

THE RELATIONSHIP BETWEEN STORY GRAMMAR INSTRUCTION
AND FIRST GRADERS' UNDERSTANDING OF NARRATIVE MATERIAL

by

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ABSTRACT

This study examined the extent to which instruction in story grammar improved children's abilities to comprehend and recall narrative material. Experimental group subjects received story grammar instruction over a five week period; control group subjects listened to the same stories as the experimental group during this time, but did not receive instruction in story grammar. It was found that subjects receiving instruction in story grammar were able to comprehend narrative material significantly better than subjects not receiving instruction. Experimental group subjects were also able to recall narrative material in the correct sequence and answer literal and inferential questions better than control group subjects, although the differences between the two groups were not significant.

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Chapter I

INTRODUCTION

There is an increasing interest by researchers in a variety of fields such as cognitive psychology, psycholinguistics, linguistics and educational psychology in the relationship of children's understanding of story structure or story grammar, and their comprehension of narrative material. Story grammar refers to a set of rules which classify the components of a story and specify the relationships among the parts. Many children's stories share a common abstract structure, including statements about an initial setting, the adventures of the main character and an outcome or ending. Since the major emphasis in the instructional material for elementary grades is narrative, current research suggests that instruction in story grammar will improve comprehension of narrative material. "This knowledge of the grammar of a story facilitates comprehension and recall. In other words, students use grammar while reading to organize the parts of a story and store them in memory. Then, when comprehension is tested they use the same story structure to help them recall the story" (Dreher and Singer, 1980, p. 263).

Need for the Study

Recently, reading authorities have developed a variety of teaching strategies for improving children's comprehension. Whaley (1981 a) discusses some teaching strategies for improving children's knowledge of story structures and suggests that it is important now for educators to bridge the gap between theory formulation and classroom application:

It is important now for educators and investigators alike, in controlled studies and informal situations to introduce a new perspective into our understanding of story schemata by using some of these instructional techniques. (p. 770).

Durkin (1981, p. 41) states that further investigations related to increasing learning from prose need to be considered in classroom settings: "Before any research findings can be generalized...systematic replication of studies using subjects who vary in age, intelligence, reading ability and socioeconomic background is essential."

The intention of the present study is to incorporate some of these instructional strategies in order to determine whether story grammar instruction is a useful technique for improving first grade children's abilities to comprehend and recall narrative material.

THE PROBLEM

The purpose of the present study is to determine the extent to which instruction in story grammar improves

children's abilities to comprehend and recall narrative material.

Specifically, the study seeks to answer the following questions:

1. What is the effect of story grammar instruction on children's abilities to comprehend and recall narrative material in the correct sequence?
2. What is the effect of story grammar instruction on children's abilities to answer literal and inferential questions?

Definition of Terms

For the purpose of this study the following terms were defined:

Story Grammar.

Story grammar consists of a set of rules which classify the components of a story and specify the relationship among the parts (Dreher and Singer, 1980, p. 262).

Comprehension.

This study defines comprehension as the grade scores obtained on the comprehension sections of the Gates-MacGinitie (Level A, Form 1 and Level A, Form 2) and Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M) reading tests as well as the raw scores obtained on the experimenter-designed pre and post-tests.

Folktale.

A story of unknown origin but well-known through repeated story telling, as Paul Bunyan folktales (Harris and Hodges, 1981, p. 121).

Fable.

A short tale in prose or verse to teach a moral, especially a tale using animals and inanimate objects as characters (Harris and Hodges, 1981, p. 115).

Subjects. The subjects for this study were selected from three grade one public school classes located within the geographic area of School District #7, Nelson, B.C.

GENERAL PROCEDURES

The general procedures were as follows:

1. The literature was surveyed to find existing information on the subject, to note the research design used in similar studies and to determine if there was a need for further investigation.
2. The three schools were selected in consultation with the District Counsellor in School District #7, Nelson, B.C. They were judged to be representative of the seventeen elementary schools in the district.
3. Pupils in each school were randomly assigned to two groups - experimental and control.
4. Student data--age, sex, birth date and school--were collected.
5. The following instruments were administered and data collected:
 - a) The comprehension section of the Gates-MacGinitie Reading Test, (Level A, Form 1) was administered to both experimental and control group students as a

pretest measure (February, 1982). Level A Form 2 of this test was administered to both experimental and control group students as a posttest measure (June, 1982).

b) Experimenter-designed pre (April) and post comprehension (June) tests consisting of both literal and inferential questions were administered to both experimental and control group students.

c) Free-Recall Measure. Students' recall protocols of a specific story ("The Gruff Lion") were taped and later transcribed. This information was obtained from students in both experimental and control groups and was used to determine the extent to which children from each group differed in the number of story events recalled and in their ability to recall story events in the correct sequence: beginning, middle and ending.

d) The Canadian Tests of Basic Skills, (Primary Battery, Level 7, Form 3 M-comprehension section) was administered during the second week (June, 1982) following the experiment to both experimental and control group students.

7. The following data were tabulated:

a) reading grade level scores-comprehension sections of the Gates-MacGinitie Reading Tests (Level A, Form 1 and Level A, Form 2) and the Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M).

- b) total comprehension scores obtained on the experimenter-designed pre and posttests.
 - c) total number of literal questions answered correctly on the experimenter-designed pre and posttests.
 - d) total number of inferential questions answered correctly on the experimenter-designed pre and posttests.
 - e) total number of literal questions answered correctly on the comprehension section of the Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M).
 - f) total number of inferential questions answered correctly on the comprehension section of the Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M).
 - g) total number of story events remembered from the free-recall measure.
 - h) a coding system was used to indicate if the story events were recalled in the correct sequence from the free-recall measure.
8. The treatment of data was as follows: Each child's comprehension scores were tabulated and mean scores and standard deviations were computed. Statistical significance was reported using a t-test of significant differences for independent samples (Glass and Stanley, 1970).

9. Control Group Procedures: The control group read the same stories as the experimental group but did not receive specific instruction in story grammar.

SUMMARY

Chapter one has introduced the purpose of the study which was to determine the extent to which story grammar instruction improves children's abilities to comprehend and recall narrative material.

ORDER OF PRESENTATION

The content and organization of the chapters are:

1. Chapter I presents the problem, the need for the study, limits of the study and general procedures.
2. Chapter II provides a survey of the pertinent literature on research-based support for story grammar application.
3. Chapter III describes the method employed in this study-- selection of subjects, instructional materials, instrumentation, teaching methods, and the collection, classification, coding, scoring and analysis of data.
4. Chapter IV is concerned with the presentation and interpretation of the data.
5. Chapter V is concerned with the findings, conclusions and recommendations for educational practise and future research.

Chapter II

RELATED RESEARCH

The purpose of Chapter two is to provide a survey of existing information related to story grammar, to note the research design used in similar studies and to determine a need for further investigation.

The Importance of Teaching Reading Comprehension

"An unprecedented interest in reading research is revealed as we skim through current journals. Individuals from a variety of fields such as cognitive psychology, psycholinguistics, educational psychology, and linguistics are writing and speaking on the topic" (Durkin, 1981, p.23).

What is reading comprehension? Pearson and Johnson (1978) offer some answers based on earlier findings:

Reading is often referred to as a complex process. In fact, Edmund Burke Huey, in 1908, believed that if we could understand reading we would understand the mysteries of the human mind. Edward Thorndike (1917) wrote an article entitled, "Reading as Reasoning...." David Russell, in 1961, considered reading to be an application of basic cognitive processes. The most recent influence on understanding reading comes from the academic discipline of cognitive psychology and artificial intelligence (Computer simulation of mental processes). In these works (for example, Anderson, 1977), reading comprehension is viewed as a process subject to the same constraints as human memory and problem solving (p.8).

Durkin (1979) observed a variety of classrooms and noted that the majority of teacher time was devoted to giving and marking assignments and very little was spent teaching comprehension. Barr (1975) reported that little attention is focused on how the reading task may be modified to help the beginning reader "...the learner receives little support and sometimes interference from instructions in organizing his experience from print. The design of the printed material and teaching methods employed determine the dominant strategy that children will use for translating print to speech. There is a reciprocal relation between the child's mental structures and instruction" (p. 13). In other words, educators must be aware of how children learn and take advantage of this in developing appropriate teaching strategies.

A search of the literature reveals a growing interest in story grammar and the role it plays in facilitating comprehension of printed material. The present study was designed to determine if a relationship exists between story grammar instruction and improved comprehension of narrative material.

Schema Theories of Knowledge Related to Identifying Text Organization

Of particular importance to this study is research related to schema theory or an individual's expectations for

structural aspects of text.

Although Kant (1781) was probably the first to refer to knowledge structures as schema(ta), it was not until Bartlett (1932) formulated a very general theory of memory that the term "schema" and the orientation came into prominence. Bartlett defined schemata as a type of mental framework based on cultural experience into which new facts are fitted.

Organization or structural schemata. Schema theory suggests that individuals develop an implicit awareness of the patterns in which discourse can be organized. These patterns or "schemata" for discourse are believed to be related to the way in which knowledge is organized in memory (Bransford and McCarrell, 1974; Rumelhart and Ortony, 1971; Rumelhart and Norman, 1978).

A schema-theoretic view of reading comprehension. Schema theory views comprehension as an interactive and/or reconstructive process. During comprehension, schemata which are abstract knowledge structures have a potent influence on what will be comprehended or recalled from exposure to discourse (Frederikson, 1975; Anderson, Reynolds, Schallert and Goetz, 1977; Kintsch, 1977; Mandler and Johnson, 1977; Mandler, 1978; Rumelhart, 1977; Rumelhart and Norman, 1978; Stein, 1979; Stein and Glenn, 1979). New ideas become anchored in abstract knowledge structures (the known) and

contribute to the uniqueness of the comprehension and ultimate mental representation. Not only are schemata used in perception, comprehension and interpretation, the schemata themselves may change in various ways as a result of the process (Anderson, 1977).

Schema theory suggests that readers use schemata at two points. Firstly, at the input (reading) stage. Schemas help to chunk the incoming information. They tell the reader when an episode is incomplete. They alert him or her to unexpected or deviant information. If, after reading, a person tries to remember what he or she has read, schemas once more become useful. They tell you what to look for next. They help sort out whether something important hasn't been remembered yet (Tuimann, 1980).

