structure has many benefits, but does not typically occur until the intermediate grades in school. Research has indicated that this knowledge can be instructed prior to that, even with preschoolers. The main problem with the implementation of this instruction is the lack of available materials to use for reinforcement and practice. Teachers must develop their own materials; however, many suggestions for possible ideas have been presented in the literature review, such as story maps and charts.
Recommendations for Future Research

The limitations delineated in the preceding section would suggest changes that could be implemented in future research. First, teachers could be trained in story structure instruction. Then classroom teachers could provide the instruction to their children. This would not only serve to eliminate the effects of an outside investigator, but would provide a dimension to the story structure instruction that has previously been lacking. If the classroom teacher provided the instruction, the opportunity for additional reinforcement of the instructed story elements could be done throughout the school day. For example, when reading from children's literature, the teacher could ask "Remember when we discussed the characters in stories this morning? Who remembers what a character is? Who are the characters in this story?", or simply reinforcement of the terminology used could occur. In addition, if the classroom teacher was providing the instruction, the instructional phase could be longer in terms of the number of sessions of treatment. More research examining just listening to well formed stories is needed. Perhaps exposure to well formed stories over a
longer period of time would produce significant results for that method.

In addition to extending the instruction, some revisions could be made to the instruction itself. The first comprehension measure, free recall of a story after listening to an oral reading, has not produced a significant interaction effect in either of the studies that have been conducted by the investigator (Ratliff, 1985, 1986). However, other studies have found significant results for a retelling task with young children (Morrow, 1984b, 1985, in press). Morrow found that frequent practice and guidance in story retelling with an emphasis on the structural elements in a story, improved children's comprehension, increased the number of structural elements included in their own retellings, and enhanced the complexity of their oral language. In a subsequent study, kindergarten children dictated stories with more structural elements included after retelling practice. It is assumed that the structures that influence the comprehension of stories also influence the spontaneous generation of stories. Therefore, the type and sequence of categories generated in spontaneous stories should be similar to the internal representation of a story.
(Stein & Glenn, 1979). The present study showed that students who received instruction designed to enhance their story schema may have produced better stories. It is apparent that young children can improve retelling performance, and that this has an effect on other abilities. An extension of the present study should include more activities designed to reinforce and practice retelling stories. Results of this revised instruction should be examined both for retelling and story production.

Another area of research that needs examination is determining which factors may contribute to the development of a schema for stories in preschool children who are judged to be skilled in story structure knowledge. It would seem that if children have acquired story structure knowledge prior to schooling, then some events within the home contribute to the development of this knowledge structure. This is an aspect of this area of research that has not been explored.

Finally, the review of the research reveals that explicit instruction in story structure produces significant results at different ages. However, when, or at what stage in reading development this
instruction is most beneficial has not been examined. In other words, if this instruction has proved beneficial for children preschool through eleventh grade, is there a time that it is most beneficial?

Summary of the Study

This study examined the effectiveness of an instructional strategy designed to enhance the story structure knowledge of prereaders and increase their listening comprehension abilities. The explicit instruction in story structure increased the number of story rules questions (story structure knowledge) that children could answer in comparison to the control group and the story group. The instruction also resulted in increased probed recall (comprehension) questions over the group that listened to stories or the group that received no treatment. These results indicate that explicit instruction in story structure can enhance a four-year-old's knowledge of stories and that this instruction does transfer to the listening comprehension of a story.

There is some criticism of the story structure approach to analyzing stories. Bruce and Newman (1978) state that the story grammars are limited, and that
they ignore the internal structure of character's plans and their beliefs. He advocates content analysis rather than structural analysis. Although these claims may not be unfounded, instructing children in identifying the structural elements of stories has proven to be one effective way to increase the comprehension ability of children. No claims are made that instructing story structure is the way, or the only necessary component, to developing comprehension ability. This body of research provides another method for increasing children's ability to understand stories.
REFERENCES


APPENDIX A

STORY PRODUCTION PICTURES
Story Production Pictures

Set A

Frog Goes to Dinner
Set A, Picture 1: Setting

Set A, Picture 2: Initiating Event
Set A, Picture 3: Attempt

Set A, Picture 4: Consequence
Story Production Pictures

Set B

The Bear and the Fly
Set B, Picture 1: Setting

Set B, Picture 2: Initiating Event
Set B, Picture 3: Attempt

Set B, Picture 4: Consequence
Story Production Pictures

Set C

Frog, Where Are You
Set C, Picture 1: Setting

Set C, Picture 2: Initiating Event
Appendix B

Story Rules *

1. Stories have characters. They are the people and the animals in the story. Three ways to learn about characters is how they look, what they do, and what they say.

