A Classroom-Based Investigation of Reciprocal Teaching at the Grade Seven Level

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Abstract

This study assessed the effectiveness of a reciprocal teaching program as a method of teaching reading comprehension, using narrative text material in a typical grade seven classroom.

In order to determine the effectiveness of the reciprocal teaching program, this method was compared to two other reading instruction approaches that, unlike reciprocal teaching, did not include social interaction components. Two intact grade seven classes, and a grade seven teacher, participated in this study. Students were appropriately assigned to three treatment groups by reading achievement level as determined from a norm-referenced test. Training proceeded for a five week intervention period during regularly scheduled English periods. Throughout the program curriculum-based tests were administered. These tests were designed to assess comprehension in two distinct ways; namely, character analysis components as they relate to narrative text, and strategy use components as they contribute to student understanding of narrative and expository text. Pre, post, and maintenance tests were administered to measure overall training effects. Moreover, during intervention, training probes were administered in the last period of each week to evaluate treatment group performance. All curriculum-based tests were coded and comparisons of pre, post, maintenance tests and training probes were presented in graph form. Results showed that the reciprocal group achieved some improvement in reading comprehension scores in the strategy use component of the tests. No improvements were observed for the character analysis components of the curriculum-based tests and the norm-referenced tests. At pre and post intervention, interviews requiring students to respond to questions that addressed metacomprehension

awareness of study strategies were administered. The interviews were coded and comparisons were made between the two interviews. No significant improvements were observed regarding student awareness of ten identified study strategies .

This study indicated that reciprocal teaching is a viable approach that can be utilized to help students acquire more effective comprehension strategies. However, the maximum utility of the technique when administered to a population of grade seven students performing at average to above average levels of reading achievement has yet to be determined. In order to explore this issue, the refinement of training materials and curriculum-based measurements need to be explored. As well, this study revealed that reciprocal teaching placed heavier demands on the classroom teacher when compared to other reading instruction methods. This may suggest that innovative and intensive teacher training techniques are required before it is feasible to use this method in the classroom.

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Chapter One

Introduction

By grade seven it is assumed that students reading at grade level have already acquired the decoding skills they need. Thus, in order to improve the reading ability of students in this grade, it follows that the refinement of comprehension skills needs to be targeted in order that the full meaning embedded in more complex textual information will become readily apparent to them (Brown & Palincsar, 1985).

In an increasingly complex world inundated with new information, students need to learn how to understand text material and also how to creatively use this information in new and dynamic ways. Thus the memorization of a string of facts does not necessarily guarantee that the information is understood, at least not to the extent that readers can make the associative links necessary to use this information flexibly in other contexts.

Instead, reading for meaning is more complicated than the recall of content. It requires students to actively study and critically analyze textual information. In fact some researchers propose that in order to reach an efficient level of understanding, the cognitive activities employed should be metacognitive in nature. When students are consciously aware of prior knowledge they have about what they are reading, and they know what kind of strategies to use while reading a specific text, they are also better able to step back from what they have learned, in an attempt to assess how effective these learning strategies were in helping them understand the material (Brown & Palincsar, 1982). If the students learn to interact with text by developing specific learning strategies, it is thought that these strategies will assist them to transfer and consciously apply the

new knowledge they have derived from the text to other situations that require the same active "executive control" and "self-regulatory"processing. Thus, not only is the textual information learned in a much more meaningful way, but the strategies that were learned will also help the reader take control over his or her own learning in general (Brown, 1978; Brown & Campione, 1978, 1981).

Given that reading comprehension is an important part of student development at the grade seven level, and given that this involves complex processing, most educators agree that reading should be an integral part of the school's curriculum. Yet, despite this agreement, reading instruction in the area of comprehension instruction is limited in time allotment, and in methodological practices.

However, researchers and practitioners have expressed concern about instruction in reading comprehension. Durkin (1978-79) observed that less than one percent of time spent on reading and social studies instruction at the upper elementary level involved teaching reading comprehension. Goetz (1984) noted that teachers may not think it is necessary to teach comprehension skills; they assume that students will acquire the necessary strategies involved in comprehension without instruction. As well, teachers' perceptions of what they are implementing in the classroom are not always accurate. As a case in point, Durkin (1983) observed that teachers often thought they were teaching reading comprehension when giving students seat-work activities such as answering questions on a particular passage. According to Durkin, this is a questionable practice, because while such an assignment is commonly the selected approach for comprehension instruction, it actually functions only as an assessment tool determining the student's comprehension ability. Teachers' failures to understand what they are

implementing when assigning such seat-work activities stem in part from a lack of understanding of reading comprehension processes themselves. Until recently, practitioners have not had access to models of cognitive processing from which to develop instructional plans and related text materials (Duffy, Roehler, & Mason, 1984).

The amount of actual classroom research in comprehension instruction has been relatively limited. However, recent research has tried to merge both theory and practice by developing instructional methodologies that coincide with cognitive processing theory. Within this framework, several instructional approaches to reading comprehension have emerged (Gersten & Carnine, 1986; Palincsar & Brown, 1984; Paris, Cross & Lipson, 1984), each with a differing emphasis on direct instruction, guided practice, and modelling for teaching comprehension strategies.

Reciprocal teaching is one of these recent, cognitively based instructional approaches, which attempts to isolate four comprehension monitoring strategies that are important for any reader to derive meaning from text. These four strategies include: summarizing, self-questioning, clarifying, and predicting. Strategies are used as students read text material and then attempt to develop a framework for didactic discussion about the material. The teacher's task, during the initial stages when students are learning strategies, is critical. The purpose of reciprocal teaching is to fade out teacher involvement, thus requiring each student within the group to gain a satisfactory degree of proficiency in using each strategy, such that he or she can assume the role of the teacher and direct the flow of dialogue.

The initial stage of the instructional program requires the teacher to explicitly teach all of the strategies. This phase involves structured teacher direction of students,

through teacher modelling and questioning, and limited student initiated interaction. After the group has been exposed to strategy definitions, and has had the opportunity to see the teacher use these strategies in action, each student is encouraged to begin to use the comprehension strategies. As the group becomes more proficient in using the strategies, and the students have evaluated the strategy-use of each group member, each student takes a turn assuming the role of the teacher. The student-teacher then leads discussions and tries to use each strategy with the help of the group. At this point the teacher becomes a coach, with minimal explicit instruction and teacher modelling. In fact, the teacher interrupts discussions only when the group fails to resolve problems, when the students drift off topic or have difficulties with the text passage, or when they are unclear as to how to use a particular strategy. Yet as the discussions become more sophisticated, the teacher will rarely intervene by making instructional statements, instead participating with the students by providing prompts and reinforcing statements (Palincsar, 1986).

Statement of the Problem

Before designing a reading comprehension program that incorporates the teaching of comprehension strategies the following problems should be clarified so that an instructional program can be more readily accepted by practitioners and translated into practice. The first question one may ask is: What particular strategies are needed to improve reading comprehension ability? Once the strategies are identified it is equally important is ask if these strategies are needed for more advanced students, or do students of all ability levels profit from strategy instruction? Do the comprehension

strategies identified assist students in learning both expository and narrative text material? Most studies conducted in the area of reciprocal teaching have used expository text material, and many researchers have assumed that narrative text is completely mastered by grade seven. However, this may not be the case if one examines more complex narratives. Another question under investigation in this study pertains to gains made by students under a setting which has high interactive versus low interactive components. Lastly, what challenges are posed for the teacher in trying to incorporate these newer approaches to reading comprehension?

Overview of Research Objectives

The purpose of this thesis was to compare reciprocal teaching, which is a process-oriented method of comprehension instruction, to product-oriented methods which have traditionally relied on a repeated exposure model (Duffy, Rochler & Mason, 1984). In this study reciprocal teaching is compared to two other methods. It was a replication of a study conducted by Brown and Palincsar (1984) in that it compared regular reciprocal teaching with two other reading programs that do not have metacognitive components, and are not taught in a social context.

However in order to assess all three instructional methods, instead of focusing on the effectiveness of the programs as they apply to poor grade seven comprehenders, this study was designed to measure the applicability of the program when it is used to teach reading comprehension to a group of grade seven students who have average to above average decoding and comprehension skills. Because the research conducted on this instructional method has thus far failed to satisfactorily demonstrate how the program

can be used as a tool for more general application, where the student population is diverse in respect to reading ability levels (Palincsar & Brown, 1985; Palincsar & Brown, in press), this study attempted to use this method not as a remedial intervention targeted at students with homogeneously grouped learning problems, but as a viable program in a naturalistic environment.

Each subject within each treatment group was assessed to determine if any of the components of the treatment programs were related to reading ability level. This researcher wanted to determine if there were any significant differential training effects that could be correlated directly to reading ability level.

This study also attempted to examine how students' comprehension of literature is facilitated through reciprocal teaching. To do this, the author chose to use complex short stories in designing assessment measures and associated instructional material. All stories that were selected were psychologically complex in that most of the stories involved the character trying to resolve an inner conflict. This type of complex short story is explained in the literature as "stories that are constructed to fit a problem-solving schema" (Singer & Donlan, 1982). Thus both during instruction and on the assessment measures, comprehension was being addressed in two ways: literary elements, more specifically defined in this study as character analysis, and general comprehension skills as they relate to strategy use.

In fact the rationale behind the design of this study that examined both story-specific content knowledge and strategy knowledge is supported by Garner and Alexander (1989). They suggest that the new wave of metacognitive research as it relates to reading comprehension development should focus on the relation between

content knowledge and strategy knowledge. They further propose that when students have no knowledge of a specific content domain, they can compensate for this lack of knowledge by using general learning strategies to find new information. Thus, it is the student who knows how to overcome deficits in the background knowledge through the use of strategies, who is considered an informed learner (Brown & Palincsar, 1985; Garner & Alexander, 1989). Yet, besides generally addressing the close relationship between content knowledge and strategy knowledge, it is also important to examine the utility of learning strategies to specific content domains. For instance in order for students to better understand literature, it may be a prerequisite that they have some knowledge of figurative language. As well, Garner and Alexander (1989) suggest "in some domains, activating subjective responses to information is critical, whereas in others it interferes with information processing" (p. 151). In fact they conclude that content knowledge in one domain may be strong, but this strength may be a weakness in another domain.

Garner and Alexander (1989) raise another issue of interest: the possible benefits during intervention of improving both content knowledge and strategy knowledge. On this point they suggest that both the interaction and single component effects of both content and strategy knowledge areas are of interest to examine because Alexander, Pate, Kulikowich, Farrell and Wright (1988) have found that students who have deficits in both knowledge areas do not benefit from either strategy training or content knowledge instruction. Given this finding, they explain that the lack of learning may be due to the fact that general strategy instruction is dependent on and will only benefit students with sufficient content knowledge.

Based on these recent research findings, Garner and Alexander (1989) forecast future research for metacognitive intervention programs by suggesting the following guidelines:

> We suggest that research done in isolation on the benefits of either content expertise or strategic approaches to problem solving is no longer needed. The demonstrations are there: "Knowing"and "knowing how to know" both matter for all sorts of academic tasks, and both can be enhanced with instruction. The really interesting questions now seem to focus on the interactions, and it is in this area that empirical work is needed. Compensatory processes can be described; domain-specific strategies can be enumerated; and transfer can be explored. Minimum levels of content knowledge as a prerequisite for successful instruction can be investigated. (p. 152)

By using narrative text the author wanted to examine more specific comprehension skills related to literary elements in complex short stories. It was of interest to examine how this type of story-specific information is acquired and used. It was hypothesized in this study that two types of comprehension skills are needed. It is suggested that the students initially need to be explicitly informed of more general comprehension strategies - those strategies that require procedural knowledge, which is necessary to detect, monitor, and evaluate specific content information relevant to any text material (Paris & Oka, 1986). This means that students need to apply general metacognitive strategies to narrative stories that involve complex character analysis or

character motivation and goal choice. If the reader is shown how to develop and use these strategies, then basic text information may become more interpretive for the student, due to the reasoning ability that has been developed through applying comprehension strategies (Brown & Palincsar, 1986). It is hypothesized that this type of learning may occur because the reader has been informed of what he has to do in order to create knowledge structures specific to the complex short story (Singer & Donlan, 1982). As aforementioned, this process involves using general comprehension learning strategies. If the reader is able to use these strategies to understand character action, inferred messages, and figurative language, then the reader is not solely dependent on the textual information, but instead relies on his own constructions of story knowledge as created by the use of the learning strategies. Thus, if the instruction of metacognitive learning strategies assists one in acquiring specific story content knowledge, it may also provide an operative plan to learn how to learn (Buswell, 1956). While there may not be two mutually exclusive mental processes at play in this comparison, metaphorically it may be easier to separate the story-specific character analysis skill, which needs to be learned in order to understand narrative text, from the more general comprehension strategies. Duffy, Roehler and Mason (1984) clearly state a rationale for teaching general learning strategies in order to help students to understand content within text material. They state that:

> Because strategy development assumes that a self-monitoring process underlies the comprehension of text content, the explication of this process takes priority when teaching strategies for comprehension text; the goal is to have students

understand the process and then transfer it for use in understanding the content of text (p. 303).

In light of some past studies, reciprocal teaching may be an effective instructional method for use across a broad range of content areas. In fact, it is of interest to examine if the application of this method moves beyond the content specific and reading comprehension domain. Seeing that it is a technique which teaches students to "critically think" (Brown & Palincsar, 1985), "to read to learn" (Duffy, Roehler, & Mason, 1984), and to problem solve (Palincsar & Brown, in press), it has been used successfully by teachers in all subject areas to teach study skills (Brown, Armbruster & Baker, 1986; Duffy, Roehler, & Mason, 1984). This study examined if the method would affect students' abilities to acquire an increased awareness of study skills and if any particular study skills were better served by the approach.

Definition of Terms

Reciprocal teaching has been introduced and will be further elaborated in Chapters Two and Three. Nevertheless, several information processing concepts and instructional approaches will be referred to throughout this paper, and in the context of the research issues examined in this study several terms warrant clarification.