The role of textual schemata in expository material.

The hypothesis that text information is hierarchically organized has been included in various studies: (Kintsch, 1974; Meyer, 1975; Rumelhart, 1975; Schank, 1975).

Several investigations have proven that the memory representation of a text is a hierarchical structure in which information is ordered from most important to least important (Ausbel, 1963; Mandler, 1967; Meyer and McConkie, 1973; Kintsch and Keenan, 1974; Kintsch, 1974; Kintsch, Koximinsky, Streby, McKoon and Keenan, 1975; McKoon, 1977; Marshall and Glock, 1978; Gabriel, Braun and Neilsen, 1980; Meyer, Brandt and Bluth, 1980; Taylor, 1980).

Studies by Meyer and McConkie (1973) and Kintsch et al., (1975) have shown that superordinate propositions were recalled better than subordinate propositions and forgotten less when recall was delayed. This was further supported through an investigation of ninth grade students' use of a reading strategy which focused on following the structural organization of text in order to determine what was important to remember (Meyer et al., 1980). Results indicated that explicitly stating the textual schema used, facilitated recall for poor ninth grade readers. Good readers apparently had well-developed schemata for text, while poor readers did not. Gabriel et al., (1980) reported similar results in an investigation of seventh grade students' abilities to utilize an author's schema in recall, and the effects of signalling on the amount and importance of information recalled from passages with different organizations. When the results were considered together, they tended to support the following conclusions:

1. Good comprehenders appear to have better developed schemata than poor comprehenders.
2. Both good and poor comprehenders appear to have better developed schemata for paratactic collections (selections which contain a general statement and several arguments of equal weight in a time sequence) than for response rhetorical predicates (structures containing

- a problem and two solutions of equal weight).
3. Signalling structure and top-level content appear to affect seventh grade good and poor comprehenders similarly for different structure types (p. 12).

The role of textual schemata in narratives. Many children's stories share a common abstract structure, including statements about an initial setting, the adventures of the main character and so forth (Bransford, 1979). Currently, there are five major story grammars that have been derived from the oral folktale tradition. These have been developed by (Rumelhart, 1975; Bower, 1976; Mandler and Johnson, 1977; Johnson and Mandler, 1980; Thorndyke, 1977; Stein and Glenn, 1979).

Story grammar can be defined as "An idealized internal representation of the parts of a typical story and the relationships among those parts (Mandler and Johnson, 1977, p. 111).

It has been shown that children as young as six years old have an internalized representation of the parts of a story even if it is a rudimentary structure consisting of a beginning, middle and end (Brown, 1977; Mandler and Johnson, 1977; Applebee, 1978; Dreher and Singer, 1980).

Although several of the story grammars have been found to be useful in recent investigations, the present study will discuss the story grammar developed by Guthrie (1977), depicted in the form of a diagram shown on page 15 of this

study. The rules for the grammatical structure are explained as follows:

The first rule simply defines a story as consisting of a setting, theme, plot, and a resolution, which usually occur in that sequence. The second rule is that the setting consists of the characters and usually the location and time of a story. The third rule is that the theme of a story consists of the main character....The plot consists of a series of episodes, which are designed to help the main character reach his goal. Each episode consists of a subgoal, and a resolution of the attempt....After several episodes an outcome occurs which matches the goal of the main character, ushering in a final resolution. These rules apply to many stories, folktales and dramas and give us a common framework for understanding them.

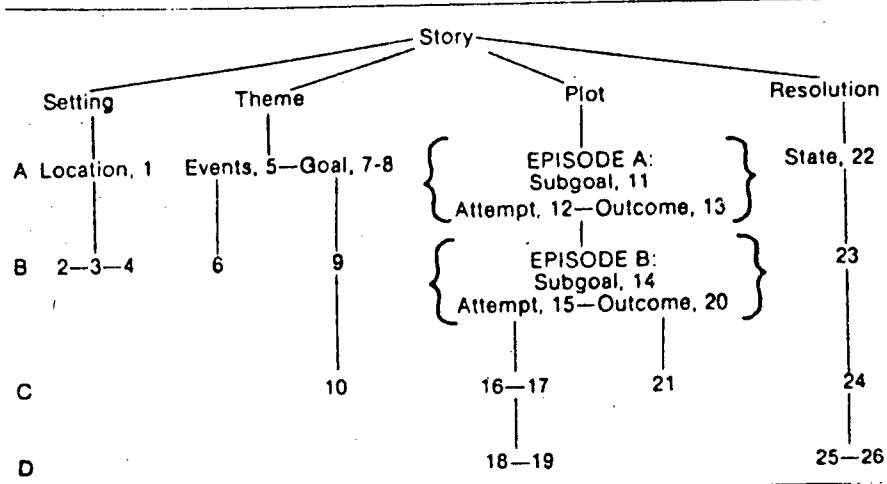
Research-based Support for Story Grammar Applications

(Thorndyke, 1977; Neilsen, 1977) studied the effects of structure and content variables on memory and comprehension of prose passages.

Thorndyke conducted two experiments using 64 undergraduates in the first and 48 in the second. Neilsen tested subjects from fifth and ninth grade levels as well as college students in three separate experiments.

In each investigation, comprehension and recall were found to be a function of the amount of plot structure in the story, independent of passage content. Subjects tended to recall facts corresponding to high-level organizational story elements rather than lower details. Story summarizations from memory tended to emphasize general structure rather than specific content.

Figure 1



Source: John T. Guthrie, "Story Comprehension". The Reading Teacher, 1977, 30, 574-577. (Cited in Dreher and Singer, 1980, p. 262.)

Neilsen (1977) also found that ninth grade and college students performed similarly, but better than fifth graders. He suggested that the schemata of older children and adults, due to world experience are more complete than the schemata of young children. Canney and Winograd (1979) reported similar findings in a study using second, fourth and sixth grade children.

In an analysis of the underlying structure of simple stories, 21 subjects from first and fourth grade and university level were required to listen to and recall two different stories (Mandler and Johnson, 1977). Analysis of final results indicated that both children and adults are sensitive to the structure of stories. The beginnings and final conclusions were extremely salient for young children.

Gordon (1979) examined the effect of two instructional strategies on the comprehension of narrative selections in the classroom, using 42 fifth grade students of average and above average reading ability. Subjects were randomly assigned to three treatment groups (Content and Structure, Inference-Awareness, and Control). The findings in this study provide support for contentions that: 1) both pre-existing schemata and metacognitive strategy use (knowing when and how to use content schemata) are important factors in constructing implied relationships, and 2) the effectiveness of instructional strategies varies under specific task demands.

An experiment conducted by Dreher and Singer (1980) using 28 fifth graders, indicated that subjects in the experimental group demonstrated a better ability to categorize story information than a separate, uninstructed group. However, no significant differences were found on the number of propositions recalled, the pattern of recall or on their recall of propositions from each of the four sections of a story.

Dreher and Singer (1980) concluded that fifth graders can learn to identify the structure of a story, but felt that story grammar teaching is not a useful technique for enhancing recall at this grade level.

Additional research necessary in classroom settings incorporating instructional techniques related to story grammar. There is considerable evidence to support the contention that individuals anticipate story structure and use schemata to understand and remember stories (Mandler and Johnson, 1977; Thorndyke, 1977; Mandler, 1978; Rumelhart, 1977; Stein, 1979; Stein and Glenn, 1979; Whaley, 1981b; Glenn, 1980; Summers, 1980; Singer and Donlan, 1982).

To date, there have only been a few cases in which investigators have concluded that schemata are not used for remembering text (Baker, 1978).

Whaley (1981 b) cites several studies which have dealt with the relationship of reading ability to sensitivity of various discourse elements such as inferences and macro-level

characteristics of text versus micro-level characteristics (Smiley et al., 1977; Hilyard and Olson, 1978; Eamon, 1978; Marshall and Glock, 1978; Tierney et al., 1978; Meyer et al., 1980; Palmer et al., 1980; Spiro, 1980; Taylor, 1980; Vispond, 1980).

In relation to these studies, Whaley (1981 b) points out that story grammar studies investigating reading achievement and sensitivity to structures in narratives to date are scarce. She goes on to suggest that future research emanating from her (1981 b) study would be to utilize prediction tasks and macro-cloze tasks in conjunction with other procedures such as recall and recognition to assess the relationship between reading achievement and readers' structural predictive abilities.

The notion that story-schema information in and of itself is not enough (Mandler and Johnson, 1977; Dreher and Singer, 1980; Whaley, 1981 b) is further supported by a recent investigation conducted by Singer and Donlan (1982).

Fifteen eleventh grade students were taught to derive story-specific questions from schema-general questions as they read complex short stories. Statistically significant differences were obtained between the treatment group and a control group.

This evidence implies 1) that instruction can help students improve reader-based processing of text and 2) that story grammar structures acquired prior to or during elementary school may

be enough for processing simple fables, but more adequate and more appropriate cognitive structures with strategies for making schema-general questions story-specific are necessary for processing, storing and retrieving information derived from reading complex short stories (Singer and Donlan, 1982, p. 166).

In a very recent article, Sadow (1982) suggests that by asking questions based on story grammar, educators will be able to elicit both literal and inferential levels of thought as well as providing a means through which children are able to internalize the structure of a story that a grammar describes. She indicates that questions based on story grammar are different from traditional questioning approaches in that it is discourse oriented rather than mental-process or skill oriented.

In designing questions based on story grammar, Sadow (1982) explains that it is helpful to think of a story as providing the answer to five questions based on Rumelhart's (1975) grammar (p.520):

1. Where and when did the events in the story take place and who was involved in them? (setting)
2. What started the chain of events in the story? (Initiating Event)
3. What was the main character's reaction to this event? (Reaction)
4. What did the main character do about it? (Action)
5. What happened as a result of what the main character did? (Consequence)

Story grammar instruction necessary in the early primary grades. There is evidence from several studies that there is a need for more investigation to be carried out in which instructional techniques related to story grammar are applied to classroom situations (Guthrie, 1977; Cunningham and Foster, 1978; Dreher and Singer, 1980; Whaley, 1981 a; Whaley, 1981 b; Sadow, 1982; Singer and Donlan, 1982).

A search of the literature also reveals a lack of studies carried out at the lower-elementary grade levels (Dreher and Singer, 1980; Schwartz, 1980; Summers, 1980; Whaley, 1981 b).