2. The setting is where and when the story takes place. Stories can take place anywhere. Stories take place in different kinds of weather. Stories can take place during the day or at night.

3. Stories have a problem that the character in the story encounters.

4. Stories tell what the character does to try to solve the problem. This is called the solution.

5. Stories have a beginning, a middle, and an end. The beginning introduces the character. The middle introduces the problem and what the character does to try to solve the problem. The end tells the outcome of the story and how the problem was solved.

* McGee & Tompkins, 1981
Appendix B

Story Rule Questions

1. Who are the characters in this story?
2. Where did this story take place?
3. When did this story take place?
4. What is the problem in this story?
5. How is the problem solved in this story?
6. Can you tell me something that happened at the beginning of this story?
7. Can you tell me something that happened in the middle of this story?
8. Can you tell me something that happened at the end of this story?
APPENDIX C

THE PASSAGES

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Tiger's Whiskers *

Once there was a woman. She needed a tiger's whisker. She was afraid of tigers but she needed a whisker to make a medicine for her husband. He had gotten very sick. She thought and thought about how to get a tiger's whisker. She decided to use a trick. She knew that tigers love food and music. She thought that if she brought food to a lonely tiger and played soft music the tiger would be nice to her. Then she could get the whisker. So she did just that. She went to a tiger's cave where a lonely tiger lived. She put a bowl of food in front of the opening to the cave. Then she sang soft music. The tiger came out and ate the food. He then walked over to the lady and thanked her for the delicious food and lovely music. The lady then cut off one of his whiskers. She ran down the hill very quickly. The tiger felt lonely and sad again.

*Stein and Glenn, 1979 (adapted)
Fox and Bear *

There was a fox and a bear who were friends. One day they decided to catch a chicken for supper. They decided to go together. Neither one wanted to be left alone. They both liked fried chicken. They waited until night time. Then they ran very quickly to a nearby farm where they knew chickens lived. The bear, who felt very lazy, climbed upon the roof to watch. The fox then opened the door of the henhouse very carefully. He grabbed a chicken. He killed it. As he was carrying it out of the henhouse, the weight of the bear on the roof caused the roof to crack. The fox heard the noise and was frightened. It was too late to run out. The roof and the bear fell in killing five of the chickens. The fox and the bear were trapped in the broken henhouse. Soon the farmer came out to see what was the matter.

*Stein and Glenn, 1979 (adapted)
Judy's Birthday *

Judy is going to have a birthday party. She is four years old. She wants a hammer and saw for presents. Then she could make a coatrack and fix her dollhouse. She asked her father to get them for her. Her father did not want to get them for her. He did not think that girls should play with a hammer and saw. But he wanted to get her something. So he bought her a beautiful new dress. Judy liked the dress but she still wanted the hammer and saw. Later she told her grandmother about her wish. Her grandmother knew that Judy really wanted a hammer and saw. She decided to get them for her because when Judy grows up and becomes a woman she will have to fix things when they break. Then her grandmother went out that very day and bought the tools for Judy. She gave them to Judy that night. Judy was very happy. Now she could build things with her hammer and saw.

*Stein and Glenn, 1979 (adapted)
Tiger's Whisker *

1. Once there was a woman
2. She needed a tiger's whisker
3. She was afraid of tiger's
4. but she needed a whisker
5. to make a medicine for her husband
6. He had gotten very sick
7. She thought and thought
8. about how to get a tiger's whisker
9. She decided to use a trick
10. She knew that tigers loved food and music
11. She thought that if she brought food to a lonely tiger
12. and played soft music
13. the tiger would be nice to her
14. Then she could get the whisker
15. So she did just that
16. She went to a tiger's cave
17. where a lonely tiger lived
18. She put a bowl of food in front of the
opening to the cave

19. Then she sang soft music

20. The tiger came out

21. and ate the food

22. He then walked over to the lady

23. and thanked her for the delicious food
   and lovely music

24. The lady then cut off one of his
   whiskers

25. She ran down the hill very quickly

26. The tiger felt lonely and sad again

*Stein and Glenn, 1979
1. There was a fox and a bear
2. who were friends
3. One day they decided to catch a chicken
   for supper
4. They decided to go together
5. Neither one wanted to be left alone
6. They both liked fried chicken
7. They waited until night time
8. Then they ran very quickly to a nearby farm
9. where they knew chickens lived
10. The bear, who felt very lazy
11. climbed upon the roof
12. to watch
13. The fox then opened the door of the
   henhouse very carefully
14. He grabbed a chicken
15. He killed it
16. As he was carrying it out of the henhouse
17. the weight of the bear on the roof caused the roof to crack
18. The fox heard the noise
19. and was frightened
20. It was too late
21. to run out
22. The roof and the bear fell in
23. killing five of the chickens
24. The fox and the bear were trapped in the broken henhouse
25. Soon the farmer came out
26. to see what was the matter