Explicit Teaching

Explicit teaching within the context of this study is not to be confused with direct instruction. Direct instruction is a component of a behavior model of teaching (Becker,

Englemann, 1975) One of the foremost examples of this model is the DISTAR program (Englemann & Bruner, 1968). Some other components are modeling, practice with feedback, breaking complex skills down, and scripted lessons (Rinehart, Stahl & Erickson, 1986). Direct instruction is based on teacher-provided examples that require the students to systematically practice the skills through repetition. Moreover, more recent direct instructional programs now include cognitive-explicit components (Gersten & Carnine, 1986).

Explicit teaching is a more general approach which focuses on the teacher thinking through the learning process and then sharing this process with the students. Explicit teaching does not incorporate systematic and scripted lessons. Instead, the expertise of the teacher is the focus and he or she needs to apply this expertise through the medium of Socratic dialogue. It is through dialogue that the teacher emphasizes explicit metacognitive strategies, and it is through this medium that students are encouraged to study the learning process (Roehler & Duffy, 1984). In this study it is the element of explicit teaching which was developed as a control treatment.

There is some concern voiced by Roelher and Duffy (1984) that direct instruction primarily focuses on teacher management of activities, and yet the role of the teacher has not been examined adequately. Having said that, they examine the role of the teacher and the active participation that is required both of the teacher and the students. Their list attempts to reveal the teacher's role while trying to teach comprehension strategies through dialogue.

1. They are consciously aware of the function and utility of the skills they are teaching and the linkages between these processes and "real reading" of

text.

2. They analyze the skill to be learned in order to identify the salient features of the mental processing required to do the skill.
3. They take an active role in teaching students how to do mental processing.
4. A teacher's active role puts a premium on what teachers do during instruction.
5. In addition to verbal statements, the teacher's active instructional role includes the use of assistance devices, ie., advance organizers, thinking aloud, careful sequencing, highlighting of salient features, ... analogies that integrate concepts or create linkages between skills and reading tasks (p. 302).

Explicit teaching is a focus on teaching metacognitive strategies and requires significant teacher expertise and an awareness of the full role of the teacher, elaborated in greater detail in Chapter Two.

Story Knowledge

According to Pearson (1984), both content knowledge and process knowledge influence text comprehension. In this definition there are two kinds of content knowledge. The first is the information within the text, while the second type is the knowledge about the text genre or text structure. More specifically, content knowledge examined here is story or narrative text knowledge. This type of knowledge has been the focus of several studies (Mandler, 1978; Stein and Glenn, 1979;

Thorndyke, 1977). Researchers have generally found that story knowledge greatly influences reading comprehension. The categories examined in this study were as follows: interpreting figurative language, recognizing logical relationships, understanding the behavioral factors in the story as they relate to the main character, interpreting implicit information that was communicated by the characters, and reflecting on the story by formulating opinions about specific issues in the story.

During the explicit teaching phase of this study each of these components was addressed and described as literary aspects that contribute to character development in narrative text. When the teacher introduced the students to each story component, it was not presented in a metacognitive way. Instead, the students were provided with a definition of this type of story-specific information, examples of which were identified by the teacher and the students during instruction.

Modelling

Modelling is the explicit demonstration of how to use a learning strategy. According to Garner (1987) there are two styles of modelling. One method involves defining the strategy by first explaining its importance. Once this is established, the teacher uses the strategy and "thinks out loud" about how he or she is managing to use it. The teacher shows the students how the strategy is used by integrating it into a context with a high degree of sophistication. Thus, the teacher does not demonstrate inadequate ways of using the strategy. Instead, the focus is on how to apply the strategy to a situation with the greatest degree of efficiency. After this has been accomplished by the teacher, the students should be provided with repeated opportunities to use the strategy

that was modelled by the teacher.

The second modelling style involves all of the procedures of the first style. However, instead of restricting the scope of presentation to one that is sophisticated, this style suggests the teacher should first demonstrate an immature usage of the strategy and then compare it to a more sophisticated way of using the strategy. This style provides the students with a comparative framework, which gives them concrete examples from which they can view the processes that are involved in using a learning strategy.

Garner (1987) contends that both modelling styles are adequate; however, the second style seems to provide the students with more options that may help them develop a deeper and broader understanding of what is involved in strategy learning.

Study Skills

In the context of this research, general study skills are defined as any activity or mental process that is involved in monitoring one's comprehension progress (Paris, & Myers II, 1981). According to Paris and Myers II (1981), what is involved in monitoring one's understanding of what one reads are three components: evaluation, planning, and regulation. Evaluation requires the reader to ask if a passage is coherent, if he or she understands the vocabulary and ideas in the passage, or if the passage fits with what he or she has previously experienced. Whereas, the planning component requires the reader to try to invent a course of action to understand what he or she is reading. This more specifically involves creating a set of learning strategies that the student will utilize when he or she experiences a comprehension break-down. Lastly, regulation involves trying to use one of the corrective strategies when the reader encounters a difficulty in

the text. For example, if there is a word that the reader has never encountered before, this suggests to the reader that he or she should go and consult a dictionary, or go back to the passage and re-read the word in context (Paris, & Myers II, 1981). Furthermore, reciprocal teaching, because of its emphasis on self-regulatory training, may help the students acquire a more conscious and permanent knowledge of strategies that need to be used for more efficient comprehension ability. It is suggested that this may increase their ability to understand what is involved in the activity of studying textual material (Brown, Armbruster, & Baker, 1986).

In this study, comprehension monitoring and study strategies are used synonymously. Paris and Myers II (1981) suggest that comprehension monitoring is an important part of metacognition. "Comprehension monitoring implies some awareness of goals and strategies for meeting them" (Paris & Myers II, 1986, p. 6). The broad categories that are examined in this study are a list of study strategies developed by Zimmerman and Martinez Pons (1986). The following is a list of student-initiated study behaviors:

1. Self-evaluation
2. Organizing and transforming information
3. Goal setting and planning
4. Seeking information
5. Record Keeping
6. Environmental structuring
7. Consequence Structuring
8. Rehearsing and memorizing

9. Seeking social assistance

10. Reviewing Records

Story Grammar

The term "story grammar" refers to many models that have been used by researchers to develop a standardized structure of narrative text (Mandler, 1978; Mandler, 1983; Mandler & Johnson, 1977; Stein & Glenn, 1979).

A story grammar is a rule system devised for the purpose of describing the regularities found in one kind of text. The rules describe the units of which stories are composed, that is, their constituent structure, and the ordering of the units, that is, the sequences in which the constituents appear (Mandler, 1984, p. 18).

A story grammar model is based on the assumption that all narrative stories have a similar underlying structure independent of content. The two main constituents in a narrative are the setting and the episode. The setting usually introduces the story and establishes the time, place, and the protagonist. The episodes follow the setting. Besides the fact that the episodes follow the setting, Stein and Glenn (1979) submit that the episodes in any story are a "behavioral sequence", where the protagonist is trying to pursue a goal. Most story grammarians also submit that narrative stories are usually goal-based. Thus in all of the models, the categories and rules are designed to explain the structure of goal based stories. The grammar contains various categories that attempt to explain the development of a narrative. Grammarians have used syntactic elements to design story grammar models (Mandler & Johnson, 1977; Stein & Glenn, 1979). A typical story grammar model (Mandler & Johnson, 1977; Stein & Glenn,

1979) would include the following elements: the story begins with an initiating event, then the protagonist reacts to the event either in an emotional or cognitive way. After the reaction, the protagonist creates a plan to attain a goal or purpose. After the character attempts to attain the goal, the character experiences the consequences of the actions which usually end the story. Admittedly, this is a rather simplistic way to describe the main structure of a story because only one episode has been described. In most stories the protagonist initially reacts to the opening event in a complex way. Thus the protagonist attempts to reach his or her goal in several different ways. Consequently, the story structure of a more complex narrative has several episodes in the story. When the protagonist attempts to reach his or her goal, this is what is referred to as the goal path and the development of the story.

Researchers believe that if children are exposed to a story grammar model they will develop an organized story schemata that will increase students' ability to understand narrative text. Researchers suggest that the application of a universal structure to various stories will assist children to build up story-specific background knowledge by prompting them to recognize familiar structural characteristics of narrative texts (Mandler & Johnson 1977; Omanson 1982; Stein & Glenn, 1979; Rumelhart, 1977; Thorndyke, 1977). It is believed that the introduction of story grammar models is one way of providing children with a framework on which they can build the capacity to learn new stories.

Metacognition

> The following definition is consistent with the one used in this study: Metacognition, which literally means transcending knowledge, refers to one's understanding of any cognitive process. Understanding in the context of reading can be revealed in two ways: first, in one's knowledge of strategies for learning from texts, differing demands of various reading chores, textual structures, and one's own strengths and weaknesses as a learner; second, in the control readers have of their own actions while reading for different purposes. Successful readers monitor their state of learning; they plan strategies, adjust effort appropriately, and evaluate the success of their on-going efforts to understand. (Brown, Armbruster & Baker, 1986, p. 49)

Self-Regulatory Learning

Self-regulatory learning is the process in which readers are in a constant state of "monitoring and checking their own cognitive activities while reading and studying" (Brown, Armbruster & Baker, 1986, p.67). It is the control of the learning process that is central when one refers to the term self-regulation.

Self-regulatory learning is the more general process which incorporates metacognitive skills as they are applied to a variety of activities and learning experiences. Self regulatory learning is involved in listening and speaking as well as in social-emotional development (Flavell, 1976; Harter, 1983). Thus in the context of reading, the learner is involved in an interactive learning experience. He or she tries to develop knowledge that will advance his or her learning progress (Brown, Bransford, Ferrara, &

Campione, 1983) by focusing on four interdependent variables: text, task, strategies, and learner characteristics. Brown, Armbruster and Baker (1986) have carefully defined each of these four variables.

1. Text: the features of reading materials that influence comprehension and memory (for example: difficulty, clarity, structure).
2. Task: the requirement of various tasks and purposes of reading that learners commonly encounter in school.
3. Strategies: the activities learners engage in to understand and remember information from the text.
4. Learner Characteristics: personal attributes and states that influence learning such as ability, familiarity with the material, motivation.(p. 51)

In conclusion, this study attempted to examine the effectiveness of reciprocal teaching on the comprehension performance of students in a grade seven program. Reciprocal teaching was examined and compared with teacher-directed approaches to develop reading comprehension. Moreover, a direct comparison of three reading instruction approaches served to shed light on the relative effectiveness of each of the approaches. Included in this study was an examination of the critical components involved in the methodological practices that encourage students at the grade seven level to persistently pursue learning in active and dynamic ways. By examining each of the self-regulatory learning strategies, and how they affect student performance, the utility of each of the four learning strategies was evaluated within the reciprocal teaching method. This study also attempted to assess the feasibility of incorporating the reciprocal teaching model within routine classroom procedures for reading instruction.

Chapter Two

Review of the Literature

Current Comprehension Instruction Approaches

Before investigating the theory and corresponding literature that has contributed to the development of reciprocal teaching, one first needs to explore the broader implications that underlie instructional methodologies currently used to teach reading comprehension and to understand what is currently going on in the classroom in the name of comprehension instruction. This will provide the reader with background on the issue of comprehension instruction as it relates to reciprocal teaching specifically.

Anderson (1981) and Durkin (1979) found that reading comprehension instruction consisted primarily of comprehension assessment activities, rather than instruction that helped students develop goals and strategies for self-directed learning. In fact, teachers' perceptions of reading comprehension instruction consisted of testing for student progress and correcting students' errors in response to teacher-generated questions (Duffy & McIntyre, in press). On the other hand, Anderson (1981) found when students were asked about reading seat-work activities, they expressed as their objectives to finish yet another assignment given to them. Using data based on students' responses, Zimmerman and Martinez Pons (1986) suggest that the students's primary objective, to finish their work, indicates teacher-initiated and teacher controlled learning behavior (Zimmerman & Martinez Pons, 1986). Thus, one may infer that students are essentially left in the dark about the complex interactive processes (Rumelhart, 1977; Stanovich, 1980), and fail to access more complex comprehension skills such as developing a "reader purpose,

familiarity, interest and motivation, and understanding of discourse type and complexity" (Pearson, 1984, p.233).

A matter of concern is why the majority of teachers do not currently inform students about the processing that they must engage in to understand text material in a meaningful way. This can be answered on the simplest level by saying that reading researchers have only recently appreciated the importance of intentional comprehension instruction. Thus, what teachers have been doing in the classroom has been on an intuitive level. Each practitioner teaches reading comprehension in the best way he or she knows, with few empirical guidelines to follow (Pearson, 1984). In addition, teachers usually know when a student is successfully using comprehension skills, but unfortunately do not have the knowledge to explain how to acquire the skills in a process-directed way (Goetz, 1984). This may explain the practitioners' orientation towards eliciting correct, predetermined responses from students (Gall, 1984); the teachers were more concerned with marking off right or wrong answers rather than examining the specific responses of each student, and using these responses as a diagnostic tool to monitor comprehension ability (Duffy, Roehler & Mason, 1984). This may also explain why teachers frequently are found to design reading comprehension lessons without any attempt to diagnose the ability levels of the students in their classroom (Duffy, 1981). Instead, the majority of teachers are more concerned with managing the material to ensure that the class gets through the prescribed lesson. When examining comprehension programs, one of the major difficulties in implementing comprehension instruction is it's not a "package program" ready for a teacher.

Despite the lack of teacher knowledge about the comprehension process and how to utilize the knowledge for instructional purposes, the comprehension programs that have been developed suggest that comprehension improves with the repeated exposure of a task. In fact, there is much empirical data to support such a claim. This suggests that the longer the time a student practices a task, and the frequency with which he or she is engaged in similar tasks, the higher the probability that the student's achievement level will increase. This trend seems to be maintained across a wide variety of reading material content. Given these findings, it is surely worthwhile to ask if the intuitively developed procedures the teachers have used in the past, namely comprehension assessment and comprehension assignment (Durkin, 1978), may actually be an effective way of increasing student achievement in the area of reading comprehension. Having said that, it is important to consider if instruction based solely on a repeated exposure model (Duffy & Roehler, 1982) is the most effective way of teaching reading comprehension.