The purpose of the present investigation is to incorporate specific instructional and questioning techniques as outlined by (Whaley, 1981 a; Sadow, 1982) in an attempt to determine the effect story grammar instruction has upon Grade One children's abilities to comprehend and recall narrative material.

SUMMARY

Chapter II has presented a discussion of existing research related to the present study, research design used in similar studies as well as indicating a need for further investigation.

Chapter III

METHODOLOGY

The purpose of this chapter is to describe: 1) the selection of subjects, 2) the selection of materials, 3) the instruments used, 4) the collection of data, 5) the teaching methods incorporated, 6) the classification of data, 7) scoring of the data, and 8) the analysis of the data.

Selection of Subjects

The subjects of the study were 78 Grade One students attending three public schools in School District #7, Nelson, B.C. (38 boys and 40 girls). Table I shows the distribution of males and females in each group and the mean age of each student. As the table indicates, there were 20 males and 18 females in the control group and 18 males and 20 females in the experimental group. The mean age of the control group students was 6 years, 3 months and the mean age of the experimental group was 6 years, 5 months. The children within each school were randomly assigned to control or experimental groups.

The three schools were chosen in consultation with the District Counsellor and were judged to be representative of the seventeen elementary schools in the district.

Table I Distribution of Age and Sex in Experimental
and Control Groups

Groups	Mean Age in Years, Months	Males	Females
Experimental	6.5	18	20
Control	6.3	20	18
Total	6.4	39	39

Hume elementary is situated in an essentially middle class area. Pupils attending Rosemont Elementary come from a variety of socioeconomic backgrounds, Brent Kennedy is located ten miles outside the city limits, the majority of pupils attending this school have E.S.L. backgrounds.

The 39 children assigned to the experimental group received story grammar instruction in a three-step strategy spread over fifteen lessons, three days a week (Tuesday, Wednesday, Thursday) of approximately thirty minutes each (Singer, 1978; Singer and Donlan, 1980; Dreher and Singer, 1980).

The control group read the same stories as the experimental group each day, but received no specific instruction in story grammar.

Instructional Materials

Three fables and two folktales from the prescribed end-of-grade one basal reader, May I Come In (Ginn 720 series) and seven similarly organized narratives taken from a reader not used in the participating schools, along with a chart prepared by the experimenter were used for instructional purposes. "No attempt was made to control factors such as length, word frequency, imagery value, or interest of the stories. It was felt that it would be important for ecological validity to use stories that were as much like naturally existing stories as possible" (Whaley, 1981 b, p. 96).

These particular narratives were chosen because as Whaley (1981 a, p. 769) states: "These materials are good sources for instruction because their story elements are identified easily."

Instruments Used

1. Gates-MacGinitie Reading Text (Level A, Form 1). The comprehension section was administered as a pretest measure during the last week of February, 1982 to students in both experimental and control groups.
2. Experimenter-designed pretest. Prior to the experiment, students from both the experimental and control groups listened to one story chosen by the experimenter

from a reader not used in the participating schools. ("The Pot That Would Not Stop Boiling" pp. 181-185, from the reader, It's Storytime, Copp Clark series, end-of-grade one level). Following this, 14 questions, 7 literal and 7 inferential were read aloud, along with a choice of answers. Pupils followed along with their own typed copies.

3. Experimenter-designed posttest. An experimenter-designed posttest consisting of 14 comprehension questions, 7 literal and 7 inferential was administered to both experimental and control groups following experimental treatment. ("The Boy and the Goats" pp. 161-166, from the reader, It's Storytime, Copp Clark series, end-of-grade one level). Procedures were the same as for the experimenter-designed pretest.
4. Gates-MacGinitie Reading Test (Level A, Form 2). The comprehension section was administered as a posttest measure during the first week of June, 1982 to students in both experimental and control groups.
5. Free-recall measure. A free-recall measure was administered individually to students in both experimental and control groups during the first week following the experiment (June, 1982).

A volunteer, chosen by the experimenter, read a narrative selection to each student from both experimental and

control groups. ("The Gruff Lion", p. 192 from the Teacher's Guidebook for the reader It's Storytime, Copp Clark series). Prior to this, the following instructions were provided:

I want you to listen very carefully to a story I am going to read to you. When I finish, I will ask you to tell me everything that you can remember about the story. Please do your very best.

Student's recall protocols of the story were taped and later transcribed. Each student's version was loosely analyzed rather than propositionally segmented to assess the number of story events recalled and to determine if the events were recalled in the correct sequence.

6. Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M). The comprehension section was administered as a posttest measure during the second week of June, 1982 to students in both experimental and control groups.

Collection of Data

The information was collected during the last week of April and the entire month of May, 1982. A pretest-posttest control group design was used. Pupils in each school were randomly assigned to two groups-experimental and control. The experimental group received story grammar instruction in a three-step strategy spread over fifteen lessons,

three days a week (Tuesday, Wednesday, Thursday) of approximately thirty minutes each.

The control group read the same stories as the experimental group each day, but did not receive any specific instruction in story grammar. Additional folk and fairytales were read on days when the experimental group was reviewing a story already read. Instruction took place at the same time each day for each of the groups involved.

Teaching Methods

Step one. a) The teacher read a story from the prescribed basal reader May I Come In (Ginn 720 series) while pupils followed along in their own readers. Following this, the teachers asked pupils five questions based on story grammar categories as suggested by Sadow (1982). The same procedure was followed with each of the four remaining stories from the last unit of this reader.

b) During the second half of this step, teachers introduced pupils to the story structure chart. The following instructions were provided by the classroom teachers:

When we read a story we are sometimes able to remember it better if we can think about the different parts in the story and what happened in each of those parts. Today, I read you the story _____, afterwards, I asked you some questions. Each of the questions were from a different part of the story. Some were from the beginning, the middle and the end. Now I'm going to show you a chart with some new questions and see if you can remember this story well enough to answer them and complete this chart together with me.

A story structure chart adapted from the one developed by Dreher and Singer (1980, p. 264), was used for this part of the investigation.

Step two. Pupils were divided into groups of three and four and given typed copies of specific phrases related to the story read on day one of each week. Each of the phrases were cut apart and pupils were instructed to paste these where they belonged on individual charts. Following this, pupils discussed their reasons for completing the charts. Throughout this it was emphasized that "...the parts of a story as outlined in the chart could be used to help understand what is happening in it as well as an aid in remembering it" (Dreher and Singer, 1980, p. 265).

Step three. A different activity was used for step three each week, in some cases incorporating unfamiliar narratives with similar organization.

Week one. Prediction Task. Students listened to an incomplete story read to them (A Sly Fox p. 196, Guidebook, It's Storytime) in this case, only the setting was read. Oral discussion followed with the total group, encouraging pupils to tell what would come next. "For example, if students first read only a Setting, the story grammar predicts they will instinctively add to it a Beginning, why it occurs at this point and so on" (Whaley, 1981, p. 768).

Week Two. Scrambled Stories. The same story as used on day one of this week was separated into story grammar categories and jumbled. Various story parts were written on separate pieces of transparency material. Students then read the scrambled story and reordered it to make a good story by reading along with the teacher from the overhead projector. Discussion then centered on rationales for different orders and on the function of various story parts. The same procedure took place using an unfamiliar story supplied by the experimenter. (The Gingerbread Girl" p.185, Guidebook, It's Storytime.)

Week Three. Macro-Cloze. A whole story category was deleted. Lines were drawn to show where material was omitted. The teacher used the same story as used on day one of this week, encouraging pupils to provide the correct missing information. Following this, pupils were given typed copies of the same story with a different category omitted and asked to complete the story. This was done in groups of three or four, each group having a different category to complete.

Week Four. Retelling Stories. The teachers retold one of the stories previously read during the experiment (The Ant and the Grasshopper" p. 166, May I Come In). Four versions were supplied by the experimenter. Pupils were encouraged to point out any inaccuracies and reasons were to be provided for accepting or rejecting the alternatives.

Following this, the teachers read an unfamiliar story (The Tiger's Whisker" cited in Whaley (1981 a, p. 765), using four versions supplied by the experimenter. Students were to choose the correct version and provide reasons.

Week Five. Questions related to story structure chart.

Each child independently completed five questions related to a story structure chart after listening to a new story read orally (Albert the Fish, cited in Whaley (1981 a, p. 764). Pupils followed along with their own typed copies.

Gabriel et al. (1980) cite a study by Carroll (1977) who argues that a discussion of reading comprehension has to be a discussion of oral language comprehension and that oral language comprehension is related to cognitive development. Therefore it would be important to establish whether poor readers are experiencing more difficulty relating to oral language and perhaps to control of cognitive processes. Therefore, for purposes of this study, all stories other than the ones included in the Gates-MacGinitie Reading tests and the Canadian Tests of Basic Skills were read orally to the pupils.

Scoring of the Data

The comprehension sections of the Gates-MacGinitie pre and post reading tests (Level A, Form 1 and Level A, Form 2), the experimenter-designed pre and posttests and the comprehension section of the Canadian Tests of Basic Skills

(Primary Battery, Level 7, Form 3 M) posttest were all hand-scored by the classroom teachers from each of the three schools involved in the experiment. Teachers were given answer keys to follow while scoring the experimenter-designed tests. The Canadian Tests of Basic Skills and the Gates-MacGinitie tests were scored by using the scoring masks developed for each test.

The experimenter transcribed each student's recall protocols of the story "The Gruff Lion" after listening to a tape-recording of each. Each student's version was loosely analyzed rather than propositionally segmented, to assess the number of story events recalled and to determine if the events were recalled in the correct sequence.

Data Analysis

In examining the effect of story grammar instruction on children's abilities to comprehend and recall narrative material, the data was examined or treated as follows:

After pre and post test scores were recorded and coded for each child, a computer card, one for each child was key punched. The data was then run through the SPSS (Statistical Package for the Social Sciences), performed on an IBM computer using the applicable subroutines of SPSS.

The probability level of less than or equal to .05 was accepted as being indicative of a significant difference and will be reported in Chapter IV for substantive discussion

and interpretation. Statistical significance was tested using a t-test of significant differences for independent samples (Glass and Stanley, 1970).