*Stein and Glenn, 1979*
Judy's Birthday *

1. Judy is going to have a birthday party
2. She is four years old
3. She wants a hammer and saw for presents
4. Then she could make a coatrack
5. and fix her dollhouse
6. She asked her father
7. to get them for her
8. Her father did not want to get them for her
9. He did not think that girls should play with a hammer and saw
10. But he wanted to get her something
11. So he bought her a beautiful new dress
12. Judy liked the dress
13. but she still wanted the hammer and saw
14. Later she told her grandmother about her wish
15. Her grandmother knew that Judy really wanted a hammer and a saw
16. She decided to get them for her
17. because when Judy grows up
18. and becomes a woman
19. she will have to fix things
20. when they break
21. Then her grandmother went out that very day
22. and bought the tool for Judy
23. She gave them to Judy that night
24. Judy was very happy
25. Now she could build things with her hammer and saw

*Stein and Glenn, 1979*
APPENDIX E

PROBED RECALL QUESTIONS
1. Why did the lady need a tiger's whisker?
2. Why did the lady need to make a medicine?
3. Why did the lady go to the tiger's cave?
4. Why did the tiger come out of his cave?
5. Why did the lady cut off the tiger's whisker?
6. Why did the tiger feel lonely and sad at the end of the story?

* Stein and Glenn, 1979 (adapted)
Fox and Bear *

1. Why did the fox and bear want a chicken?
2. Why did they wait until nighttime?
3. Why did the fox open the door of the henhouse?
4. Why did the roof crack?
5. Why did five chickens get killed?
6. Why did the farmer come out?

* Stein and Glenn, 1979 (adapted)
Judy's Birthday *

1. Why was Judy having a party?
2. Why did Judy want a hammer and saw?
3. Why did her father buy her a dress?
4. Why did Judy tell her grandmother about her wish?
5. Why did her grandmother go out that very day?
6. Why was Judy happy now?

* Stein and Glenn, 1979 (adapted)
APPENDIX F

STORY PRODUCTION RATING SCALE
Appendix F

Story Production Rating Scale *

Points

0  **No Structure**: Stories with only one or two statements.

1  **Descriptive Sequence**: Two or more statements that describe habitual feelings, personality traits, typical goals, with no temporal or causal relationship.

2  **Action Sequence**: Statements describe habitual, stereotypical, everyday actions of the protagonist temporally arranged, not necessarily causally connected.

3  **Reactive Sequence**: Events have a beginning and an end, are causally related, but are out of the control of the protagonist. No planful behavior on the part of the protagonist occurs.
4 **Incomplete Episode**: Protagonist's goal statement and consequence but no means whereby goal was brought about, or an attempt, but no consequence.

5 **Simple Episode**: Initiating event and/or an internal response, attempt and consequence. No reaction.

6 **Complete Episode**: Setting, initial event, attempt, consequence, reaction.

7 **Multiple Episode Stories**: Stories contain more than one motive resolution sequence.

* Stein and Glenn, 1982*
Appendix G
Children's Book References


APPENDIX H

DAILY INSTRUCTION

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Appendix H

Daily Instruction

Day one. The first day of instruction focused on the characterization rule. Discussion helped children verbalize that characters are the people and animals in stories. Also stressed was that authors tell us information about characters by telling us how they look, what they say, and what they do. This information was explicitly stated, with the rule presented on a chart. Next, the book Danny and the Dinosaur (1958) was read. This book was short enough to be read in the allotted time, and has distinct characters. Children identified possible characters in other stories by examining several book covers. The first period of instruction ended with an oral review of the story rule on characterization. No follow-up activities were planned for the first day because of time factors (time for introductions, etc.)

Day two. The rule taught on the second day of instruction was setting: when and where the story takes place. Children were told that stories can take place in different times, such as day or night. The key
words "when" and "where" were utilized. This rule also appeared on a chart. The book *Snow* (1962) was read to the children and followed with a discussion of the setting of that story. For follow-up the children drew a picture of the setting at the beginning of the book and at the end of the book. Each child orally shared his picture and told the other children about the setting in their picture. This instructional period ended with an oral review of the first two rules instructed.

**Day three.** The third rule taught explicitly is that stories have problems. Children were told that the characters in a story have problems. An oral discussion of possible problems the children have encountered followed the sharing of a problem by the instructor (e.g. I have to go to school, but I can't find my shoes). Next, the book *Little Bear* (1957) was read to the children. An oral discussion followed, focusing on what Little Bear's problem was. Review of the previous was included by asking who the characters are in this story and what the setting of this story is. As a follow-up activity, the children orally told stories about problems they have had, being sure to
tell a setting and identifying the characters in their story.