In order to find what kinds of methods are the most effective in the classroom, one needs to examine a wide variety of training procedures within this context. Metacognitive training methods seem to be promising new techniques that have been particularly useful for training people with learning disabilities. The methods require students to gain executive control over learning strategies by knowing how the strategies work, and when to apply them in any given situation. Within the research of metacognition as it applies to reading instruction, the following assumption is frequently made: in order to help individual readers acquire the knowledge necessary to regulate their own learning they need to be explicitly informed of the tasks, procedures, and strategies that are involved in learning textual material.

Metacognitive Comprehension Instruction

Historical Overview

Metacognition is not a recent term. However, within the study of reading it is a new notion. In the past, developmental psychologists have studied metacognitive activities of young children in an effort to understand their thinking processes (Brown, 1979; Bruner, 1966; Cole, 1978; Flavell, 1976, Rogoff, 1984; Wertsch, 1979) in order to determine how children become active and independent learners. Yet recently, because reading is one of the most cognitively complex activities, there has been an interest in examining how metacognitive learning contributes to efficient reading comprehension. Therefore the research efforts have examined learners across all age and ability levels, which included training mildly retarded children (Brown & Campione, 1978), grade one children, (Brown & Palincsar 1985) grade four, five and six children (Short & Ryan, 1984; Poindexter & Prescott, 1986; Adams, Carnine and Gersten, 1982), seventh graders (Brown, Palincsar & Armbruster, 1984); and grade eleven students (Singer & Donlan, (1982). However, because the focus is on trying to discover what is going on while learning and subsequently what is not acknowledged by the learner that should be noticed, much of the research has examined those learners who do not have metacognitive strategies for coping with reading activities. When examining poor readers, researchers have found that one of the reasons they fail to understand what they are reading is because their learning is missing essential components, either in the form of not having knowledge of strategies, or not being able to monitor or evaluate their own learning; components that are necessary for active learning behavior (Brown, Armbruster & Baker, 1986). In response to these findings, researchers have tried to develop remediation programs that would inform students about learning strategies to help them learn in more active and efficient ways (Brown, Palincsar and Armbruster, 1984; Brown

& Campione, 1978).

Distinguishing Characteristics of the General Approach

There have been many instructional programs that have attempted to teach students with varying ability levels and age levels, metacognitive learning strategies. Metacognitive instructional approaches are characterized by the emphasis on teaching students "to plan, implement, and evaluate strategic approaches to learning and problem solving" (Palincsar, 1986, p. 118). Within the domain of applying metacognitive instructional approaches to teach reading comprehension strategies, there has been a further emphasis on text comprehension: getting the students to develop a better understanding of textual structure and textual content. "Components determined to be critical to the success of this endeavor as well as other metacognitive interventions include selecting strategies wisely, providing guided instruction in the acquisition and application of these strategies, and informing the learner regarding the utility and consequences of employing the strategies" (Palincsar, 1986, p. 118).

What separates metacognitive instructional programs from other types of instruction is the explicit training that defines the strategies. This training shows the learners how to use the strategies, and identifies the usefulness of them. Thus, Winograd and Hare (cited in Garner, 1987, p. 109) have suggested that the reader should be taught the following:

1. Why the strategy should be learned.
2. What the strategy is.
3. How to use the strategy.
4. When and where the strategy is to be used.
5. How to evaluate the use of the strategy.

Another, equally important aspect of a self- regulatory program is the "on-line" corrective feedback that the teacher must provide when the students try to use the strategies.

Metacognitive instruction has also been found to positively influence the learner, particularly the below average reader. The below average reader may in fact benefit more from a comprehension-monitoring approach because he or she may theoretically not benefit from more practice on a skill he or she has not been able to learn in the past. In fact, Durkin (1978) suggests that "for the students who hover near chance level on the task, the additional practice may only reinforce their already misguided strategies" (p. 251). This may suggest that the self-regulatory teaching approach is necessary, seeing that directed comprehension instruction taught on an explicit level benefits students with below average comprehension ability (Brown, Armbruster & Baker, 1986; Brown & Palincsar, 1982; Palincsar, 1986; Palincsar & Brown, 1984; Palincsar & Brown, in press).

Many researchers have designed metacognitive instructional programs to examine the effectiveness of teaching students these learning strategies to plan, implement, and evaluate problem-solving learning situations. Poindexter and Prescott (1986) taught grade four, five, and six students a three-step strategy technique that would help them answer text-based inferential questions. The instruction was metacognitive because not only were the strategies defined for the students in terms of "what"they were, but they were also shown "how"to use the strategies and "why"the strategies were important ones to learn, and "when"the strategies should be used. At the end of this three-month instructional program, both qualitative and quantitative data indicated that the technique was effective in increasing children's ability to answer inferential text-based questions.

Patching, Kameenui, Gersten, and Colvin (1983) also designed an approach that taught students explicit critical reading strategies. The findings of the study indicate that after the program, students were more successful in detecting faulty arguments in text. Moreover, Short and Ryan (1984) demonstrated that both skilled and less skilled grade four readers, when exposed to explicit story grammar strategies, benefited from the program in different ways. More specifically, when the story grammar strategies were explicitly taught to the students, the unskilled readers were able to respond to instruction in a more active way because the task demands were explicit (Short & Ryan, 1984). The more skilled readers began training with a poor knowledge of metacognitive thinking and consequently their strategy application was initially immature. However, after the program they were able to utilize strategies in a mature way that significantly differed from their initial ability. This demonstrates that the metacognitive approach can be employed effectively across a wide range of ability levels.

In another study, Singer and Donlan (1982) taught eleventh grade students a problem-solving schema for understanding complex short stories. Students were asked to observe the categories outlined in a story grammar model which included: story plan, goal, action, obstacles, and outcomes. Students were provided with general questions that corresponded to these story grammar categories, and then were asked to create their own more specific story questions. For example, a story grammar question may look like the following: Who was the main character in the story? Whereas, the student's story specific question may look like this: Was Marie the most important person in the story? By teaching students a problem-solving schema that could be applied to complex narratives the students were able to increase their understanding of this type of textual material.

Since study skills are also related to reading, Adams, Carnine and Gersten (1982)

explored the possibility of teaching grade five students metacognitive skills for studying. The teacher tried to get the students to become aware of the importance of re-reading text, reviewing after reading, taking notes, and attending to sub-headings. The students who were taught these metacognitive skills performed significantly better than the students who received no instruction, or those who were asked to learn the textual material in an independent seat-work activity.

Paris, Lipson and Wixson (1983) have also designed a metacognitive instructional program that included the following components: informed teaching, metaphors for strategies, bulletin boards, group dialogues, guided practice, bridging content area, reading. They taught students cognitive strategies that were then used to understand the content of text materials. Perhaps the most unique aspect of this program was that the strategies were concrete, in that every attempt was made by the teacher to demonstrate how the strategies could be used to increase student learning. Yet besides the teacher's attempts to make the strategies concrete, the curriculum design included several metaphors that were actual titles referring to specific strategies. For example the title "Plan Your Reading Trip" referred to pre-reading activities, and "Round Up Your Ideas" was used to get the students to summarize. These titles were an attempt to make the strategies concrete and "user friendly". The strategies were taught to the students in a cooperative learning or group setting. As the students attempted to use each of the learning strategies they were provided with frequent teacher feedback. Paris and Oka (1986, p. 21) contend that the "magic of this metacognitive program is in the strategies and awareness; their ordered presentation to children, and teacher's communication that these strategies are important and beneficial" (p. 21). Further, metacognitive programs combine "cognitive skill and motivations because the program emphasizes the functional value of strategic reading".

Another metacognitive program, which is the focus of this study, is reciprocal teaching. The corrective feedback of peers is an essential component of the program. As the students are trying to learn how to regulate their own learning, they have to be given continual feedback after each attempt at trying to use a learning strategy. This is accomplished in reciprocal teaching because the whole program progresses through a type of Socratic dialogue. It is feasible for the teacher to be alert to the problems that each individual encounters, to attempt to correct these problems before they become over-learned and develop into compensatory strategies. As well, the peer group also learns from the active struggles of others, and can participate in addressing the problems that the group is experiencing in an effort to eliminate them.

The four strategies that this reciprocal teaching method identifies are: summarization, question generation, prediction, and clarification (Palincsar, 1986). They were chosen because they are all strategies that could be translated into concrete activities that were understandable to the average learner (Brown & Palincsar, 1985). But they are also activities that require metacognitive interaction. That is to say that in order to understand a task, readers have to think about what they are doing while they are engaged in doing it, as well as checking what they have understood at the end of the task. For example, if a reader is asked to summarize a passage, and realizes that he or she cannot accomplish this task because the main idea in the passage cannot be identified, the reader is recognizing his or her cognitive limitations and can then attempt to do something about it, such as re-reading the information.

Summarization is essentially self-review (Palincsar & Brown, 1985; Garner, 1987). It is an excellent way of finding out if the students are comprehending what they are reading. Summarization involves finding the main idea and then forming it into one's own words. Firstly, the reader must judge what parts of the text are the most important.

Then he or she must devise a set of rules that can assist in eliminating redundancies and repetitions, and locating important information such as topic sentences (Brown & Day, 1983; Kintsch & van Dijk, 1978). Lastly, the reader must be able to translate this information into his or her own words, being careful not to partially copy what the author has written (Brown, 1981).

Summarizing is actually an effort to shorten the text so that the reader re-generates the gist of what he or she has just read. If the reader cannot generate a summary this signals the reader to re-read the passage again (Garner, 1987, p. 109). For this reason, the act of summarizing is a metacognitive activity. The reader is only able to summarize if he or she recognizes what steps must be applied in order to accomplish the task. The teacher needs to emphasize that the "real"task is putting all of the most important information together and then formulating it into one's own words. Thus the teacher should clearly state to the students that they should not copy the author's exact words, but work on finding the main ideas and then putting them into their own words.

The strategy of question generation is very similar to the summarization strategy. Yet, this strategy requires the students to carry the summarization task one step further. The students are challenged to generate a question about the main idea of a passage. The type of questions that the teacher should encourage are those questions which focus on the most important ideas in the passage. Brown and Palincsar (1985) point out that students have difficulty using this strategy during the early stages of the program. They usually look for information and then repeat that information in a verbatim format. For example, the students may have read the following:

"The duck walked across the street and was almost hit by a car."

The student may form the following question from this information:

"The duck walked across the street and was almost hit by a car for what?"

Yet as the student develops his or her skills, the teacher will find that the student will no longer seek information by trying to extract one sentence out of the text and then make it into a question. Instead, the student will examine several sentences in an attempt to find the main idea. Then the student will attempt to create his or her own questions by first summarizing the passage, and then creating a question from the main idea. This involves thinking, synthesizing and inventing (Brown & Palincsar, 1985).

A prediction is a type of inference. It involves examining the text by using one's background experiences in order to form certain expectations and conclusions about what is going to happen next. The students must carefully analyze what they are reading and try to associate what is being read by using their prior world and text driven knowledge. In order to do this the student must try to look for textual cues that will assist him or her in determining what is going to happen next.

Brown and Palincsar (1984, 1985) describe the clarification strategy as an attempt to resolve any difficulty in the text that the reader may find is hindering his or her understanding of the information. Once the reader has identified the difficult area, he or she has an initial awareness of the problem and can then try to tease apart the problem by re-inspecting the text, asking questions, and utilizing other supportive resources (i.e., dictionary, other reference books).

The four learning strategies are first taught to students through explicit instruction and teacher modelling. The explicit instruction phase is discontinued once the students have had an opportunity to understand all of the terms involved in the program and have had the opportunity to observe how the concepts can be used in a concrete way (Palincsar & Brown, 1984). Once it is evident that the students have at least a superficial understanding of the procedures involved, the teacher then informs the students that they will be expected to participate in the discussions. In fact, the teacher

at this point clearly delineates that, when they have gained confidence in using strategies, they will each take turns using a strategy to lead the discussion about the passages the group reads. Therefore, from the beginning of the intervention stage, students are informed that they will be required to individually discuss sections of a story by using the four strategies as a framework (Brown & Palincsar, 1985; Palincsar & Brown, in press). This alerts the students to carefully observe the teacher as he or she uses strategies to derive meaning from text. However, once the students have been introduced to the learning strategies, the problem-solving schema specific to the complex story structure of narrative text material, the process of using the learning strategies, and the social interactive context, they are encouraged to implement the instructional technique by orchestrating a discussion on a passage and applying the strategies.

The method is used with the objective of teaching students how to take on the responsibility for their own learning. The responsibility is delegated when each student is asked to contribute to the discussion by performing the duties of the teacher. These duties involve task delegation, evaluative feedback, time management, and social awareness. Each student is also asked to take on another type of responsibility which involves participating in the dialogue as an active member of a group effort. These combined responsibilities are apparent in the following sample reciprocal teaching dialogue provided by Palincsar:

Teacher: The title of this story is Genius with Feathers. Let's have some predictions. I will begin by guessing that this story will be about birds that are very smart. Why do I say that?

S1: Because a genius is someone really smart.

Teacher: But why would I say "birds that are very smart?"

S2: Because they have feathers.

Teacher: That's right. Birds are the only animals that have feathers. Let's predict now the kind of information you might read about very smart birds.

S3: What kinds of birds?

Teacher: Good one. What kinds would you guess are very smart?

S3: Parrots or blue jays.

S1: A cockatoo like on Baretta.

Teacher: What other information would you want to know?

No response.

Teacher: I would like to know what these birds do that is so smart. Any ideas?

S2: Some birds talk.

S4: They can fly.