The analysis was related to the following questions: To what extent do children instructed in story grammar differ from a control group in ability to:

1. Comprehend narrative material. The comprehension section of the Gates-MacGinitie (Level A, Form 1 and Level A, Form 2) and the experimenter-designed pre and posttest scores were recorded. Mean scores and standard deviations were calculated.

The statistical procedures employed in examining the question of the effect of treatment on group differences was a t-test. The particular t-test used was a t-test of significant differences for independent samples (Glass and Stanley, 1970).

2. Ability to answer literal and inferential questions.

The experimenter-designed pre and posttests and the comprehension section of the Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M) posttest were analyzed in terms of the number of literal and inferential questions answered correctly by each student. Mean scores and standard deviations were calculated from the recorded scores.

The statistical procedures employed in examining the question of the effect of treatment on group differences was a t-test of significant differences for

independent samples.

3. Ability to recall story events. The number of story events recalled by each student after listening to the story "The Gruff Lion", were recorded and mean scores and standard deviations were calculated. The statistical procedures employed in examining the effect of treatment on group differences was a t-test of significant differences for independent samples.
4. Ability to recall story events in the correct sequence. Students' abilities to recall the story: "The Gruff Lion" in the correct sequence were recorded using a coding system. Mean scores and standard deviations were calculated.

The statistical procedures used in examining the question of the effect of treatment of group differences was a t-test of significant differences for independent samples.

SUMMARY

The present chapter has presented information pertaining to the selection of subjects; instructional materials, instrumentation; teaching methods; and the collection, classification, coding, scoring and analysis of data.

Chapter IV

PRESENTATION AND INTERPRETATION OF DATA

This chapter presents the results of the data analysis and the interpretation of these results. The presentation is in four sections. The first section presents pretest results as determined by the Gates-MacGinitie and experimenter-designed tests. The second section presents posttest results as determined by Gates-MacGinitie and experimenter-designed tests. The third section discusses the effects of story grammar instruction on pupils' abilities to recall narrative material and to recall it in the correct sequence. Section four presents posttest results of the Canadian Tests of Basic Skills.

PRETEST RESULTS

The Gates-MacGinitie Reading Test (Level A, Form 1) and an experimenter-designed test were administered to all subjects prior to the experimental treatment. Total comprehension scores were recorded as well as the number of literal and inferential questions answered correctly on the experimenter-designed test.

Gates-MacGinitie Total Comprehension Test Scores

The experimental group achieved a mean score of grade

2.0, with a standard deviation of .72, while the mean score for the control group was grade 1.9, with a standard deviation of .70 (Table II). According to a t-test for independent samples, there were no significant differences between the two groups ($p < .55$), $t(76) = .343$.

Table II Means and Standard Deviations for Experimental and Control Groups on Total Comprehension as Measured by the Gates-MacGinitie (Level A, Form 1) Pre-reading Test.

Group	Mean	Standard Deviation
Experimental	2.0	.72
Control	1.9	.70

Experimenter-Designed Total Comprehension Test Scores

The experimental group achieved a mean score of 11.8, with a standard deviation of 1.11, while the control group achieved a mean score of 11.5, with a standard deviation of 1.06 (Table III). According to a t-test for independent samples, there were no significant differences between the two groups ($p < .22$), $t(76) = 1.54$.

Table III Means and Standard Deviations for Experimental and Control Groups on Total Comprehension as Measured by the Experimenter-Designed Pretest.

Group	Mean	Standard Deviation
Experimental	11.8	1.11
Control	11.5	1.06

Analysis of Literal and Inferential Questions on the Experimenter-Designed Test

A further analysis of the experimenter-designed test was done to determine the number of inferential and literal questions answered correctly.

Results of the experimenter-designed comprehension test scores on literal questions. The experimental group achieved a mean score of 5.5, with a standard deviation of 1.02, while the control group achieved a mean score of 5.1, with a standard deviation of .85 (Table IV). According to a t-test for independent samples there were no significant differences between the two groups ($p < .12$), $t(76) = 2.44$.

Table IV Means and Standard Deviations for Experimental and Control Groups for Literal Questions as Measured by the Experimenter-Designed Pretest.

Group	Mean	Standard Deviation
Experimental	5.5	1.02
Control	5.1	.85

Results of the experimenter-designed comprehension test scores on inferential questions. The experimental group achieved a mean score of 6.3, with a standard deviation of .90, while the control group achieved a mean score of 6.4, with a standard deviation of .81 (Table V). According to a t-test for independent samples, there were no significant differences between the two groups ($p < .89$), $t(76) = .017$.

Table V Means and Standard Deviations for Experimental and Control Groups for Inferential Questions as Measured by the Experimenter-Designed Pretest.

Group	Mean	Standard Deviation
Experimental	6.3	.90
Control	6.4	.81

SUMMARY

Examination of the Gates-MacGinitie Reading Test (Level A, Form 1), and the experimenter-designed pretest results indicated there were no significant differences between experimental and control groups prior to the experimental treatment in: 1) ability to comprehend narrative material; 2) ability to answer literal questions; and 3) ability to answer inferential questions.

POSTTEST RESULTS

The Gates-MacGinitie Reading Test (Level A, Form 2) and the experimenter-designed test were administered as posttests to all subjects following the experimental treatment. Total comprehension scores were recorded as well as the number of literal and inferential questions answered correctly on the experimenter-designed test.

Gates-MacGinitie Total Comprehension Test Scores

The experimental group achieved a mean score of grade 2.7, with a standard deviation of .73, while the mean score for the control group was grade 2.2, with a standard deviation of .89 (Table VI).

According to the results of a t-test for independent samples, the experimental group made a mean gain of 6.9, with a standard deviation of 6.14 while the control group's

mean gain was 3.6, with a standard deviation of 6.10, in which $T(df=76) = 2.42$, which is significant at alpha .05.

Table VI Means and Standard Deviations for Experimental and Control Groups on Total Comprehension as Measured by the Gates-MacGinitie (Level A, Form 2) Post-Reading Test.

Group	Mean	Standard Deviation
Experimental	2.7	.73
Control	2.2	.89

Experimenter-Designed Total Comprehension Test Scores

The experimental group achieved a mean score of 13.2, with a standard deviation of 2.6, while the control group achieved a mean score of 11.7, with a standard deviation of 1.1 (Table VII).

According to the results of a t-test for independent samples the experimental group made a mean gain of 1.3, with a standard deviation of 2.88, while the control group's mean gain was .20, with a standard deviation of 1.41, in which $T(df=76) = 2.14$, which is significant at alpha .05.

Table VII Means and Standard Deviations for Experimental and Control Groups on Total Comprehension as Measured by the Experimenter-Designed Posttest.

Group	Mean	Standard Deviation
Experimental	13.2	2.6
Control	11.7	1.1

Analysis of Literal and Inferential Questions on the experimenter-Designed Test.

A further analysis of the experimenter-designed test was done to determine the number of inferential and literal questions answered correctly.

Results of the experimenter-designed comprehension test scores on literal questions. The experimental group achieved a mean score of 6.3, with a standard deviation of .70, while the control group achieved a mean score of 5.7, with a standard deviation of .75 (Table VIII).

According to the results of a t-test for independent samples, the experimental group made a mean gain of .84, with a standard deviation of 1.15, while the control group's mean gain was .56, with a standard deviation of 1.04, in which $T(df=76) = 1.13$, which is not significant at alpha .05.

Table VIII Means and Standard Deviations for Experimental and Control Groups for Literal Questions as Measured by the Experimenter-Designed Posttest.

Group	Mean	Standard Deviation
Experimental	6.3	.70
Control	5.7	.75

Results of the experimenter-designed comprehension test scores on inferential questions. The experimental group achieved a mean score of 6.4, with a standard deviation of .64, while the control group achieved a mean score of 6.0, with a standard deviation of 1.0 (Table IX).

Table IX Means and Standard Deviations for Experimental and Control Groups for Inferential Questions as Measured by the Experimenter-Designed Posttest.

Group	Mean	Standard Deviation
Experimental	6.4	.64
Control	6.0	1.0

According to the results of a t-test for independent samples, the experimental group made a mean gain of .07, with a standard deviation of 1.08, while the control group's mean gain was -.41, with a standard deviation of 1.2, in which $T (df=76) = 1.82$, which is not significant at alpha .05.

SUMMARY

The results of a t-test for independent samples on the differences between pre and posttest scores indicated that:

- 1) the experimental group made significant gains compared to the control group in total comprehension as measured by the Gates-MacGinitie (Level A, Form 1 and Level A, Form 2) and experimenter-designed pre and post reading tests;
- 2) no significant gains were made by either group in ability to answer literal questions as measured by the experimenter-designed pre and posttests;
- 3) No significant gains were made by either group in ability to answer inferential questions as measured by the experimenter-designed pre and posttests.

The difference between the experimental and control group on the total experimenter-designed tests indicates an overall gain for the experimental group. The difference in gain for the control group was positive for literal questions and negative for inferential questions.

RECALLING NARRATIVE MATERIAL

A free-recall measure was administered individually to all subjects following experimental treatment. Students' recall protocols were taped and later transcribed. Each student's version was analyzed to determine: 1) the number of story events recalled and 2) if the events were recalled in the correct sequence.

Ability to Recall Story Events

The mean number of story events recalled by the experimental group was 4.9, with a standard deviation of 3.0, while the mean number of story events recalled by the control group was 2.8, with a standard deviation of 1.3 (Table X). According to a t-test for independent samples the differences between the two groups were significant ($p < .0002$); ($t(76) = 15.80$).

Table X Means and Standard Deviations for Experimental and Control Groups for Recalling Narrative Material as Measured by the Experimenter-Designed Free-Recall Measure.

Group	Mean	Standard Deviation
Experimental	4.9	3.0
Control	2.8	1.3

Ability to Recall Story Events in the Correct Sequence

Table XI shows the mean sequence scores for the experimental and control groups. A number 1 was assigned for events recalled in the correct sequence, and a number 2 was assigned for events recalled in the incorrect sequence. The experimental group's mean sequence score was 1.4, with a standard deviation of .49, while the mean sequence score for the control group was 1.6, with a standard deviation of .48. This indicates that the experimental group was able to recall story events in the correct sequence better than the control group. According to a t-test for independent samples, the differences between the two groups were not significant ($p < .04$), $t(76) = 4.28$.

SUMMARY

Examination of the free-recall scores indicated there were significant differences between the experimental and control groups following treatment favoring the experimental group in: 1) the number of story events recalled, but not in: 2) the ability to recall story events in the correct sequence.