Day four. Day four involved the explicit teaching of the solution rule. This rule was presented on the story rule chart. First, the instructor told possible solutions for the problems discussed on day three. The children added other possible ways to solve the problem. Next was an oral review of *Little Bear*, while visually displaying the book. Questions were asked regarding who the characters were, the setting, the problem, and how the problem was solved in that story. *Harry and the Terrible Whatzit* (1977) was read next. The children found the solution to Harry's problem. The word "attempt" was introduced to explain all of the things the character does to solve his problem.

Day five. The last rule, beginning, middle, and end, was explicitly taught after an oral review of the first four rules. To introduce the concept of beginning, middle, and end, three children were placed in three chairs that were in a row, with the explanation that ______ is in the first, or beginning chair, etc. This concept was then connected to the idea of a train. The child in the first chair is like
the engine of a train, and so on with the middle cars and the ending caboose. Next, an explanation was given that stories have a beginning, a middle, and an end. This rule also appeared on the story rule chart. *I Will Not Go to Market Today* (1979) was read to the children while they listened for something that happened at the beginning, the middle, and the end of the story. Reviewed was that: (a) at the beginning we learned about the characters and the setting; (b) in the middle, the problem was introduced and the attempts were made; and (c) at the end of the story, the solution was found. As a follow-up activity, the children made trains. On each of the three sections of the train, the children drew a picture and dictated a sentence about the thing that happened at the beginning, the middle, and the end of the story.

**Day six.** This period began with a review of the rules learned. Next, the children discussed how stories have all of the parts we learned about in our rules. *Just For You* (1975) was read. Children orally identified the story elements. Particular emphasis was placed on beginning, middle, and end. The students
composed a group story, recorded on chart paper, and identified all of the story elements in it.

**Day seven.** After reviewing the five story rules, students heard the story *Little Runner* (1962). This was followed by making Indian headbands and acting out the story, focusing on the elements identified by the rules. Next, each child orally composed a story for the group about an Indian.

**Day eight.** A review of story rules was held. Second, the children listened to the story *The Knight and the Dragon* (1982). Puppets, resembling dragons, were decorated and used to enact the attempts to solve the problem in the story. Instruction was completed with a final review of the five story rules, naming the story parts, and reviewing what should be included when telling stories.
VITA

Joanne L. Ratliff was born August 22, 1953 in Northampton, England. She received a B.S. in Elementary and Special Education (June, 1974) and an M.Ed. in Reading Supervision (March, 1983) from Wright State University in Dayton, OH. Requirements for a Ph.D. in Curriculum and Instruction from Louisiana State University were completed in August, 1986.

While at Louisiana State University, Joanne Ratliff, Lea M. McGee (major professor), and colleagues published "Influence of Story Schema and Concept of Story on Children's Story Compositions" (Thirty-Third Yearbook of the National Reading Conference). With Ray. R. Buss (minor professor), she published "Effects of Instruction on the Use of Story Structure in Comprehension of Narrative Discourse" (Thirty-Fourth Yearbook of the National Reading Conference). Her third publication, with coauthor Jean Burns, is entitled "A Study of the Relationship Between Levels of Intelligence and Early Reading Within High Literacy Homes" (Thirty-Fourth Yearbook of the National Reading Conference). In addition, Joanne coauthored a book chapter with Lea M. McGee, "Using the VCR in the language arts." which was accepted for inclusion in C. 175
Personke and D. Johnson (Eds.) Language Arts and the Beginning Teacher.

Joanne has presented research papers at the National Reading Conference in 1983, 1984, and 1985. In addition to those national presentations, she presented research papers at the Southwest Educational Research Association annual meetings in 1984, 1985, and 1986. In 1985 she presented a workshop in story structure instruction at a regional meeting of the International Reading Association. A workshop on the use of wordless picture books in the intermediate grades was presented at the Louisiana Reading Association annual meeting in 1983.

While working as a graduate assistant at LSU, Joanne had the opportunity to work as a research assistant on two grant projects, supervise field experience students in Reading, and teach undergraduate courses in Elementary Reading Methods, Language Arts Methods, Middle and Secondary School Reading Instruction, and Diagnosis and Remediation of Reading Problems. Prior to attending LSU, Joanne taught elementary school in Ohio—five years in a self-contained primary learning disabilities class and three years in an intermediate resource learning disabilities class.
DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: Joanne L. Ratliff

Major Field: Education

Title of Dissertation: Explicit Instruction in Story Structure: Effects on Preschoolers' Listening Comprehension

Approved:

[Signatures]

Major Professor and Chairman
Dean of the Graduate School

EXAMINING COMMITTEE:

[Signatures]

Ray R. Burns

Date of Examination: July 21, 1986