Teacher: That's an interesting one. As smart as people are, they can't fly. Well, let's read this first section now and see how many of our predictions were right on. I will be the teacher for this one.

(All read silently)

Teacher: My question is, "Who is the genius with feathers"?

S1: Crows.

Teachers: That's right. So we were correct in our prediction that this would be about birds but we didn't correctly guess which bird, did we? My summary would be that these paragraphs describe the clever things that crows do which make them seem quite intelligent. Is there anything else I should add to my summary?

S1: How they steal corn?

Teacher: Well now, that's a detail which described one of the ways in which they

are clever. For our summary we will not include these details. I believe I found a word that needs clarification. What does "resourceful"mean?

S1: No response.

Teacher: If I say that you are a resourceful person, I mean that you are able to deal with problems and difficulties easily. Being resourceful is another way in which crows are intelligent. I would like to make a prediction now. The last sentence says, "One major reason they have mastered survival against heavy odds is their amazing communication system." My prediction is that they will now describe this communication system. How do you think crows communicate with one another?

S: Caw-caw.

S: With a special song.

Teacher: Alright. Let's read on. Who will be the teacher for this section? (Dialogue which illustrates the student, Jim, leading the discussion and the teacher providing corrective feedback).

S1: How do crows communicate with one another?

Teacher: Good question! You picked right up on our prediction that this is about the way crows communicate. Whom do you choose to answer your question?

S1: Barb.

S2: Crows have built-in radar and a relay system.

S2: That's a good part of it. The answer I wanted was how they relay the messages from one crow to the other crow.

Teacher: Summarize now.

S1: This is about how crows have developed a system.

Teacher: Of what? You must include the whole main idea.

S1: Of communication.

Teacher: That's right. The paragraph goes on to give examples of how they use pitch and changes in interval but these are supporting details. The main idea is that crows communicate through a relay system. Jim?

S1: Any clarification?

S2: Does relay mean to transpose?

S1: (looks to teacher)

Teacher: Well, to transpose means to change - like in music - I would transpose a song by playing it higher or lower. To relay just means to pass on. Like in a relay race the runners pass on a baton from one person to another until the race is over. Ok? Any more clarifications?

S1: I'm a little unclear about something in this paragraph.

Teacher: Ok. What would that be?

S1: I just want to make sure about being great mimics. Does that mean that they're smart and they pick up things very quickly?

Teacher: That's part of it. Dave, what do you think a mimic is?

S2: Like imitate somebody else's voice, can indicate something.

S3: Like that one guy, what's his name on Rich Little.

Teacher: Rich Little does impersonations. He mimics or imitates not just the person's voice but also the way they walk and what they say. To mimic is to imitate or copy. That was a good point to clarify. Jim?

S1: My prediction is -

It says here that the crows can use their communication system to play tricks, so maybe something about the tricks they play? I would like Sue to

be the next teacher.

Teacher: Excellent prediction. The last sentence of a paragraph often can suggest what the next paragraph will be about. Good for you. (Palincsar, 1984, p. 13-15)

Brown and Palincsar have combined the four strategies to create a reading program that requires students to obtain a working knowledge of each of the four strategies so that they can utilize each of the four strategies to increase their awareness of what they are reading and how to improve their reading abilities. Interestingly, Palincsar and Brown (1985) and Brown and Palincsar (in press) found that all four strategies must be incorporated into the program at the same time, and any attempts not to use all of the strategies identified will jeopardize the effectiveness of the program. They have also found that a necessary component of the program is to provide the "teacher in training" and the student with operational definitions of each of the four strategies. In other words, it cannot be assumed that all practitioners have a universal understanding of what it means to use each of the four strategies in an active learning situation. This may be largely due to the fact that teachers vary in how they define each of the four strategies. Some of the differences arise from a lack of understanding of the specific cognitive processing demands and task requirements that are implied when one is asked to use any one of the four strategies. For the purpose of this study, the teacher was provided with definitions for each of the four strategies. This measure was initiated in an effort to prevent the teacher from using the strategies in a way that did not conform with the way the strategies have been used in previous studies on reciprocal teaching.

Having considered the way that comprehension instruction and self-regulatory

learning influenced reciprocal teaching, it is also important to examine how two theoretical focuses, namely a theory of instruction and a theory of the task have also influenced the development of this teaching technique (Brown & Palincsar, 1985).

Reciprocal Teaching

A Theory of Instruction

The work of Vygotsky (1978) and Wertsch (1979), as well as the research of Bruner (1978), have been grounded in the proposition that learning begins at a social level and eventually progresses to an individual level. "In short, for Vygotsky, individual thinking is essentially re-enactment by the individual of cognitive processes that were originally experienced in the company of others" (Palincsar, 1986, p. 9). Therefore the development of thinking ability is internalized only when the learner has been interacting with other individuals, creating the external conditions for learning. Yet, what is important to realize is that the extent of the learning is dependant on whom the learner interacts with (Palincsar, 1986).

Vygotsky establishes the parameters of this learning by contending that learning occurs within a zone of proximal development (Palincsar, 1984). This means that the expert learner is more cognitively advanced or is at a higher developmental level than the novice learner. However, when a novice learner interacts with an expert (teacher, parent, or more advanced student) the novice is more capable of dealing with problems that individually he or she could not previously manage. In fact, with continuous feedback from the expert, the novice eventually will be able to tackle similarly difficult problems independently. The novice is continually progressing to a more advanced level of understanding which is only accomplished when he or she interacts with an expert. During social interaction, the expert introduces the novice to new ideas and then guides the novice in an effort to help him or her understand them. This challenges the novice to think about ideas that he or she had never been exposed to before, and also encourages the novice to use the expert as a support in the hope that the novice will shift his or her dependency away from the supportive feedback of the expert and towards

a willingness to utilize the new knowledge independently (Brown & Palincsar, 1986; Wertsch, 1984).

There are several implications involved in this type of learning experience, also referred to as expert scaffolding (Bruner, 1978). The expert has to be aware of the student's developmental level before engaging in an activity or a discussion. If the expert gauges the learning challenge at an expectation level that is unrealistically high, the learning experience will serve no purpose and unnecessarily frustrate the novice learner. To address this point, reciprocal teaching is a method that provides the teacher with a direct line of assessment. As the students are engaging in activities, their abilities to use strategies reflect both the difficulties they are encountering and the progress they are making. Thus reading readiness and comprehension break-downs may be more easily monitored (Brown & Palincsar, 1985).

There are many advantages to providing learning opportunities in a social environment, often referred to as cooperative learning (Brown, Palincsar & Armbruster, 1984; Dansereau, 1983). Within the body of research on this subject, the role of the teacher is of particular significance, as the teacher tries to enlist the students to actively assume responsibility for their own learning (Brown & Palincsar, 1982; Brown, Palincsar & Armbruster, 1984; Brown, & Palincsar, 1986). But the question to be asked here is: How can a teacher help students take charge of their own learning? One way of doing this is to expose students to the efforts of peers. This will provide each student with a mirror image of the efforts, attempts, and responses that are generated by their peers.

The peer group is important because there is a shared responsibility that is inherited by the group collectively, the sole objective of which is to learn how to problem solve more effectively (Brown, Palincsar, 1986). Not every person within the group is given an individual role, the exception being the opportunity to lead the discussions (Palincsar & Brown, in press). Yet the whole group contributes to the learning progress. In so doing, the group can share the burden of understanding the textual passage, and distribute the responsibility accordingly.

Another objective within the reciprocal teaching model is to use the peer group as a collective effort to advance individual learning; to fade out the involvement of the teacher so that the teacher eventually sits on the sidelines and assumes the role of the coach. This is accomplished by getting the students to interact and take turns in assuming the role of the teacher. In the transition period, when the teacher is encouraging the students to take turns at assuming the role of the teacher, it is important to intercept a student who fails to utilize a strategy correctly. This is critical because the students may collectively develop misconceptions about how to use a particular strategy if the error is not corrected. Moreover, to ensure that the individual reader's willingness to participate is not jeopardized by criticism, the coach should first ask the group to evaluate the way the individual used the strategy. If the group fails to see the problem spotted by the coach, the coach should then model a mature way of using the strategy and ask the novice to mimic the performance of the coach. Moreover, it is equally important to evaluate the expertise of the student-teacher. Thus after each effort, the group should be encouraged to evaluate the performance of the novice in the role of the teacher.

The exposure of the efforts of other individual learners is important (Garner, 1987). It is believed that this will increase the students' awareness of how a strategy can be used. Furthermore, when the students are interacting in a supportive environment where they are encouraged to participate, there is a greater likelihood that students will assume more responsibility for their learning. Again, a shift of dependence away from the teacher characterizes this theory.

Reciprocal teaching was also created as a form of propletic instruction, defined as "an anticipation of competence", and "where the mature task is maintained even if each individual member of the group is not yet capable of full participation" (Brown & Palincsar, 1986, p. 16). Hence, they are informed that their discussions about the stories are both structured and spontaneous, meaning that the discussions are not an open forum for personal insight. Rather the tasks and procedures never change, they are structured and systematically organized by the very fact that the four strategies are the only avenue used for the interactive dialogue. This procedural control helps to eliminate any confusions about the goal or the outcome of the task (Palincsar & Brown, in press). Furthermore, with the static procedures and group support, the individual reader does not have to continually re-orient himself or herself to the task requirements because the tasks themselves are never altered. As well, the tasks do not have to be completely learned by each individual when the support of the group is engaged.

In fact the theory postulates that these types of interactive learning experiences in a cooperative learning context lead to more permanent learning than what is achieved in more teacher-controlled individualized learning situations (Dansereau, 1983). In a socially interactive setting, the experiential backdrop is richer and more supportive than

the conventional reading lesson that involves active participation from the teacher, demanding relatively passive participation from the students.

Palincsar and Brown (in press) also suggest that the diversity of reading ability levels within a group can serve to increase student learning because often the students are able to more readily recognize problem areas in the text before the teacher.

Lastly, the shift of responsibility from the teacher to the students is a very complicated process and in order to be competent in this technique the teacher must undergo extensive training. While more research needs to be conducted to determine the nature of the teacher training sequence and what is involved in acquiring an adequate level of competency in teaching the program, Brown and Palincsar (1985) have found that the teacher strongly influences student achievement both during and after the program. In fact, those teachers who have been successful in using this technique were sensitive to the theoretical implications of the scaffold effect when they transferred their roles from teachers to coaches. More specifically, when the transcripts of the more successful teachers were compared to those teachers who were not successful, Palincsar (1986) found that in the intermediate phase of the instruction, the successful teachers were able to increase the frequency of corrective feedback statements while decreasing the instructional and modelling statements. In contrast, teachers who were less successful did not reduce the instructional and modelling statements at the later stages of instruction, and as a result were not allowing the students the flexibility to explore the text through dialogue on their own terms. In fact, these qualitative differences have been shown to radically affect student performance (Palincsar, 1986, p. 11).

A Theory of Self-Regulated Learning

A body of research that is relevant to understanding reciprocal teaching is that involving self-regulatory learning (Brown, & Palincsar, 1982). Brown, Flavell and others were first interested (out of the Vygotsky perspective) in how thinking develops. Therefore the first research interests focused on how young children develop self-monitoring skills. Reading comprehension applications became pertinent in applying children's self-monitoring findings to reading as problem solving. This section more specifically addresses what is involved in strategy learning, based on comprehension processing and metacognitive research (Brown, Armbruster & Baker, 1986).

Expert readers or mature readers have learned to use specific strategies, but in the act of automatizing the skills, it is difficult in retrospect to determine how the readers have actually acquired and developed those skills. One may ask why it is important to know what is involved in the process of learning to comprehend text material. It is proposed that all readers do not necessarily learn how to comprehend text material efficiently, either because they are not aware of the strategies that are developed by better readers, or they do not use the strategies effectively and consistently. Thus it is important to develop intervention programs that attempt to target those very strategies that enable students to comprehend what they are reading. Such programs would assist the individual readers by making them explicitly aware of the strategies that are important to develop while reading. Furthermore, these instructional methods would contribute to the development of better readers by reinforcing and refining comprehension skills that they have previously acquired (Brown & Palincsar, 1985).

Brown and Palincsar (1985) contend that the cognitive skills that are involved in reading comprehension and indeed any other problem solving task are complex, and consequently, are not always utilized by readers. With this in mind, educators need to target those skills that are critical for effective comprehension (Paris, Lipson, & Wixson, 1983). Brown and Palincsar (1985) submit that once the educator has isolated specific skills or strategies that need to be taught, it is then critical to inform students about the skills they need to learn in order to comprehend textual information. As well, they need to be involved in using the skills in a social context, while the teacher closely monitors the learning process and progress of the students. Further, in order to benefit from the learning experience, the skills should not be presented one at a time to students, but rather several skills should be simultaneously targeted by the educator, and then taught together to the students (Brown & Palincsar, 1985). This rationale was developed because when students are processing textual information they are not just using one skill to understand what they are reading. Instead, many skills are being used to decipher the meaning from text. In addition, Brown and Palincsar contend that the teaching of skills is not sufficient enough. The product-oriented notion of skill training emphasizes the importance of acquiring skills for the purpose of achieving a specific task. Yet learning in this way does not ensure that the reader will be able to apply these skills in other contexts (Brown & Palincsar, 1982). Instead, Brown and Palincsar (1985) emphasize that the reader has to learn to make conscious decisions about what strategies are needed. The act of using the strategies in this way has been referred to as "using skills under consideration." (Paris, Lipson, & Wixson, 1983, p. 295). Yet, in order to get readers to do this, Palincsar and Brown (1982; 1985) proposed that training programs

need to inform students of the benefits of using the strategies in many different contexts.

The following list identified by Brown, Palincsar and Armbruster (1984, p.263) summarizes the strategies that an individual reader should use when presented with reading comprehension tasks.