Table XI Means and Standard Deviations for Experimental and Control Groups for Recalling Narrative Material in the Correct Sequence as Measured by the Experimenter-Designed Free-Recall Measure.

Group	Mean	Standard Deviation
Experimental	1.4	.49
Control	1.6	.48

POSTTEST RESULTS

CANADIAN TESTS OF BASIC SKILLS

The Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M) was administered to all subjects following the experimental treatment. Total comprehension scores were recorded as well as the number of literal and inferential questions answered correctly.

Canadian Tests of Basic Skills Total Comprehension Test Scores

The results of the Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M) indicated that the experimental group achieved a mean score of grade 2.8, with a standard deviation of .76, while the mean score for the control group was grade 2.2, with a standard deviation of .68 (Table XII). According to a t-test for independent samples, the differences between the two groups were significant ($p < .0002$), $t(76) = 15.80$.

Table XII Means and Standard Deviations for Experimental and Control Groups for Total Comprehension as Measured by the Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M) Posttest.

Group	Mean	Standard Deviation
Experimental	2.8	.76
Control	2.2	.68

Results of Canadian tests of basic skills test scores on literal questions. The experimental group achieved a mean score of 30, with a standard deviation of 6.2, while the control group achieved a mean score of 24, with a standard deviation of 7.4 (Table XIII). According to a t-test for independent samples, the differences between the two groups were significant ($p < .001$), $t(76) = 11.61$.

Table XIII Means and Standard Deviations for Experimental and Control Groups for Literal Questions as Measured by the Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M) Posttest.

Group	Mean	Standard Deviation
Experimental	30	6.2
Control	24	7.4

Results of Canadian tests of basic skills test scores on inferential questions. The experimental group achieved a mean score of 18.3, with a standard deviation of 4.2, while the control group achieved a mean score of 14.6, with a standard deviation of 4.7 (Table XIV). According to a t-test for independent samples, the differences between the two groups were significant ($p < .0005$), $t(76) = 13.28$.

Table XIV Means and Standard Deviations for Experimental and Control Groups for Inferential Questions as Measured by the Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M) Posttest.

Group	Mean	Standard Deviation
Experimental	18.3	4.2
Control	14.6	4.7

SUMMARY

The Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M) results indicated that the experimental group was significantly better able to: 1) comprehend narrative material; 2) answer literal questions; and 3) answer inferential questions as compared to the control group, following experimental treatment.

SUMMARY

The present chapter has presented and interpreted the data collected. Pre and posttest results were subjected to statistical analysis to determine: The extent to which instruction in story grammar improved children's abilities to: 1) comprehend narrative material; 2) answer literal questions; 3) answer inferential questions; 4) recall narrative material; and 5) recall narrative material in the correct sequence.

The major findings are summarized below:

1. According to a t-test for independent samples, the experimental group made significant gains in ability to comprehend narrative material as measured by the Gates-MacGinitie (Level A, Form 1, and Level A, Form 2) and experimenter-designed pre and post reading tests, as compared to the control group.
2. According to the results of a t-test for independent samples, the experimental group showed greater gain in ability to answer literal and inferential questions than the control group as measured by the experimenter-designed pre and post reading tests. However, the differences in gain between the two groups were not significant.
3. The experimental group was able to comprehend narrative material significantly better than the control group following experimental treatment as measured by the

comprehension section of the Canadian Tests of Basic Skills (Primary Battery, Line 7, Form 3 M), administered as a posttest.

4. The experimental group was able to answer literal and inferential questions significantly better than the control group following experimental treatment as measured by the comprehension section of the Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M) administered as a posttest.
5. The experimental group was able to recall story events significantly better than the control group following experimental treatment as measured by the free-recall measure administered as a posttest.
6. The experimental group was able to recall story events in the correct sequence better than the control group following experimental treatment as measured by the free-recall measure administered as a posttest. However, the differences between the two groups were not significant.

Chapter V

SUMMARY, FINDINGS, CONCLUSIONS, AND EDUCATIONAL IMPLICATIONS

Several instructional strategies have been incorporated in this study to determine whether story grammar instruction is a useful technique for improving children's comprehension and recall of narrative material. Prior to the present study, few investigations had been carried out in which instructional techniques related to story grammar have been applied to the classroom situation, particularly at the grade one level. The present study supports the use of story grammar instruction as an aid in improving children's abilities to comprehend and recall narrative material.

SUMMARY

The purpose of this study was to determine the extent to which instruction in story grammar improves children's abilities to comprehend and recall narrative material. Specifically, the study sought to answer the following questions:

1. What is the effect of story grammar instruction on children's abilities to comprehend and recall narrative material in the correct sequence?
2. What is the effect of story grammar instruction on

children's abilities to answer literal and inferential questions?

Administration of Instruments

The comprehension section of the Gates-MacGinitie (Level A, Form 1 and Level A, Form 2) and the experimenter-designed reading tests were administered to all subjects as pre and posttests. A free-recall measure was administered individually to all subjects as a posttest measure, following experimental treatment. The comprehension section of the Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M) was administered to all subjects as a posttest measure following experimental treatment.

Treatment of Data

Each child's pre and posttest scores on each of the measures were recorded and coded and a computer card, one for each child was key-punched. The data were then run through an SPSS (Statistical Package for the Social Sciences), performed on an IBM computer, using the applicable sub-routines of SPSS. Mean scores were computed for total comprehension, literal questions, inferential questions, number of story events recalled, and correct reporting of story sequence. The statistical procedure employed in examining the question of treatment on group differences was a t-test of significant differences for independent samples, significant at the 5 percent level of confidence.

FINDINGS

Briefly, the questions raised at the beginning of this investigation were answered in the following manner based on the data presented in Chapter IV. .

Comprehension of Narrative Material

Children in the experimental group who received story grammar instruction made significant gains in ability to comprehend narrative material as measured by the Gates-MacGinitie (Level A, Form 1 and Level A, Form 2) and experimenter-designed pre and post reading tests, as compared to children in the control group who did not receive story grammar instruction.

Although no pretest scores are available from the comprehension section of the Canadian Tests of Basic Skills, for comparison, children in the experimental group who received story grammar instruction achieved significantly higher mean scores on the Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M) when administered as a posttest only, as compared to children in the control group who did not receive story grammar instruction.

Ability to Answer Literal Questions

Children in the experimental group who received story grammar instruction showed a greater gain in ability to answer literal questions as measured by the experimenter-designed pre and posttests than control group children who did

not receive story grammar instruction. However, the differences in gain between the two groups were not significant.

Although no pretest scores are available from the comprehension section of the Canadian Tests of Basic Skills, for comparison, children in the experimental group who received story grammar instruction answered significantly more literal questions correctly as measured by the Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M) when administered as a posttest only, as compared to children in the control group who did not receive story grammar instruction.

Ability to Answer Inferential Questions

Children in the experimental group who received story grammar instruction showed a greater gain in ability to answer inferential questions as measured by the experimenter-designed pre and posttests than control group children who did not receive story grammar instruction. However, the differences in gain between the two groups were not significant.

Although no pretest scores are available from the comprehension section of the Canadian Tests of Basic Skills, for comparison, children in the experimental group who received story grammar instruction answered significantly more inferential questions correctly as measured by the

Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M) when administered as a posttest only, as compared to control group children who did not receive story grammar instruction.

Ability to Recall Story Events

Children in the experimental group who received story grammar instruction recalled a significantly higher mean number of story events when asked to recall a story read orally to them, as compared to children in the control group who did not receive story grammar instruction.

Ability to Recall Story Events in the Correct Sequence

Children in the experimental group who received story grammar instruction were better able to recall story events in the correct sequence when asked to recall a story read orally to them than children in the control group who did not receive story grammar instruction. However, the differences between the two groups were not significant.

CONCLUSIONS

The results of the present investigation seem to warrant the following conclusions:

1. Story grammar instruction appears to be an effective means of improving Grade One children's overall comprehension of narrative material.

2. The experimental group made greater gains in ability to answer both literal and inferential questions compared to the control group as measured by the experimenter-designed pre and posttests. The reason the differences between the two groups were not significant may be due to the fault of the experimenter-designed test, which was not tested for reliability or validity prior to the experiment. It is interesting that experimental group children were significantly better able to answer literal and inferential questions on the comprehension section of the Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M) administered as a posttest than control group children. However, on the basis of this study, it cannot be positively concluded that story grammar instruction is an effective means of improving Grade One children's abilities to answer literal and inferential questions.
3. Experimental group children were able to recall story events significantly better than control group children as measured by a free-recall measure, administered as a posttest. However, since no pretest information is available for comparison, it cannot be positively concluded that story grammar instruction is an effective means of improving Grade One children's abilities to recall narrative material.

4. Experimental group children were able to recall story events in the correct sequence better than control group children as measured by the free-recall measure administered as a posttest. However, the differences between the two groups were not significant. Therefore, on the basis of this study it cannot be positively concluded that story grammar instruction is an effective means of improving Grade One children's abilities to recall narrative material in the correct sequence.

RECOMMENDATIONS

1. This study recommends that story grammar instruction be considered a useful technique for improving Grade One children's comprehension of narrative material.
2. Although no significant differences were found between groups in ability to answer literal questions, the experimenter did observe that experimental group children who received story grammar instruction were better able to answer literal questions following experimental treatment than control group children who did not receive story grammar instruction, on both the experimenter-designed and Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M) posttests. Based on these observations, this study recommends that story grammar instruction be considered a useful technique for improving Grade One children's abilities to answer literal questions.

3. Although no significant differences were found between groups in ability to answer inferential questions, the experimenter did observe that experimental group children who received story grammar instruction were better able to answer inferential questions following experimental treatment than control group children who did not receive story grammar instruction, on both the experimenter-designed and Canadian Tests of Basic Skills (Primary Battery, Level 7, Form 3 M) posttests. Based on these observations, this study recommends that story grammar instruction be considered a useful technique for improving Grade One children's abilities to answer inferential questions.
4. This study recommends that story grammar instruction be introduced in the early primary grades rather than postponing this type of instruction until the middle or upper intermediate grades.
5. Classroom teachers should be aware that story grammar information in and of itself is not enough. The present study incorporated the use of macro-cloze, prediction tasks and questions related to story grammar structure. As Singer and Donlan noted in their (1982) study, this may also be why the results of the present experiment were favorable, in contrast with previous instruction in story grammar which only taught knowledge structures and teacher-directed categorization

under these structures.

SUGGESTIONS FOR FURTHER RESEARCH

1. A replication of the present study using grade one children in other geographical areas of Canada would add to the present findings, and to the applicability of the findings to a wider population.
2. It is recommended that a replication of the present study could be carried out longitudinally so as to determine whether instruction in story grammar is an effective means of improving comprehension and recall of stories in subsequent grades.
3. It is recommended that a longitudinal study be conducted in order to examine children receiving story grammar instruction and those receiving comprehension instruction solely through techniques suggested in the basal reader. This would be done during their first year in school in order to note developmental trends.
4. It is recommended that a replication of the present study could be carried out longitudinally so as to determine whether instruction in story grammar is an effective means of improving children's writing abilities in subsequent grades.
5. Further research is needed in which additional

standardized tests can be administered as pre and post-test measures to further validate the effect of story grammar instruction on children's abilities to comprehend and recall narrative material.

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APPENDICES

INSTRUCTIONAL MATERIALS
AND
TEACHING PROCEDURES

Appendix A

Pretest Measures (To be conducted April 22 or 23, 1982.)

- An experimenter-designed pretest will be administered during the second to last, or the last day of the week prior to the experiment.
- Each student from both experimental and control groups will listen to one story read orally by the regular classroom teacher. Following this, 14 comprehension questions, 7 literal and 7 inferential will be read aloud, along with a choice of two possible answers. Pupils will follow along with their own typed copies and mark the appropriate answers. (Story read will be: "The Pot That Would Not Stop Boiling", pp. 181-185, from the reader It's Storytime, Copp Clark, level four.)

PRETEST

"The Pot That Would Not Stop Boiling"

1. Who did the little girl live with?
 - a) her mother
 - b) her grandmother
2. Who did the little girl meet in the woods?
 - a) an old woman
 - b) her mother

3. Where did the old woman get the pot from?
 - a) under her coat
 - b) behind a tree.
4. What did the mother say to try to get the pot to stop boiling? (Choose 3)
 - a) don't, don't
 - b) now, now
 - c) stop, stop
 - d) please, please
 - e) no, no
5. Where was the little girl staying when the pot wouldn't stop boiling?
 - a) in another village
 - b) down the street at a friend's house.
6. What did the mother say to the pot when she wanted porridge?
 - a) cook, cook
 - b) cook, little pot, cook.
7. How did the people get a road made through the porridge?
 - a) they ate their way through
 - b) they ploughed their way through
8. Why was the little girl looking for berries?
 - a) because they didn't have enough to eat at home.
 - b) because she wanted to make a pie.

9. Why did the old woman give the little girl an iron pot?
 - a) because it was too heavy to carry.
 - b) because the little girl was very poor and she wanted to help her.
10. Why did the little girl thank the old woman?
 - a) because her mother told her to.
 - b) because she was glad to get the pot.
11. Why wouldn't the pot stop boiling for the little girl's mother?
 - a) because it didn't like her
 - b) because she didn't say the right words
12. Why did the mother want porridge when the little girl was away?
 - a) because she was hungry.
 - b) because she wanted to see if the pot would work for her.
13. Why did the little girl run home when she saw the porridge coming down the street?
 - a) she heard her mother calling for help
 - b) she wanted to help her mother
14. Why would the village people be unhappy with all the porridge?
 - a) it made everything messy
 - b) they didn't like porridge.

Appendix B

Experimental Group Procedures

Instruction will be in a three-step strategy spread over fifteen lessons, three days a week (Tuesday, Wednesday, Thursday), of approximately thirty minutes each for a total of five weeks.

Step 1(a) Tuesday of each week

The teacher will read a story, for example "The Ant and the Grasshopper", orally to the students. Students will follow along with their own readers. Following this, the teacher will ask pupils five questions, orally. (Questions will be prepared by the experimenter.) The same procedure will be followed with each of the four remaining stories from Unit V of May I Come In, over the following four weeks.

Step 1 (a) Tuesday----Week One

Story: "The Ant and the Grasshopper"

I Setting:

1. Who did the grasshopper want to play with?
2. Where did the grasshopper want to play?
3. What kind of game did he want to play?

II Initiating Event:

1. Did the ant want to play? Why not?

III Reaction:

1. Did the grasshopper think it was a good idea for the ant to spend all his time working at the beginning of the story?

IV Action:

1. Did the grasshopper talk the ant into playing with him?
2. Did the ant talk the grasshopper into working?
3. What did the ant do? What did the grasshopper do?

V. Consequence:

1. What did the grasshopper do when the snow came?
2. How did the ant feel about the grasshopper now? Did he help him?
3. What do you think will happen to the grasshopper? How will he spend the winter?

Step 1 (a) Tuesday----Week Two

Story: "In the Country"

I. Setting:

1. Where does the country mouse live? What do you think the place where he lives looks like?

II. Initiating Event:

1. Why did the city mouse decide to surprise the country mouse?

III Reaction:

1. Was the country mouse surprised to see the city mouse?
What did he say that makes you feel this way?

IV Action:

1. What was the first thing the city mouse asked about after he arrived?
2. Where do you think the country mouse took the city mouse to find food?

V Consequence:

1. What did the city mouse suggest they should do at the end of the story?
Why do you think the country mouse decided to go along with him?

Step 1 (a) Tuesday----Week Three

Story: "In the City"

I Setting:

1. Where does city mouse live? What do you think the place where city mouse lives looks like?

II Initiating Event:

1. Where did the city mouse take the country mouse?

III. Reaction:

1. How did the country mouse feel about going into the city house?

2. Why didn't the country mouse like people?
3. How did the country mouse feel about the city after he first started eating?

IV. Action:

1. What frightened the country mouse and changed his mind about staying in the city?
2. What did the country mouse do after he saw the cat?

V. Consequences:

1. Where did the country mouse decide it was best to live? Why?

Step 1 (a) Tuesday----Week Four

Story: "The Three Bill Goats Gruff"

I. Setting:

1. Where did the goats want to go?
2. What are the three goats' full names? (e.g. Little Billy Goat Gruff)
3. What is a troll?

II. Initiating Event:

1. How did the Troll know someone was walking on the bridge?
2. How did he feel about goats walking on his bridge?
Why didn't he want them to cross the bridge?

III Reaction:

1. Was Little Billy afraid of the Troll? How do you know?
2. What did Little Billy do to convince the troll not to eat him?
3. Why did the Troll decide to wait for Big, Big Billy Goat?

IV Action:

1. What happened to the Troll?

V. Consequence:

1. Will the goats be afraid to cross the bridge now?
Why not?

Step 1 (a) Tuesday----Week Five

Story: "Henny Penny"

I Setting:

1. Who is Henny Penny?
2. Where do you think she was when she was eating at the beginning of the story?

II Initiating Event:

1. What happened to upset Henny Penny?

III Reaction:

1. What did she think was happening?

IV Action:

1. What did Henny Penny decide to do about what happened?
2. Who went with her?
3. Did they all try to help her?

V Consequence:

1. Did Henny Penny ever tell the King? Why not?

Step 1 (b) (Introduction of story categories)

Tuesday of each week.

The following oral instructions will be provided by the classroom teacher:

When we read a story we are sometimes able to remember it better if we can think about the different parts in the story and what happened in each of those parts. Today, I read you the story _____, afterwards I asked you some questions. Each of the questions were from a different part of the story. Some were from the beginning, the middle and the end. Now, I'm going to show you a chart with some new questions and see if you can remember the story _____, well enough to answer them and complete this chart. (Story grammar chart on overhead projector.)

Story Structure Chart

I Setting:

- a) Where does the story take place?
- b) Who is/are the main character(s)?

II Beginning

- a) What do/does the main character(s) want to do at the beginning of the story?
- b) Why do you think the main character(s) want to do this?
- c) How do/does the main character(s) try to get what he/they want?

III Middle

- a) Something happens to change the main character(s); plans.
- b) What do/does the main character(s) decide to do now?

IV Ending

How did the story end? Did the main character(s) get what he/they wanted?

Step 2 Wednesday of each week

- a) Pupils will be divided into groups of three or four and given typed copies of specific phrases related to the story read on day one of each week. Each of the phrases will be cut apart and the pupils will be

instructed to paste these where they belong on individual charts prepared by the experimenter.

- b) Pupils will discuss their reasons for completing the charts done in the first part of this step. Throughout this instruction it should be emphasized that the parts of a story as outlined in the chart can be used to help understand what is happening in a story as well as an aid in remembering it.

The Ant and the Grasshopper

In the grass.

The ant and the grasshopper.

The grasshopper kept asking the ant to play with him.

The grasshopper went to the ant for help.

The grasshopper saw the snow.

Because the ant didn't know he would need food for winter.

The ant would not help and the grasshopper was left alone with no food.

In the Country

The City Mouse.

In the country.

The City Mouse wanted to see the Country Mouse.

The City Mouse didn't like country food.

The City Mouse decided to go back to the city because the food was better.

The City Mouse and the Country Mouse leave for the city.

No, the City Mouse did not get what he wanted.
He ran and ran until at last he came to the country.
Because he hadn't seen the Country Mouse for a long time.

In the City

City Mouse and Country Mouse.

In the city.

They wanted to find some food.

The City Mouse saw something big.

The Country Mouse decided to run home to the country.

The Country Mouse ran home and left the City Mouse in the city.

The City Mouse got what he wanted, but the Country Mouse didn't.

The City Mouse and the Country Mouse went into a house to find food.

Because City Mouse didn't like country food.

The Three Billy Goats Gruff

The three Billy Goats Gruff.

On a hill.

They wanted to eat green grass.

The Troll didn't want them on his bridge.

The goats told the Troll to wait for Big, Big Billy Goat Gruff.

The goats got to eat grass like they wanted to.

The three goats went up to eat grass and there is no Troll.

They tried to walk across the bridge.

Because they needed to find more grass to eat.

Henny Penny

She kept running and running to find the king.

Henny Penny.

In a farmyard.

Because something fell on her tail.

Henny Penny wanted to tell the king the sky was falling.

The Fox took the animals into his den.

Henny Penny ran away from the fox.

All the animals ran away and Henny Penny never told the king the sky was falling.