1. Clarifying the purposes of reading, i.e., understanding the task demands, both explicit and implicit.

2. Activating relevant background knowledge.

3. Allocating attention so that concentration can be focused on the major content at the expense of trivia.

4. Critically evaluating content for internal consistency and compatibility with prior knowledge and common sense.

5. Monitoring ongoing activities to see if comprehension is occurring by engaging in such activities as periodic review and self-interrogation.

6. Drawing and testing inferences of many kinds, including interpretations, predictions, and conclusions.

Notice that these activities extend beyond unconscious and automatic cognitive processing, to involve conscious deliberate involvement, defined as metacognitive awareness. What is implied here is that the individual reader needs to adopt strategies to become more aware of what is involved in learning how to comprehend text adequately. In order to do this, the individual reader needs to first develop a set of strategic plans. Then he or she needs to learn to use them before, during, and after processing textual information. Thus the strategies will serve as pre-planning, checking, and monitoring devices. Moreover, instead of restricting the use of a strategy by associating it with a specific task, the individual must learn to use the strategic knowledge he or she has

gained from one task-specific situation as a guide to problem-solve in other situations (Palincsar & Brown, in press).

Thus it is important to analyze the knowledge that the students acquire after they have undergone a self-regulatory training program. Researchers have found that students who are capable of learning on their own and achieving a high level of competency, understand goals and the motivation to actively achieve those goals (Corno & Mandinach, 1983; McCombs, 1984).

Research Issues for Reciprocal Teaching

An important issue in the area of comprehension instruction is conceptualized in the work of Rumelhart (1977) and Stanovich (1980). They suggest that reading comprehension requires interactive processing, processing that is initiated when readers are relying primarily on the textual material to determine what they are reading. When readers are dependent on text, they are trying to understand the author's message. In contrast, when readers are no longer spending their time trying to interpret the story, but instead are beginning to draw conclusions from the author's message and also formulate opinions about character actions, readers are moving from being text-dependent to using their own knowledge as a springboard, enhancing what was revealed to them in the text. This type of comprehension processing is referred to in the literature as reader-based processing (Pearson, 1984). Yet in order to accomplish reader-based processing, the reader must learn to evaluate content factors and identify the processing demands of the textual information. Therefore by examining processing procedures, more specifically defined in this study as the four metacognitive learning

strategies, one may examine the benefits of training students to identify the processing skills that are necessary to comprehend text material.

In addition, an examination of the content factors that influence reader-based comprehension is required. Text format has been considered an influential factor in determining the student's level of awareness and subsequent strategy use (Pearson, 1984). Brown, Armbruster and Baker (1984) contend that "major text forms have standard structures that can be identified by astute learners to help them set up expectations that guide the reading process." Thus, certain forms of text material have specific attributes, such as theme, plot, antagonist, etc., that may need to be explicitly pointed out to students in order that they can be more aware of textual cues, or even aware of the absence of such cues. This, of course, leads into the whole area of developing a sensitivity of the text genre and the considerations of the text.

Many researchers claim that narrative text is easier for children to understand than expository text (Hidi & Baird, 1986; Hidi & Anderson, 1986; Meyer & Freedle, 1984). There is an imposed difficulty in comprehending text within the narrative structure itself. One such difficulty is in understanding implied meanings that are communicated by story characters. In order to understand implied messages, one must also learn to understand literary devices such as figurative language, author intent, story theme, and story structure (Singer & Donlan, 1982). This claim is generally accepted because it is believed that narrative material is more familiar to children and has a structure that is more linear than the text structure of expository material. Thus, narrative material is thought to be simpler in structure and easier to process than the "less-organized and non-linear structure found in many expositions" (Hidi & Anderson, 1986, p. 476). But

Taylor (1986) found that children in grades four and five had just as much difficulty making sense out of narrative text as they did trying to understand expository text. This leads one to suspect that narrative text is not necessarily easier to learn. In fact, a comparison of the two types of genres, in terms of difficulty, may be inappropriate because both place different processing demands on the reader. When reading narrative text the reader is typically involved in making psychological and abstract literary interpretations, activities not usually involved in processing expository text. In fact, Bruce and Newman (1978) contend that the complex forms of narrative include "competition, conflict, or sharing between major characters" (cited in Brown, Armbruster & Baker, 1986, p. 53). Yet in order to understand the interaction of two characters, the reader may have to understand the author's intent by relying on background experience and textual cues.

In fact, most of the research on reciprocal teaching has used expository text as its only source of material. This may well mean that the procedure may have to be altered if narrative material is to be used. In light of this, the clarification strategy that Palincsar and Brown have developed may be limited in application when used to understand narrative text material. This strategy involves getting students to become aware of any confusing parts of the text so that they will try to alleviate the confusions they are experiencing. However this is a very broad objective. In practice, there is some evidence that helping students identify difficulties at the surface level, such as difficult vocabulary words, can be successful, but there is no evidence to suggest that it has helped students identify unclear ideas at a deeper level. Again, this may be explained by examining the material that has been used in past research studies. Most of the studies have used

expository material, which is structured and written in a specific way. Thus forming predictions and conclusions while reading narrative text may be difficult. The structure could inhibit readers from forming conclusions while they are reading because "often narrative structure prevents them from drawing any meaningful conclusions until they have full knowledge of the characters, the scene, and the action" (Taylor 1984, p.388). When reading exposition, the reader is frequently prompted to draw tentative conclusions about what is going to happen next because the author has provided the reader with topic sentences and other such textual cues (Taylor, 1984). What is at the heart of this distinction is that students may find that each text genre employs specific demands on the reader that pose difficulties, but the nature of the difficulties may be very different.

Thus it is important to examine the effects of the four comprehension strategies in reciprocal teaching to see if they better facilitate learning narrative material. Components of the genre to be examined include those that are universal: literary techniques such as the use of abstract language, thematic progression, as well as psychological elements such as character motivation, values, point of view, competition, author intent and reader expectation (Brown, Armbruster, & Baker, 1986).

Further, in order to examine if there are any connections between teaching students more general learning strategies and the ability to comprehend story-content information, it is necessary to delineate skills traditionally used specifically for narrative story material. Cole (1984) emphasizes examining curriculum that includes : "Implication and inference, causality; redundancies; categorization; sequence and degrees; analogies; differentiation; anagrams; word completion; fallacies; irrelevances; inductive - deductive reasoning; negative inferences; letter and number patterns; syntactical cloze passages; and scanning." (p.5)

This seems to be a complete list of the sub-skills involved in critical reading; however, what is missing is an explanation of the processing involved in acquiring and using these skills. Probably the most concise model, put forward by Fehl (1983), suggests that the reader must use the following five interdependent processes in order to successfully read the material:

1. Maintenance of awareness of the denotations and connotations of words.
2. Suspension of judgement
3. Interpretation
4. Problem solving
5. Insight

Dechant (1973) has composed a similar model, involving recognition, understanding, reaction and integration (p. 273). Dechant contends that the reader, When engaging in these activities, must examine the material in a self-questioning way, while making every effort to notice any inconsistencies, errors, or confusing ideas that the author presents. Notice that two out of the four strategies proposed by Palincsar and Brown, namely self-questioning, and clarifying, are included in what Dechant proposes to be critical reading processes. In other words, these researchers seem to suggest that critical reading is not only a series of sub-skills, but it also involves the self-regulation of these skills (Cherney, 1986). Therefore, according to Bereiter and Bird (1985) metacognitive activity cannot be separated from the actual skill that the student needs to apply in order to acquire problem solving ability in reading and thinking activities.

These models were carefully considered when this study was designed, and when test material was selected for use in assessing the students' ability in the character analysis component of the study. Considerations included getting students to interpret figurative language, recognize logical relationships, understand the behavioral factors in the story as they related to the main character, interpret implicit information that was communicated by the characters and reflect on the story by formulating their own opinions about a specific issue in the story. While these considerations were addressed explicitly during training, the emphasis of training was directed to learning story content information by using metacognitive strategies as a guideline for meaning recognition and understanding. The assumption based on the literature reviewed was that the most significant benefit accrues when the student can view a "process in action" because he or she can recognize the process and utilize this process in other learning contexts.

Summary of Research Objectives

Many research efforts have investigated the effectiveness of a reciprocal teaching program as it applies to teaching reading comprehension. Brown, Palincsar and Armbruster (1984) report that reciprocal teaching has helped to dramatically improve the reading comprehension abilities of grade seven readers who, prior to intervention, were average decoders but well below grade level in comprehension performance (Brown, Palincsar, 1982; Palincsar & Brown, 1984). In fact, Brown and Palincsar (1984) summarize the findings of these studies:

1. There was clear qualitative evidence of improvement in students' dialogues.

2. The quantitative improvement on the comprehension test was large and reliable.
3. The effect was durable; maintenance probes showed no drop in the level of performance for up to an eight-week period.
4. The effect generalized to the classroom setting, with students reaching or surpassing the average level of their age mates.
5. Training resulted in reliable transfer to laboratory tasks that differed in surface features from the training and assessment tasks -summarizing, predicting questions, and detecting incongruities all improved.
6. Sizable improvements in standardized comprehension scores were recorded.
7. The intervention was no less successful in natural group settings conducted by regular teachers than it was when conducted by the experimenter.
8. The teachers were uniformly enthusiastic about the procedure once they had mastered it (not before) and planned to incorporate it into their routine teaching repertoires (Palincsar & Brown, 1984, p.167).

Yet, despite the fact that the findings evidenced in these studies are impressive, it is of equal importance to measure the effectiveness of this approach by comparing it with other intervention programs. Brown and Palincsar (1984) have attempted to do this. Reciprocal teaching has been compared with a teacher modelling technique. During the instruction, while reading the story, the teacher stops to model the four strategies and then asks the students to answer questions about the story (Palincsar & Brown, 1984; Palincsar, 1984). As well, the researchers have tested how students responded to the strategies in isolated practice, where the students were given work sheets on each

strategy while the teacher provided them with corrective feedback (Palincsar, 1984). Lastly, the researchers have investigated a variation of the reciprocal teaching procedure and refer to the technique as reciprocal practice (Palincsar, 1984). Reciprocal practice also involves a direct instruction phase, when the teacher informs the students about the strategies. However, unlike reciprocal teaching, it does not have an interactive component where the students discuss passages of a story with their peers by using the strategies as a focal point. Instead, the students in this group practice using the strategies on a work sheet provided by the teacher. As they are reading the story, they are told to stop when they notice an asterisk. They are informed that when they see this sign, they are to write a summary, question, prediction, and clarification (Palincsar, & Brown, 1984). Thus, like the regular reciprocal teaching method, they advance through the story by segments. But instead of orally discussing the passage they have read, they practice using each strategy in a pencil and paper task.

In all of the studies reviewed there were large and reliable gains achieved by those students who were in the regular reciprocal teaching groups. Moreover, when the students' scores were compared to the programs aforementioned, the gains were significant in that the students in the reciprocal group rendered higher quantitative and qualitative gains than students in other intervention programs. In fact, in one study conducted by Brown and Palincsar (1982), students assessed as having comprehension difficulties were taught comprehension strategies in a reciprocal teaching program. The findings indicate that both during and after intervention, all of the students but one were able to perform at the same level as the average comprehenders in the control group. As well, students in the reciprocal group were able to apply the strategy knowledge they

had acquired during the reciprocal teaching program to accomplish different tasks.

Much of the recent research in the area of reciprocal teaching explores how the method can be used to help poor learners become better learners. Therefore the subjects have been grouped homogeneously. However, it is important to see how this method can be used in a natural environment. In typical classrooms, the students perform at various achievement levels. Thus, it is important to examine how the students that participate in reciprocal teaching should be grouped. Guido and Colwell (1987) contend that the small group format should be heterogeneous because this gives the students an opportunity to benefit from the way other students in their group learn the strategies, model the strategies, explain what they are doing when using the strategies, and evaluate the ways the strategies are used. Again, mixed-ability groups can provide support for weaker students, and can also provide a window that exposes the efforts of other students, which can heighten the level of awareness of the more advanced students and also help them identify what areas need to be addressed for further understanding.

This study examined the effectiveness of reciprocal teaching as a method for teaching reading comprehension to two grade seven classes in a classroom setting in order to assess its feasibility in a busy school routine. When this point is established it will help teachers and researchers to determine if self-regulatory training is a necessary component for the classroom teacher to apply in the classroom setting. The study was conducted to investigate a method that incorporates the explicit teaching of specific comprehension strategies and students' use of them in a small group setting. This study

is particularly relevant in view of the present research concern that is focused on evaluating teaching methodologies which will help students learn how to read for meaning with the greatest degree of effectiveness.

This study also investigated other variations on the reciprocal teaching method in an effort to examine if all of the components within the reciprocal teaching model are necessary to improve student reading comprehension ability. Thus, within this study a variation of reciprocal teaching was designed. This variation altered the regular reciprocal teaching method by excluding the peer interaction component, and the dialogue by which the students were encouraged to interact. Group discussions about the textual material were replaced by individual seat-work activities that imitated the procedures of the interactive discussions of the reciprocal group. Of further interest was the degree by which the reciprocal teaching method would facilitate student understanding of narrative text. The author wanted to discover if the four metacognitive comprehension strategies would serve as a catalyst to enable students to understand story-specific information. As well, this study investigated reciprocal teaching, a self-regulatory comprehension instruction program, that explicitly taught students reading comprehension strategies, and required them to practice these strategies through dialogue with peer support. It was of interest to examine if this method would increase student ability to control and monitor their own learning - strategies often associated with teaching children to learn how to learn in both reading and study activities. Given the established utility of the approach when applied to a population of low comprehenders, this study also investigated the extent to which students who are not experiencing comprehension failures and who do not need remediation can benefit from monitoring.

Hypotheses

This study explored the following hypotheses and corresponding issues:

1. Reciprocal teaching is more effective than a control and an alternative approach that provides teacher explicit explanation of strategies with no peer dialogue. These effects will be demonstrated on reading comprehension measures based on criterion referenced tests.