Step 3

Thursday of each week

A different activity will be used for step three each week. These activities are outlined for each week with the accompanying activities attached.

Prediction Task Instructions ("A Sly Fox") Week one (a)

Just read the Setting, which is underlined. After the children have discussed what could come next, the teacher will read the complete story to them and discuss how their stories are similar.

The Sly Fox

A sly fox lived in a den in the forest. Every day the fox searched the forest for food. He often wished for something different to eat. He thought of the rats and bugs he usually dined on. Surely somewhere in this forest there had to be something more interesting to feast on!

Suddenly, the fox spotted a robin up in a tree eating just what the fox wanted - a piece of cheese! The fox began to climb the tree. Just as he was getting close, the bird flew to another tree. The fox's mouth was watering as he stared up at the cheese. He did not want to eat a rat, when he could have a delicious cheese. "That bird will fly away again if I try climbing the tree"! he thought. "But I have to have that cheese!"

Then the fox decided to try to trick the robin into giving up the cheese. "Mrs. Robin," said the fox, "I have heard that your voice is the best in the forest, I would love to hear one of your beautiful songs for myself." The proud robin lifted her head to sing, but the moment she opened her mouth the piece of cheese fell to the ground. The fox laughed as he looked up at the surprised bird. He was glad that it had been so easy to fool the robin.

So the fox ate the cheese, while the robin went hungry. Then the fox went on his way, looking for a dessert. He was proud of himself for outsmarting the robin.

(Story Used: A Sly Fox, cited in Dreher and Singer, 1980,p.266).

Prediction Task Instructions Week One (b)

Read the Setting and Beginning event, as underlined. After the children have discussed what could come next, the teacher will read the complete story to them and discuss how their stories are similar.

Little Black Hen

Little Black Hen was coming along the road with her scissors in her hand. She and Mrs. Duck had made a new coat for Little Red Hen.

"I hope Little Red Hen has our dinner ready," she said to herself. "I never had such a day. I am so hungry I could eat a horse."

Little Black Hen got home and looked around. There was no pot boiling on the fire. There were no worms in the cupboard. But there was Little Red Hen snoring in bed.

"What is this?" scolded Little Red Hen. "You have no dinner ready. You didn't get any worms. I worked all day making a new coat for you and all you did was sleep. Just for that, I will keep the coat for myself." And she did! (This story was taken from p.180 of the Teacher's Guidebook for the reader: It's Storytime, Copp Clark series.)

Thursday Week Two

(Scrambled Stories)

- a) The same story as used on day one of this week (In the Country) will be separated into story grammar categories and jumbled.

Various story parts will be written on separate pieces of transparency material. Students will then read the scrambled story and reorder it to make a good story by reading along with the teacher from the overhead projector. Discussion will centre on rationales for different orders and on the functions of various story parts.

- b) The same procedure will take place using a new and different story supplied by the experimenter. (The Gingerbread Girl, p. 185 of Teacher's Guidebook: It's Storytime, Copp Clark reader.)

In the Country Activity (a)

The City Mouse wanted to see the Country Mouse.

He ran away until he came to the country.

"I'm going to the country. I will surprise Country Mouse," said City Mouse.

"Can I have some food?" asked City Mouse.

City Mouse did not like Country Mouse's food.

City Mouse and Country Mouse went away to the city.

The Gingerbread Girl Activity (b)

Once upon a time, a little old woman lived in a gingerbread house deep in the woods.

The woman was lonesome, so she decided to make a gingerbread girl to live with her.

After she had worked and worked to make the best gingerbread girl she could, she put her in the oven.

Soon she heard something for inside the oven, "I'm ready now. Let me out, please." Someone said.

The little old woman opened the oven door and out jumped a little gingerbread girl. She stayed with the little old woman and they lived happily ever after.

Thursday Week Three: (Macro-Cloze)

A whole story category is deleted. Lines are drawn to show where material is omitted. The teacher will use the same story as used on day one of this week (In the City), encouraging pupils to provide the correct missing information. Following this, pupils will be given typed copies of the same story with a different category omitted and asked to complete the story. This will be done in groups of four or five, each group will have different information deleted.

In the City

City Mouse and Country Mouse ran up hill and down hill. At last they were in the city. "I know where we can get some food," said City Mouse. "Follow me." "I will," said Country Mouse. "At last we are here," said City Mouse. "We will go into this house. The people will be in bed."

"Do people live here?" asked Country Mouse. "I don't like people." City Mouse said, "The people are in bed. They can't see you. Come with me." And he went into the house. Country Mouse went into the house too. He looked for City Mouse, and he called, "Where are you?"

"Here I am," said City Mouse. "Jump up here with me." When Country Mouse jumped, he saw some food. "Eat away." said City Mouse. "You will like this food." City Mouse said, "Don't go back. You can live here with me."

When they were eating, City Mouse saw something big. He said, "Run, Run, Country Mouse. And don't stop."

City Mouse called, "Come back, Country Mouse, There is no danger now. The cat went back into the house." But Country Mouse did not stop. He called, "No, I don't like to live where there is danger. I'm going home."

Country Mouse ran up a hill and into the country. When he got home, he said, "At last I can stop. I will not go back to the city. Not where the cat is. I will eat country food, and City Mouse can live in danger."

In the City

City Mouse and Country Mouse ran up hill and down hill. At last they were in the city. "I know where we can get some food," said City Mouse. "Follow me." "I will," said Country Mouse. "At last we are here," said City Mouse. "We will go into this house. The people will be in bed." "Do people live here?" asked Country Mouse. "I don't like people."

City Mouse said,

Country Mouse went into the house too. He looked for City Mouse, and he called, "Where are you?" "Here I am," said

In the City

City Mouse and Country Mouse ran up hill and down hill. At last they were in the city. "I know where we can get some food," said City Mouse. "Follow me." "I will," said Country Mouse. "At last we are here," said City Mouse. "We will go into this house. The people are in bed." "Do people live here?" asked Country Mouse. "I don't like people." City Mouse said, "The people are in bed. They can't see you. Come with me." And he went into the house. Country Mouse went into the house too. He looked for City Mouse, and he called, "Where are you?" "Here I am," said City Mouse. "Jump up here with me."

When Country Mouse jumped, he saw some food, "Eat away," said City Mouse. "You will like this food." Country Mouse said, "I do like it. I may not go back to the country." City Mouse said, "Don't go back. You can live here with me."

When they were eating, City Mouse saw something big. He said, "Run, Run, Country Mouse. And don't stop." Away went City Mouse. And away went Country Mouse. They ran out of the house.

City Mouse called, "Come back, Country Mouse. There is no danger now. The cat went back into the house." But Country Mouse did not stop. He called, "No, I don't like to live where there is danger. I'm going home."

Country Mouse ran up a hill and into the country. When he got home, he said,

In the City

City Mouse and Country Mouse ran up hill and down hill. At last they were in the city. "I know where we can get some food said City Mouse. "Follow me." "I will," said Country Mouse.

"At last we are here," said City Mouse. "We will go into this house. The people will be in bed." "Do people live here?" asked the Country Mouse. "I don't like people."

City Mouse said, "The people are in bed. They can't see you. Come in with me." And he went into the house. Country Mouse went into the house too. He looked for City Mouse, and he called, "Where are you?"

"Here I am," said City Mouse. "Jump up here with me." When Country Mouse jumped, he saw some food, "Eat away," said City Mouse. "You will like this food." Country Mouse said, "I do like it. I may not go back to the country."

City Mouse said, "Don't go back. You can live here with me."

When they were eating, City Mouse saw something big. He said, "Run, Run, Country Mouse. And don't stop." Away went City Mouse. And away went Country Mouse. They ran out of the house.

City Mouse called, "Come back, Country Mouse. There is no danger now. The cat went back into the house."

But Country Mouse did not stop. He called, "No, I don't like to live where there is danger. I'm going home."

Country Mouse ran up a hill and into the country. When he got home, he said, "At last I can stop. I will not go back to the city. Not where the cat is. I will eat country food, and City Mouse can live in danger."

Thursday Week Four:

(Retelling Stories)

- a) The teacher will retell one of the stories previously read during the experiment and will allow the children to point out any inaccuracies. Alterations will be made by the experimenter and supplied for the teacher. Reasons should be provided by the children for accepting or rejecting the alterations.
- b) The teacher will read a new and different story using three versions (supplied by the experimenter). Students will choose the correct version and provide reasons. (Story used: The Tiger's Whisker, cited in Whaley (1981 a, p. 765).

Story (a) The Ant and the Grasshopper". (version one)

"Hello, Little Ant," said the grasshopper. "Will you come and play with me? I will hide in the grass, and you can look for me there."

The ant said, "You hide in the grass. But I can't look for you there. I have work to do."

"Don't work," said the grasshopper. "When do you play, Little Ant?" "I don't have time to play," said the ant.

"I'm looking for food. I'm going to put the food away.

And when the snow comes, I will have food to eat."

"Work away!" said the grasshopper. "I'm going to play now." And away he went in the grass. The ant went on working. "You can play, but I will work," the ant said. "And I will have food to eat when the snow comes."

The grasshopper saw the snow. "What am I going to do?" he said. "I can't play now. I want some food, but what can I eat?"

The ant saw the grasshopper in the snow. "What are you doing there?" the ant asked. "Are you looking for something?" "Yes, I am," said the grasshopper. "I'm looking for you. Help me, Little Ant. Let me have something to eat."

The ant said: "O.K., I should have played with you. I was foolish to work all the time while you played, I will share my food with you."

Thursday Week Four (Retelling stories)

Story 1 (a) "The Ant and the Grasshopper" (version two)

"I will hide in the grass, and you can look for me there."

"Hello, Little Ant," said a grasshopper.

The ant said, "You can hide in the grass. But I can't look for you there. I have work to do." "Don't work," said the grasshopper. "When do you play, Little Ant?"

"I don't have time to play," said the ant. "I'm looking for food. I'm going to put the food away. And when the snow comes, I will have food to eat."

"Work away!" said the grasshopper. "I'm going to play now." And away he went in the grass. The ant went on working. "You can play, but I will work," the ant said. "And I will have food to eat when the snow comes."