A. In the strategy use component of the criterion referenced tests, which is reflected in the students' ability to use the summarization, self-questioning, prediction and clarification learning strategies, there will be a significant difference in general comprehension performance between grade seven students who are taught four comprehension strategies in the Reciprocal Teaching group (RT), as compared to students in the Explicit Teaching (ET) group, and students in the Non-Intervention group (NI) group.

B. There will be a significant difference in story-specific comprehension performance, as measured by a character analysis component on a criterion-referenced test, of grade seven students who are taught story-specific information in the Reciprocal Teaching (RT) group, as compared to students in the Explicit Teaching group (ET), and students in the Non-Intervention (NI) group.

2. In past research investigations low achievers have made greater improvements in comprehension performance after participating in a reciprocal teaching program. Furthermore, when students with varying reading ability levels have participated in a reciprocal teaching program, greater gains have been evidenced by the low achievers. It is hypothesized that the low ability level students will profit from the reciprocal teaching

(RT) program in a different manner when compared to the mid and high ability level students.

3. As part of this investigation the evaluation of the awareness of study strategies is examined.

A. Firstly, the extent of knowledge of study strategies as a function of reading ability is examined at pre-test.

B. Secondly, following the Reciprocal Teaching (RT) program the students in this group will have increased their awareness of study knowledge more than students in the non-intervention (NI) group and explicit teaching (ET) group which do not differ from each other. As well there will be a greater identification of study strategies at all readability levels in the Reciprocal Teaching (RT) group when compared to the other groups.

4. There will be pretest/posttest differences on reading comprehension performance as measured by the Stanford Diagnostic Reading Test - Brown level (Karlsen, Madden, & Gardner, 1976) of grade seven students with the Reciprocal Teaching (RT) group compared to students in the Explicit Teaching (ET) group, and students in the Non-Intervention (NI) group.

Chapter 3

Methodology

Method Overview

Three reading groups were compared within and across two intact classes of grade seven students, over a period of five weeks. Within each of the two classes, students were randomly assigned to three reading groups. To control for reading achievement level, students were ranked low, mid, and high in reading comprehension and randomly assigned to the three groups while maintaining equal representation. Instructional groups included regular reciprocal teaching (RT), explicit teaching (ET), and a silent reading comprehension, or non-intervention group (NI). Reading group teaching was conducted simultaneously for the three groups during the regular reading period by the classroom teacher and the author, both of whom rotated across all groups over the course of training. This training program took place over a period of five weeks, which does not include pre-and post-testing. The classes meet five periods a week for 35 minutes per period. Therefore over the course of five weeks, the total time of intervention was fourteen hours and thirty-five minutes.

Analysis included testing significant differences between groups, and differential effects for ability levels within groups. This was accomplished with pre-post assessments that measured comprehension performance and knowledge of study strategies. As well as using pre-post measures, learning curves of each treatment group were examined to monitor the effects of each treatment and how each treatment related to learning progress. This approach was taken to replicate a study method developed by Palincsar and Brown (Brown, Palincsar and Armbruster, 1984; Palincsar 1984) which provides an

opportunity for comparison with other studies of its kind. In addition, this methodology was chosen in order to study approaches suitable for the classroom, thus encouraging the use of well researched yet practical approaches to teaching reading comprehension (Brown & Palincsar, 1985). One aspect of this study was analyses of single component results with regard to learning strategies. Although the teaching of learning strategies must be done concurrently (Brown, Palincsar & Armbruster, 1984), the testing procedure focused on examining each comprehension strategy separately to uncover any significant advantages to learning attributable to one or other learning strategies.

Subjects

Permission was obtained from a private school board in Toronto to involve the grade seven students in a reading comprehension program. The school was chosen based on the author's prior teaching at the school. The school is located in an urban middle class area in Southern Ontario. The administrators and the regular grade seven English teacher consented, and the regular English teacher also participated in the program. Permission was also obtained from all of the students' parents. They were informed of the nature of the program and asked to sign a release form indicating that the researcher could use all of the data collected for purposes of a research study.

Because the program was to be tested in a natural classroom setting all of the students attending the school enrolled in the grade seven program participated in the program. Therefore the total subject sample for both classes was twenty-seven. This particular grade was selected because most of the research conducted in the area of reciprocal teaching has targeted this age group. Many researchers have claimed that one of the strategies, namely summarization, is a late developing skill (Brown & Day, 1983). Assuming this is true, students at intermediate grade levels may developmentally benefit

more from a program explicitly teaching this strategy than would younger children. Moreover, the research effort was intended to explore how the strategies would facilitate the understanding of complex narratives, and specifically targeted literary devices and psychological elements. Because these components do not appear with the same frequency in stories created for younger children, the program was designed for students at the grade seven level, where the stories are written with a greater degree of complexity.

The subject sample included twenty-seven students, which included fourteen students in one class and thirteen students in the other class. The total number of boys across both classes was 13, while the total number of girls who participated in the study was 14. The average age of the students was 11.5 years and ethnic composition consisted of six students who were Black, thirteen students who were Caucasian, and eight students who were Asian. None of the students had been diagnosed as having learning disabilities. In each class, the maximum total number of students assigned to each group was five. In fact, Brown and Palincsar (1984) recommend that the number of students participating in each reciprocal teaching group should be relatively small. However, they have also indicated that the reciprocal teaching approach can be used in larger groups of ten or more if the discussion procedure is slightly modified (Brown, & Palincsar, 1984).

It should be noted that teacher reports indicated a mixed reading group with a significant portion of above average readers. Of major interest was the extent of variability in reading comprehension and the effect that the training would have on readers of different achievement levels. Therefore as part of the assignment to training groups, students were also assigned by virtue of reading achievement, using the reading comprehension percentile rankings of the Stanford standardized reading achievement test. It was decided to group students into three categories: High achievers-75% or

above, Mid achievers-50-74%, Low achievers- Below 50%. According to these criteria, class one included 4 students ranked high, 4 students ranked mid, and 5 students ranked low. In class two there were 6 students ranked high, 6 students ranked mid and 2 students ranked low. When examining subject assignment by training group as selected by achievement level, the composition was as follows: The reciprocal teaching group consisted of 3 highs, 4 mids, and 3 lows, and the explicit teaching group consisted of 4 highs, 3 mids, and 2 lows, and lastly the control group consisted of 3 highs, 3 mids, and 2 lows.

The volunteer classroom teacher also participated in the study based on her interest in learning reciprocal teaching. Her past educational background included a Bachelor of Science degree in Home Economics, and a Bachelor of Education degree. She was 29 years old and had taught grades six and seven at the school where the study was conducted for six years. Her past teaching experience included teaching all of the core subject areas at the grade 6 and 7 levels. For two years prior to the study she had chosen to specialize in the subject areas of English, specifically reading instruction, and science. The additional professional qualifications she had acquired consisted of Guidance Counselling Parts 1 and 2.

Material Development

All curriculum-based tests and instructional materials were developed by using a selected collection of stories from two basal readers frequently used by grade seven teachers. The stories were selected and used in the same sequential order in which they appeared in the readers. Moreover, the stories were also organized so that a story selected from one reader, was followed by a story selected from the other.

All of the materials used to design the curriculum-based tests, which include the weekly probes, pre, post, and maintenance tests, as well as the stories used for instruction, have been selected from two Canadian basal reading programs that are both widely used by schools in Ontario. The reading series, Contexts (Nelson Series, 1982), and Inside Outside (Impressions Series, 1978) were programs designed for the grade seven level. Readability levels were established for each selection, according to the Dale-Chall readability formula, and the Fry readability formula (1968).

There were five stories used across the five week period of instruction. Each story was approximately 2100 words. To control for word length the researcher has edited many of the stories, by adding information or, for the most part, deleting information. In doing this, every effort was made to ensure that the level of difficulty was not altered so that the thematic progression, main ideas, and coherency were not jeopardized. All of the stories were complex narratives, in that they involve the reader in making psychological inferences based on character interaction and development, thematic progression, and author intent. As well, abstract language, such as metaphors and similes, was evident in all of the stories.

Another consideration when selecting each story for the purposes of instruction and assessment was the sequential arrangement of the material. In each basal reading

series, the stories are arranged in an order that corresponds to a time line that is developmentally sensitive, in that the stories at the beginning of the readers provide a foundation for the stories at the end of the readers. The stories selected for the study followed the same logic developed by the editors. The stories were also organized so that a story selected from one reader was followed by a story selected from the other reader, and the sequencing of stories maintained the developmental graduation of the basal reader format. The stories, used for instructional purposes in the program, appear in the order that they were taught:

Underground to Canada: (Graves & McClymont, 1981)

The Fun They Had/ Of a Shoe and a Ship and Sailormen: (Booth, 1978)

The Final Face-Off: (Graves & McClymont, 1981)

We Lived in the Almont: (Booth, 1978)

A Bottle for the Bosun: (Graves & McClymont, 1981)

As well, the material in the reciprocal teaching group (RT) and the explicit teaching group (ET) was organized in a specific way. In order to inform the students when to stop reading the story and to discuss or write about the passage by using the four strategies, the text was segmented. Each segmented passage contained five to seven sentences. The reciprocal teaching (RT) group was signalled to stop reading to discuss each passage when they saw three asterisks (***). The explicit teaching (ET) group was signalled to stop when they saw an asterisk, a number, and then an asterisk (*1*).

Measures

This section describes the standardized tests used to determine reading achievement for the purposes of group selection. As well, it will describe pre/post and maintenance test measures, and the curriculum-based tests that were used as weekly probes.

Standardized Measures

To assess reading comprehension ability in the pre-assessment stage, standardized tests were used for the purposes of group selection. The tests used for comprehension ability were as follows: Stanford Diagnostic Reading Test #2, The Stanford Achievement Test, Form E, Test of Reading Achievement. Measures used for decoding ability were as follows: Harrison-Jacobson Core Lists, Slosson Oral Reading Test, Stanford Diagnostic Reading Test. The Stanford Diagnostic Reading Test #2 was also used at the pre-test stage and at the post-test stage, the final measure of reading comprehension ability during the experiment.

The Stanford Diagnostic Reading Tests Brown level (Karlsen, Madden, & Gardner, 1976), Test #2 Form A and B are subtests that assessed the students ability to read and understand several short passages. This was measured by their ability to answer questions that corresponded to each passage. This particular test was the single measure used for level assignment within groups.

The Stanford Achievement test-Brown level, Form E, Intermediate 2 (Gardner, Rudman, Karlsen & Merwin, 1982) was also used as a pre-assessment instrument. This particular test was a listening comprehension test, where the students were instructed to listen to short passages and to answer a set of questions that follow the instructor's reading of

each passage. It was designed to be administered in both individual and group settings.

Test of Reading Comprehension (TORC) was another measure used to measure the student's reading comprehension achievement (Brown, Hammil, & Wiederholt, 1986). Four of the eight sub-tests were used in the assessment: General Vocabulary, Syntactic Similarities, Paragraph Reading, and Sentence Sequencing. It is a group test that places no time constraints on the students.

Harrison-Jacobson Core lists (Harris & Jacobson, 1972) were used to assess word recognition. There were eight lists of words beginning at a pre-primer level and ending at a grade six level, consisting of ten words per list. The students were individually asked to pronounce the words in each list. If the students demonstrated that they could not pronounce three words in any one list, it was assumed that the preceding list matched the student's word recognition level.

Slosson Oral Reading Test (SORT) (Slosson, 1963) was another word recognition test designed to be administered individually. Again, this test was based on the student's ability to read word lists. There were ten word lists consisting of twenty words each. The lists were a representative sampling of words found in readers at each corresponding grade level.

To assess decoding and comprehension ability, a section of the Stanford Diagnostic Reading Test -Brown level #5 (Karlsen, Madden, & Gardner, 1976) was used as a reading rate measure. The students were given a story and as they were reading the story there were questions embedded in the story in a multiple choice cloze format. The students were given three minutes to read the story and to answer the corresponding

questions. This test measured the speed that the student could read, and also assessed the degree to which the students could understand what they were reading when restricted by time.

Criterion-Referenced Measures

Criterion-referenced assessments were used to evaluate student performance. Each test was divided into two parts. Part A probed into the psychological and literary elements of each story. Again, it was an attempt to see how effective the explicit instruction of these components of narrative text better facilitated comprehension. The questions were always presented to the students in the same order, and were designed to reflect five areas of higher order comprehension. Comprehension questions were developed according to the following scheme.

PART A:

Question #1. Abstract Reasoning: Identify and understand metaphor, simile, analogy, and figurative language.

Question #2. Analytic Reasoning: Identify the logical relationships in the story and apply this knowledge to understand the order of events and the thematic progression in the text.

Question #3. Interactive Reasoning: Identify and understand the behavioral elements in the story as they are shown through the physical and psychological actions (character goals, motivation, responses, conflicts, plans, character development, outcomes) (Stein & Glen, 1979).

Question #4. Interpretive Reasoning: Grasping the implicit information that is communicated through character point of view.

Question #5. Evaluative Reasoning: Formulate judgments and supportive arguments by integrating the character's points of view with one's own, or those of other readers.

Each question was scored with a five point scale. Figure 1 provides a sample of one of the tests used in part A.

Figure One

Story: The First Day of War

Part A

1. In your own words explain what the author means by the following metaphor. "As I started to walk forward, I already knew what I would see, and knowing was evil and I wanted to take back what I knew."

Student Response: I think the author means that he knew that something bad and terrible had happened and he didn't want to really find out and wished he didn't know because he would find out something that would hurt him emotionally. Teacher Score: 4

2. Sequence the order of events as they occur in the story.

   3 A plane that the girl had never seen before starts to fly in the same path that her dog is running.

   1 The girl's father flies off to fight in the war before the girl has a chance to see him.

   4 The girl hears a strange noise that she does not recognize.

   5 The girl looks for her dog.

   2 The girl and her puppy frolic in the swamp.

Teacher Score: 5

Figure One Continued

3. Compare how the girl responded to the war at the beginning of the story to the way she responded to the war at the end of the story.

Student Response: She didn't think much about the war until her dog did not return.

Teacher Score: 3

4. Why did the girl's feelings about war change?

Student Response: Her feelings about war changed because she actually had an experience of the war when her puppy was killed. Then she realized how horrible wars are and what costs you have to pay (consequences).

Teacher Score: 5

5. How would you feel if you were the girl in this story? Would your reaction be different or similar? Explain.

Student Response: I would be very sad for my dog and react the same but I would have called for him and run away.

Teacher Score: 2

Part B:

Part B was essentially a probe to check the reader's ability to use each of the following four strategies: Summarization, Question Generation, Prediction, and Clarification. Each question was oriented to one of the four strategies, and two questions were designed to tap into the clarification strategy. Figure Two is a sample of one of the scored tests used in Part B. (See the appendix to examine the rest of the tests.)

PART B:

Question #1. Summarization: Identify main ideas from a given passage by forming them into one's own words.

Question #2. Self-Questioning: Identify a main idea from a given passage and then form it into a question.

Question #3. Prediction: After reading a given passage, anticipate what is going to occur next in the story based on prior text information.

Question #4. Clarification: Identify an area that was unclear, accompanied by an explanatory statement of the difficulties that are associated with the selected passage.

Question #5. Clarification: Interpret a difficult metaphor or implied meaning. the question was structured such that a successful answer would probably require re-reading the contextual passage.

Figure Two

Story: The First Day of War

Part B

Question 1: What was the passage mainly about?

Student Response: The passage was mainly about a girl that experiences different and odd new things that she is not familiar to and she doesn't really know what is going on but it is a bit puzzling.

Teacher Score: 2

Question 2: Re-read the whole passage again. Think carefully about what you are reading so that you can think of a good question at the end. Now, please write your question.

Student Response: Why did she think knowing what had happened was evil?

Teacher Score: 4

Question 3: Re-read this passage one more time. Please read carefully so that you can write about what you think you will read next. What do you think will happen next in the story?

Student Response: I think she will tell whoever she is going to tell and they are going to try and contact her father.

Teacher Score: 3

Figure Two Continued

Question 4: Please select an area from the story that needs to be explained so that the ideas will become more clear to you. The part of the story that needs clarification is...

Student Response: And there were no sounds - not one single sound since that was the sound that I was now beginning to understand. I don't understand if there were no sounds how could she begin to understand the sound?

Teacher Score: 5

Question 5: What is the author trying to tell the reader in the following sentences? "Now there was another plane. I looked up, but it wasn't his - it did not have white and red squares under the wings."

Student Response: The author is explaining how the girl can recognize her father's plane.

Teacher Score: 2

The third story in Part B of the pre, post, and maintenance tests was an expository passage. It was used as a transfer measure in this study. The researcher wanted to assess how well the students could transfer their newly acquired strategy knowledge to similar tasks when given different material. While the form of the questions in Part A was designed to uncover the reader's knowledge about narrative text material, the questions designed in Part B were used to uncover the reader's knowledge of the learning strategies. While Part A questions were story specific, the more general questions in Part B could be applied to both narrative and expository text. Following this, only Part B was used to assess the durability and transferability of student's knowledge of the four strategies. The same five questions used previously in part B for narrative stories were used again for the expository text.

Text Materials

Pre-test:

The three short passages extracted from the stories in the two basal reading series, for the curriculum-based pre-test appear as follows:

The First Day of War: (Graves & McClymont, 1981)

Journey By Night: (Booth, 1978)

The Caribou and the Highway: (Graves & McClymont, 1981)

Post-Test:

A Long Anger: (Graves & McClymont, 1981)

Journey Outside: (Booth, 1978)

Farms of the Future: 100 m Down!: (Graves & McClymont, 1981)

Maintenance Test:

Adrift on a Pan of Ice: (Graves & McClymont, 1981)

The Invention of the Terrible Ball: (Booth, 1978)

Mystery Whales: (Graves & McClymont, 1981)

Training Probes

Training probes were undertaken on a weekly basis to provide an ongoing measure of learning. The students were given thirty-five minutes to write the curriculum-based probe each week. The probe was administered in the last period, or fifth period of each week.

All of the curriculum-based probes were designed by alternating the selection of stories from each reader in the exact same manner that they were organized during instruction. Each probe consisted of one narrative story. Each passage was approximately 315 words. As well, each narrative was comprised of two sub-sections of questions that the students were required to answer in a written format. Subsection A investigates the students' understanding of the psychological and literary elements of each story. Subsection B checks the reader's ability to use each of the following four strategies: Summarization, Question Generation, Prediction, and Clarification. The following stories were used to design the weekly probes as indicated.

Probe # 1: Small World in the Snow: (Booth, 1978)

Probe # 2: Challenge the Sea: (Graves & McClymont, 1981)

Probe # 3:Skyscraper Athlete: (Booth, 1978)

Probe # 4:The Last Race of the Bluenose: (Graves & McClymont, 1981)

Probe # 5:Drum Beat: (Booth, 1978)

Coding Procedures for Pre, Post, and Maintenance Tests and Training Probes

A coding procedure was developed for use in marking the curriculum-based tests and probes. Figure Three indicates the coding scheme that was used in marking the curriculum-based test.

A five-point scale was developed for marking Part A of each test, and for marking the training probes. The scale was designed to encode the students' responses on a graduation from no response, incorrect literal response, literal response, attempt at abstracting, a partially correct abstract response and a complete abstract response. This five-point scale was used for each question in Part A.

A four-point scale was used for all Part B stories. The four-point scale was repeated four times to provide a code for each of the four strategies.

Figure Three

Coding Scheme for Parts A and B of Curriculum-Based Tests
and Training Probes
Marked on a five-point scale

Part A

	Response	Value
o	An attempted response but one that is an incorrect literal response or no response.	1
o	A literal response.	2
o	An attempt at abstracting.	3
o	A partially correct abstract response.	4
o	A complete abstract response.	5

Part B

Response		Value
o	Misses the point.	1
o	Notes details that are of marginal relevance to the topic or fails to include important information.	2
o	One general idea is paraphrased but the students has added too much detail or not enough information.	3
o	The general idea is noted and the student has successfully translated the material in his or her own words.	4

Question Generation: Marked on a four point scale

	Response	Value
o	The question misses the point.	1
o	The question focuses on trivial detail.	2
o	The student has formed his or her question from an inadequate understanding of the main idea. The question is either focussing on a very narrow idea or a very broad idea without tapping into the gist of the story.	3
o	General idea is noted and there is an attempt at translating the text material into the student's own words.	4

(Figure Three continued)

Prediction:

	Response	Value
o	The prediction does not correspond to the point of the story.	1
o	The prediction focuses on trivialities.	2
o	The prediction is logical but there is evidence in the text that would refute the validity of the prediction .	3
o	The prediction is relevant and supported by the contents of the text.	4

Clarification

	Response	Value
o	An attempted response but one that is an incorrect literal response.	1
o	A literal response.	2
o	An attempt at abstracting.	3
o	An abstract response.	4

Interview for Student Knowledge of Study Strategies

In order to assess the knowledge of study strategies that students had gained from the program, a structured interview schedule developed by Zimmerman and Martinez Pons (1986) was adapted for use in this study. The subjects were interviewed individually prior to and following the intervention program. Each interview was approximately twenty minutes in length and was divided into two parts. For Part 1 of the interview the students were asked three questions that related to the following specific learning contexts: when preparing for tests, when engaged in reading and writting assignments in class, and when poorly motivated. The interviewer asked each student to comment on the methods they used for accomplishing reading and writing tasks in the contexts aforementioned. As a prompt, the interviewer also asked the students to say how they would do a task if they were having difficulties.

During Part 2 of the interview, the researcher provided each student with a list of ten strategies that help people become more aware of how to study. The following is a list of the ten study strategies examined in this study:

1. Self-evaluation
2. Organizing and transforming information
3. Goal setting and planning
4. Seeking information
5. Record Keeping
6. Environmental structuring

7. Consequence Structuring

8. Rehearsing and memorizing

9. Seeking social assistance

10. Reviewing Records

The interviewer explained each of the strategies and provided the student with a concrete example. For example the interviewer would ask the student: "How often would you make an effort to record events or results?" and then clarify this by explaining how "recording events" is synonymous to taking notes of class discussion, or keeping a list of frequently misspelled words (Zimmerman, & Martinez Pons, 1986). Again, after each strategy, the student was asked to rate how often he or she used each of the strategies.

Coding Procedure for Interviews

When analyzing the data in Part 1 of the interview, the author recorded the stated use of each of the ten possible strategies. In other words, if the student did not mention that he or she used a particular strategy the student received a zero ranking for that strategy. In contrast, if the student mentioned that he or she used the strategy the students received a higher ranking.

In Part 2 of the interview, once the teacher had provided the student with a list of ten study strategies, the author analyzed the frequency with which the student stated the used each of the strategies. the following coding scheme was used in both parts 1 and 2 of the interviews: 1. Seldom, 2. Occasionally, 3. Frequently, 4. Always.

The following is an example of a coded interview:

Interviewer's Question:

Where given a set of questions, based on a novel you are reading, do you have any particular method to help you plan to answer the questions?

Student Response #1: **I would summarize and make questions out of the summary. I would make the questions up.**

Experimenter ranking: Category 2: Organizing and transforming information

Interviewer Question: How often would you do this?

Student Frequency of Use Ranking: **3. Frequently**

Student Response #2: **I would look over the part it is in and then I would answer the question.**

Experimenter ranking: Category 3: Goal-setting and planning

Student Frequency of Use Ranking: **4. Always**

Procedures

Three instructional groups were formed by matching chronological age, gender, and reading achievement with appropriate assignment. The groups incorporated students with varying levels of reading ability. The levels within the subject sample were determined through the Stanford Reading Comprehension measure. Prior to group assignment, students were classified for reading comprehension level based on individual percentile scores. Students who scored at or below the 50th percentile ranking were

rated as lows, while those scoring between the 50th percentile to 75th percentile rankings were rated as mediums, and students who scored above the 75th percentile ranking were rated as highs. Students from each level were randomly assigned to one of the three treatment groups to achieve a balanced ability level in each group. Reading group teaching was conducted simultaneously for the three groups during the regular reading period by the classroom teacher and the author, both of whom rotated across all groups over the course of training.

All pre-post assessments given to the grade seven students included the following:

1. Standardized measures of word recognition and reading comprehension,
2. An inventory of metacomprehension awareness as determined through a structured interview schedule,
3. Criterion-referenced, written comprehension strategy measures for prediction, summarization, questioning, and clarification, as well as measures of inferential comprehension,
4. Reading material extracted from complex short stories.

Before pre-tests were administered, the volunteer classroom teacher, for whom reciprocal teaching was a completely new concept, began training in one and a half hour sessions, three times a week over a three week period. Training consisted of role-playing aided by a training manual, and a critical overview, either in class or via videotape, of reciprocal teaching conducted with grade six students.

Administration

The criterion-referenced tests were administered in a group format for both pre, post and maintenance testing. Each class was given seventy minutes, the equivalent of two class periods, to complete both part A and part B of each test. There were no time limitations imposed so that it was expected that all students would be able to complete the test. The criterion-referenced tests were administered one week after standardized reading tests had been completed and one week before intervention. The criterion-referenced post-test was administered one week after the five weeks of intervention and the maintenance test was administered six weeks after the post-test. Each test involved two narrative stories and one expository passage. Part A involved only the two narrative passages, while Part B involved these same passages plus the expository passage. Each passage was approximately 315 words. The first two narratives were accompanied by two sub-sections of questions that the students were required to answer in either short responses or rank ordering.

During intervention, the teacher was also provided with a weekly lesson plan. Each plan was designed by the author. The plans provided the teacher with a timetable, and weekly objectives that were explained both in terms of what was to be accomplished, and what techniques the teacher needed to refine in order to improve student progress.

Furthermore, when the teacher was instructing the reciprocal teaching group (RT), all sessions were audio-taped. This data provided the author with insight into what was going on in the classroom. The tapes also helped the author monitor the performance of the teacher on a daily basis so that the volunteer teacher could be provided with corrective feedback when necessary.

Instructional Groups

During the regular reading period, for one half hour sessions, four times a week, all groups received instruction in the classroom or in the resource room, with the same reading materials.

The Reciprocal Teaching Group (RT) followed the instructional format established by Palincsar (1985), using an initial week of teacher directed instruction and modelling of strategies, followed by guided practice dialogues.

The Explicit Teaching Group (ET) followed the same first week format as the RT group, after which the teacher-led format continued to prompt the four comprehension strategies while students responded individually in written form, without student-led group dialogue. Thus, the ET group was provided with the direct explanation of the same strategies taught in reciprocal teaching, but instead of discussing the strategies in a social context through dialogue, the students were asked to practice using the strategies in an individualized seat-work activity that essentially involved advancing through the text by segments. For each segment read, the students are directed to write down their understanding of each passage by using the four strategies as a framework.

The Non-Intervention Group (NI) silently read the materials and responded in writing to comprehension questions after completing the reading passage. In this program the students were not given any explicit instruction on comprehension strategies, but were asked to practice answering a set of questions taken from a basal reading series. After answering the questions, the teacher initiated a set of new questions that were taken from the basal reader manual. No pre-reading discussion was initiated. This format is one that Durkin (1983) observed to be the most common instructional method used by teachers to teach reading comprehension.

The Reciprocal Teaching Group (RT)

This group followed the instructional program established by Palincsar and Brown (1985). When the group initially met, they sat in a circle and were given a folder with a copy of the weekly story. The students were provided with a direct explanation of the objectives of the program which lead into a discussion about the four learning strategies and the five character analysis components of the program. As well during this first week, the teacher modelled the four strategies for the students. For the following weeks the students were asked to silently read a passage of a story, and were told that the passage consisted of five to seven sentences located between two stop markings, identified as asterisks. After the students had read each passage, collectively they were instructed to discuss what they have read by assigning one of the members as a teacher and through this individual's guidance, to use the four strategies to structure their dialogues. While discussing the story material, they were also expected to evaluate their peers ability to use the four strategies. The format used on week one involved the following procedures: The teacher informed the students about the four learning strategies through direct explanation and teacher modelling. The teacher also explained that they were going to use the strategies to discuss a text passage. The teacher then asked each student to make up a story and then proceeded to demonstrate how the student could use each strategy to understand the content of a story. During the week, the teacher also explained each literary element that would be tapped into by the assessment measures.