The grasshopper saw the snow. "What am I going to do?" he said. "I can't play now. I want some food, but what can I eat?" The ant saw the grasshopper in the snow. "What are you doing there?" the ant asked. "Are you looking for something?" "Yes I am," said the grasshopper. "I'm looking for you. Help me, Little Ant. Let me have something to eat."

But the ant said "No. You played when I worked. You didn't work, Grasshopper." And away went the ant.

"Stop!" called the grasshopper. "Don't go away." He called and called, but the ant still did not stop. And the grasshopper walked away. On and on he went in the snow.

Thursday Week Four (Retelling stories)

Story 1 (a) "The Ant and the Grasshopper" (version three)

"Hello, Little Ant," said a grasshopper. "Will you come and play with me? I will hide in the grass, and you can look for me there."

The ant said, "You can hide in the grass. But I can't look for you there. I have work to do." "Don't work," said the grasshopper. "When do you play, Little Ant?"

"I don't have time to play," said the ant. "I'm looking for food. I'm going to put the food away. And when the snow comes, I will have food to eat."

"Work away," said the grasshopper. "I'm going to play now." And away he went in the grass. The ant went on working, "You can play, but I will work," the ant said. "And I will have food to eat when the snow comes."

The grasshopper saw the snow. "What am I going to do?" he said. "I can't play now. I want some food, but what can I eat?" The ant saw the grasshopper in the snow. "What are you doing there?" the ant asked. "Are you looking for something?" "Yes I am," said the grasshopper. "I'm looking for you. I still want you to come and play with me, come and play with me in the snow."

Thursday Week Four (Retelling Stories)

Story 1 (a) "The Ant and the Grasshopper" (version four (original))

Hello, Little Ant," said the Grasshopper. "Will you come and play with me? I will hide in the grass, and you can look for me there." The ant said, "You can hide in the grass. But I can't look for you there. I have work to do." "Don't work," said the grasshopper. When do you play?" Said the ant, "I'm looking for food. I'm going to put the food away. And when the snow comes, I will have food to eat." "Work away!" said the grasshopper. "I'm going to play now." And away he went in the grass. The ant went on working. "You can play, but I will work," the ant said. "And I will have food to eat when the snow comes."

The grasshopper saw the snow. "What am I going do do?" he said. "I can't play now. I want some food, but what can I eat?"

The ant saw the grasshopper in the snow. "What are you doing there?" the ant asked. "Are you looking for something?" "Yes I am," said the grasshopper. I'm looking for you. Help me, Little Ant. Let me have something to eat."

But the ant said, "No. You played when I worked. You didn't work, Grasshopper." And away went the ant. "Stop!" called the grasshopper. "Don't go away." He called and called, but the ant still did not stop. And the grasshopper walked away. On and on he went in the snow.

Story (b) "The Tiger's Whiskers" (version one)

Once there was a woman who lived with her husband in the woods. One day, her husband got very sick. The woman was delighted by her husband's illness and hoped he would die.

She tried everything she could think of but nothing worked. At last she remembered that medicine made from a tiger's whisker would help him get well. So the woman set out to get a tiger's whisker. She went to a tiger's cave and put some food in front of the opening to the cave and sang soft music. The tiger came out, ate the food, and thanked the woman for the food and music. The woman quickly cut off one of his whiskers and ran home.

The tiger was lonely and sad, but the woman's husband got well.

"The Tiger's Whiskers" (version two)

Once there was a woman who lived with her husband in the woods. One day, her husband got very sick. The woman was very upset by her husband's illness and wanted him to get well.

She tried everything she could think of but nothing worked. At last she remembered that medicine made from a tiger's whisker would help him get well. So the woman set out to get a tiger's whisker. She went to a tiger's cave

and put some food in front of the opening to the cave and sang soft music. The Tiger came out, ate the food, and thanked the woman for the food and music. The woman quickly cut off one of his whiskers.....(Stop reading here. The children should be able to determine that the story is incomplete.)

"The Tiger's Whiskers" (version three (original))

Once there was a woman who lived with her husband in the woods. One day, her husband got very sick. The woman was very upset by her husband's illness and wanted him to get well.

She tried everything she could think of but nothing worked. At last she remembered that medicine made from a tiger's whisker would help him get well. So the woman set out to get a tiger's whisker. She went to a tiger's cave and put some food in front of the opening to the cave and sang soft music. The tiger came out, ate the food, and thanked the woman for the food and music. The woman quickly cut off one of his whiskers and ran home. The tiger was lonely and sad, but the woman's husband got well.

"The Tiger's Whiskers" (version four)

One day, her husband got very sick. Once there was a woman who lived with her husband in the woods. The woman was very upset by her husband's illness and wanted him to get well

She tried everything she could think of but nothing worked. At last she remembered that medicine made from a tiger's wisker would help him get well. So the woman set out to get a tiger's wisker. She went to a tiger's cave and put some food in front of the opening to the cave and sang soft music. The tiger came out, ate the food, and thanked the woman for the food and music. The woman quickly cut off one of his whiskers and ran home. The tiger was lonely and sad, but the woman's husband got well.

Thursday Week Five:

Each child will independently complete five questions related to a story structure chart after listening to a new story read orally and following along with their own typed copies (Story used: Albert the Fish, cited in Whaley (1981 a, p.764).

"Albert the Fish"

Once there was a big gray fish named Albert who lived in a big icy pond near the edge of a forest. One day, Albert was swimming around the pond when he spotted a big juicy worm on top of the water. Albert knew how delicious worms tasted and wanted to eat that one for his dinner. He swam very close to the worm and bit into him. Suddenly, Albert was pulled through the water into a boat. Albert felt very sad and wished he had been more careful.

"Albert the Fish"

1. Who is Albert?
 - a) a little brown fish
 - b) a big green fish
 - c) a big gray fish
2. Where does Albert live?
 - a) in a big blue lake
 - b) in a small fish pond
 - c) in a big icy pond
3. What did Albert see one day while he was swimming around in his pond?
 - a) some delicious fish food
 - b) a big juicy worm
 - c) a fish hook with bait on it
4. Why did Albert want to eat the worm?
 - a) he knew how delicious they tasted
 - b) he was very hungry
 - c) he wanted to kill the worm
5. How did he try to get the worm?
 - a) he grabbed at it
 - b) he bit into it
 - c) he swam over it
6. What happened to Albert after he tried to get the worm?
 - a) he ate the worm
 - b) he got caught by a fisherman
 - c) he swam away very happily

7. How did Albert feel about what he had done?
- a) he wished he had been more careful
 - b) he was glad he got the worm
 - c) he was angry with the fisherman for catching him.

Follow-up Procedures

a) Posttest

The final day of week five will be used to administer the experimenter-designed posttest. A story taken from a basal reader not used in the participating schools will be read orally to the students followed by 14 comprehension questions, 7 literal and 7 inferential. (Story used: "The Boy and the Goats", pp. 161-166 from the reader, It's Storytime, Copp Clark series).

b) Free-Recall Measure

A free-recall measure will be administered during the week following the experiment. A volunteer, chosen by the experimenter will read a narrative selection to each student. Prior to this, the following instructions will be provided:

I want you to listen very carefully to a story
I am going to read to you. When I finish, I
will ask you to tell me everything that you can
remember about the story. Please do your very best.
Student's recall protocols of the story will be taped
and later transcribed.

Appendix C

Posttest

"The Boy and the Goats"

1. Where did the boy take the goats every morning?
 - a) up to the green grass on the hill.
 - b) down to the river.
2. Who jumped over the fence first?
 - a) one big goat
 - b) all three goats jumped over together
3. Who's garden did they jump into?
 - a) the farmer's
 - b) the little boy's
4. Who was the second animal that came along?
 - a) a fox
 - b) a rabbit
5. Who got the goats out?
 - a) the boy
 - b) the little bee
6. What did the bee do when he sat on the big goat's nose?
 - a) he said "buzz, buzz".
 - b) he stung the goat's nose
7. What did the boy do to try and get the goats back?
 - a) he coaxed and scolded
 - b) he cried and cried

8. Why wouldn't the farmer want the goats in his garden?
 - a) because he didn't like goats.
 - b) because they would eat all his grass.
9. Why did the boy sit down and start to cry?
 - a) because the goats wouldn't come out
 - b) because the goats kicked him.
10. Why did the boy, the rabbit and the fox laugh at the little bee?
 - a) because they didn't think he could get the goats out.
 - b) because he said something funny
11. Why did the two other goats jump over the fence?
 - a) because they saw the big goat jump over
 - b) because they wanted to run and jump
12. Why did the boy go running after the goats?
 - a) because he wanted to scold them
 - b) because he had to take the goats home for the night
13. Why did the bee only have to say: "Buzz, buzz"?
 - a) because that's all bees can say
 - b) because the goats were afraid of being stung.
14. Why did the boy take the goats up to the green grass every morning?
 - a) so they could have green grass to eat
 - b) so they could run and play.

Free-Recall MeasureInstructions prior to reading the story:

I want you to listen very carefully to a story I am going to read to you. When I finish, I will ask you to tell me everything that you can remember about the story. Please do your very best.

Instructions after hearing what the child has said:

Is that all you can remember? Can you remember anything else you would like to tell me? Thank-you for coming to see me today.

"The Gruff Lion"

Once upon a time, a gruff old lion lived in the woods. He had a thick mane and a long tail. He was the king of all the animals and they were afraid of him. If he frowned or growled they all shook with fear.

"He is a beast," said a monkey. "He boasts that he can beat everyone. I don't trust him." But no one could tell of a way to get rid of him.

One day a troop of men came into the woods. They had a big crate and were looking for animals to take back to the zoo.

"I know now how to get rid of that mean old lion," said a little gray mouse to himself as he watched the men dig a deep hole. The little mouse rushed off down the trail. He soon saw some fresh paw marks. "Ah! Here are that old lion's tracks. Now, to get him to chase me."

The mouse stood up beside the path and waited for the lion to come along. As soon as the lion saw the mouse, he started after him. Away went the mouse as fast as his little legs could carry him. The mouse led the lion right up to the trap. The mouse stopped. The lion was going fast and not watching where he was going. He fell right into the hole. What a fuss he made!

The men heard him growling and snarling and came running up with chains. They put him in the crate and took him off to the zoo while all the other animals laughed and laughed.

"We are free! We are free!" they all called. "Let's have a party for smart Little Gray Mouse!"

(p.192 It's Storytime, Teacher's Guidebook, Copp Clark series.)