During the sessions in weeks two and three the teacher briefly discussed the four strategies. The teacher then directed the group to begin reading each story segment.

After each segment was read, the teacher demonstrated to the students how to use the four learning strategies by applying them to the content of the passage of the story. When each student seemed to be ready to use the strategies, the teacher provided the student with the opportunity to use them. Yet, instead of asking one student to use all four strategies at any one time, the teacher asked each student to use one strategy per passage. When it was evident that the student was using the strategy incorrectly, the teacher provided the student with immediate corrective feedback. This teacher feedback showed all of the students how the strategy could have been used in a more effective way. The students in the group were also encouraged at this time to begin to evaluate the strategy-use of each group member.

In week four the students were able to discuss the story on their own while the teacher was an active coach, helping to delegate the students who were to use the strategies during the discussion of each passage. Yet, during this week, although the teacher assumed the role of the coach, she also began to delegate the management responsibility of selecting which student was to use each strategy within the context of the group dialogue, rotating this responsibility to each of the members of the group. By empowering one of the students with the initial responsibility of task assignment, the students began to realize the implications of assuming the role of the teacher.

The next task was to teach the student-teacher and group members how to evaluate the effective use of each strategy. In order to accomplish this the following procedure was adopted: After silently reading the passage, the teacher asked one student to summarize. When the student attempted to use the strategy, the group was asked to evaluate the summary. If the summary was of poor quality, the group tried to

iron out the difficulties and produce a better summary. In the event that the group, in its collective effort, did not produce a summary that was satisfactory, the teacher modelled a summary, asking the original student who was asked to generate the summary, to repeat the teacher's modelled summary. On the other hand, if the group and the teacher all agreed that the summary was satisfactory, the student who generated the summary asked another peer to use a different strategy to understand the same passage. The following is an example of a typical session in the fourth week:

Daniel: (Provides a summary) "This is my summary..."

Group: (Evaluates summary) "That was a good one."

Daniel: (Delegates new student and strategy) "Taryn please ask a question."

Taryn: (Asks a question) "This is my question..."

Group: (Evaluates the question) "That was a good question."

Taryn: (Delegates new student and strategy) "Anika please make a prediction..."

Group: (Evaluates the prediction) "That was a good one."

Anika: (Delegates new student and strategy) "Lenny, can you find anything that needs to be clarified?..."

Lenny: (Finds a part of the text that needs to be clarified.) "I don't understand this part..."

Someone in the group: (Responds to Lenny's request.) "I think it means this..."

Lenny: (Assigns next student-teacher and initiates reading of the next passage.) "Let's begin reading again. You're next John."

During week five the students were able to discuss the story on their own. Instead of delegating one strategy per person at any one given time, each student

discussed a passage by using all four learning strategies. The other students in the group responded by evaluating the way each student used the strategies. After the student-teacher had been evaluated by his or her peers, the student-teacher then asked another student to continue the discussion. The following is an example of a typical session in Week #5:

Everyone is directed to silently read the passage segment.

Daniel:"This is my summary..."

Group:(Evaluates the summary.)

Daniel:(Asks a question) "This is my question."

Group: (Evaluates the question.) "That was a good question."

Daniel:(Makes a prediction) "This is my prediction."

Group:(Evaluates the prediction.) "That was a good prediction."

Daniel:(Asks for a clarification) "This is a part that I need clarified. Could someone help me?"

Someone in the group: (Responds to Daniel's request). "It means this..."

Daniel: (Delegates new student.)

This group received the same amount of instructional time, and the same exposure to the teachers when compared to the other two treatment groups. The only difference attributed to this group is the place where instruction was conducted. The resource room was chosen as an alternative to the classroom because it was thought that the nature of group discussions would distract the learners in the other groups who participated in silent reading activities.

Explicit Teaching Group (ET)

During the first week, this group received the same explicit-instruction phase as the reciprocal teaching group. The main difference between the two groups was associated with the instruction that followed this initial week of instruction. For the weeks that followed, the students were given a workbook that contained a written assignment that was designed as an individual seat-work activity. These assignments were structured in such a way that the students progressed through the story in the same way as the regular reciprocal group: however, instead of verbally using the four learning strategies, the students were directed to practice using them in a written format. This group received minimum teacher feedback in a format that required the teacher to mark the written assignments daily by assigning a red star to every correct student response. (See Figure Four).

Figure Four

Sample Probe for Explicit Teaching Group

Directions:

Begin reading the story, but stop when you see a sign that looks like this - *1*. Now write a summary, create a question, write a prediction and look for ideas that need to be clarified from the passage you have just read. After you have completed these four steps you may continue reading until you see another sign. Then repeat the four steps again.

1 My Summary is _____

My Question is _____

My Prediction is _____

Ideas that I need Clarified are _____

This group received the same amount of instructional time, the same exposure to teachers and participated in assigned reading activities in the regular grade seven classroom.

Non-Intervention Group (NI)

The non-intervention group was the control group. It received the same stories as the other two groups but was not provided with any instruction on the four strategies. Then the students were asked to silently read each story in its entirety, then asked to answer post-reading questions that were taken directly from the teacher's manual of the appropriate basal reading program. The questions were answered individually in a written format and the teacher marked the students' progress on a daily basis. After the post-reading questions were all completed and marked, the teacher extracted more questions from the teacher's manual, to direct a group discussion. This format was adopted to mimic a frequently used classroom method of teaching reading comprehension (Durkin, 1983).

Like the Explicit Teaching group (ET), this group also received the same amount of instructional time, the same exposure to teachers and participated in assigned reading activities in the regular grade seven classroom.

Inter-rater Coding

All assessment measures, included pre-post and maintenance tests, probes, and study strategy interviews, were marked by two independent raters. Both were extensively trained in using the coding procedure in accordance with the guidelines set out in Tables One and Two before student work was marked. On the occasions when coders assigned differing marks, the more appropriate mark was determined through discussion between the raters. A criterion of 80 % agreement was established on sample tests before marking proceeded with actual subject data, to ensure a degree of common understanding with respect to the marking schema.

Chapter 4

Results

The results of this study were concerned with four main areas. First of all, a comparison of pre-assessment measures consisting of both norm-referenced and criterion-referenced tests were used to observe if it was possible to classify students in two grade seven classes into three different reading achievement levels. Secondly, the training effects of intervention were analyzed by an overall review of the total comprehension scores, followed by a break-down analysis of the sub-scores from the criterion-referenced measures categorized as strategy cluster scores and character analysis cluster scores. These measurements involved a comparison of two narrative passages in the criterion-referenced assessments for both pre and post intervention. In addition, a generalization measure, as represented by the expository passage on pre and post intervention was made. As well, a maintenance test and norm-referenced test was analyzed for durability and reliability of training effects. Thirdly, a comparison of learning curves of the three treatment groups, as measured by the weekly training probes was accomplished. Lastly, an analysis of the interview data on student metacomprehension awareness was made.

Rater Reliability

The written responses from the criterion-referenced tests were transcribed to maintain student anonymity which provided a basis for unbiased judgment. The rating scale developed for use as the coding scheme to score each student response was described in Chapter Three. The transcripts from all tests, including pre, post,

maintenance, and probes were examined independently by the experimenter and a research assistant for each of the ten targeted areas per story (Character Analysis: 5 questions, Strategy Use: 5 questions). There was 85 percent agreement between raters on all eight measures.

The verbal responses from the interviewers were transcribed from an audio recording used at the time of the interview. Part 1 of the interview, where the students were asked to specify what particular methods they would use across three different learning contexts was coded by two independent raters. Based on the ten categories of study strategies as defined by Zimmerman and Pons (1986), the raters needed to determine what study strategies the students were verbalizing. There was 90 percent agreement between raters on the two measures.

Pre Training

Tests for homogeneity of variance across classes were conducted on pretest reading achievement and interview data. Since no pretest differences were found between the two grade seven classes, subsequent analyses were preformed for training groups and reading levels, with the two classes collapsed.

Tests for homogeneity of variance conducted across groups at pretest indicated no significant group differences for norm-referenced and criterion-referenced comprehension measures. Table One summarizes student reading achievement across groups at pretest.

Table Two summarizes all related pretest reading achievement scores for students by level. Within the regular grade seven classroom, significant differences appeared for

the TORC vocabulary subtest, $F(2,24)=5.36$, $p<.05$, and Stanford Reading Comprehension, $F(2,24)=84.99$, $p<.0001$, Stanford Listening Comprehension, $F(2,24)=6.23$, $p<.01$. For vocabulary, low and mid levels were significantly different from the highs, but not from each other. For listening comprehension and reading comprehension, low, mid, and high levels were all significantly different from each other. Level differences on criterion-referenced measures in Narrative 1 (Strategy Use) approached marginal significance, $F(2,24)=3.15$, $p<.06$, and in Narrative 2 (Character Analysis) were significant $F(2,24)=4.17$, $p<.02$.

TABLE 1

Group Mean and Standard Deviation Scores of Reading Achievement Measures at Pre-Assessment

Reading Measures	Reciprocal Teaching Group (N=10)		Explicit Teaching Group (N=9)		Non-Intervention Teaching Group (N=8)	
	Mean	Std	Mean	Std	Mean	Std
TORC						
Vocabulary	11.50	2.80	12.33	1.41	11.38	1.77
Similarities	11.20	2.78	12.56	1.42	11.88	1.36
Paragraphs	12.90	0.74	12.44	1.01	12.13	1.46
Reading Quotient	111.70	10.69	114.78	7.29	111.75	7.29
Slosson						
Oral Reading	106.20	2.57	103.56	5.90	104.75	6.39
Stanford						
Reading Rate (%)	88.30	8.47	78.89	16.43	78.13	16.99
Reading Comprehension	65.40	20.55	70.89	21.71	67.63	20.73
Listening Comprehension	51.90	18.84	43.00	17.81	42.25	23.07
PRETEST						
Narrative 1						
Character Analysis	14.50	3.78	12.33	4.58	10.75	3.81
Strategy Use	12.50	1.43	11.78	3.38	11.00	2.14
Narrative 2						
Character Analysis	12.80	2.44	12.67	3.71	12.25	3.11
Strategy Use	12.00	1.56	11.11	2.37	12.13	1.55

TABLE 2

Mean and Standard Deviation Scores of Reading Achievement Measures by Reading Level at Pre-Assessment

Reading Measures	Low (N=6)		Mid (N=9)		High (N=12)		
	Mean	Std	Mean	Std	Mean	Std	
TORC							
Vocabulary	11.00	1.26	10.56	2.51	13.00	1.35	*
Similarities	11.50	0.55	11.89	2.89	12.00	1.86	
Paragraphs	11.83	1.72	12.56	0.73	12.83	0.83	
Reading Quotient	108.83	5.95	110.33	10.37	116.50	6.95	
SLOSSON							
Oral Reading	101.83	5.98	107.22	2.33	104.67	5.47	
STANFORD							
Reading Rate (%)	76.17	20.80	81.44	9.91	85.67	13.86	
Reading Comprehension	41.50	5.99	59.44	4.10	87.42	9.60	***
Listening Comprehension	31.67	12.34	39.44	15.20	58.25	19.00	**
PRETEST							
Narrative 1							
Character Analysis	10.17	1.83	11.00	3.94	15.17	4.09	
Strategy Use	10.50	2.26	11.11	1.90	13.00	2.45	
Narrative 2							
Character Analysis	11.00	2.00	11.44	3.09	14.25	2.63	*
Strategy Use	10.50	3.27	12.00	1.32	12.17	0.94	

* $p<.05$ ** $p<.01$ *** $p<.0001$

Training Effects

Total Comprehension Scores

Effects of training were analyzed by group (3) and level (3) for difference scores on Stanford reading comprehension and on criterion-referenced measures. Comprehension items were clustered to indicate total scores in character analysis (five items) and use of the four comprehension strategies (five items). Table Three summarizes the pre and post results for the norm-referenced comprehension measures, the two narrative stories and the maintenance test. Significant group differences were noted on comprehension scores which reflected strategy use for Narrative 1, $F(2,24)=6.38$, $p<.006$), and for Narrative 2, $F(2,24)=11.28$, $p<.0004$, while no significant training effects were observed for overall character analysis scores. An analysis of group differences on the generalization measure, as represented by the expository passages, was conducted, and no group differences were found.

Comprehension Sub-scores

When an analysis of variance, broken into group and level was conducted, on the strategy use component, a main effect for group was observed for summarization, $F(2,18)=3.43$, $p<.055$ and self-questioning, $F(2,18)=12.38$, $p<.001$ while no interaction effects were noted. Post hoc comparisons indicated that at the .05 level of probability the reciprocal teaching group and the explicit teaching group were significantly different from the non-intervention group, but not significantly different from each other. More specifically, when using the summarization strategy the Reciprocal Teaching group (R.T.)

gained by a mean score of .8, the Explicit Teaching group (E.T.) gained by 1.45, while the Non-intervention group (N.I.) showed no gain (-.13). Similarly, when using the self-questioning strategy, the Reciprocal Teaching group (R.T.) gained by a mean score of 2.90, the Explicit Teaching group (E.T.) gained by 2.94, and the Non-Intervention (N.I.) group gained by .75.

In further review of character analysis responses no group main effects were observed but there was a significant level effect, $F(2,18)=4.30$, $p<.03$, with a significant interaction effect, $F(4,18)=4.69$, $p<.009$, on item three in Narrative 1 and Narrative 2 (See Tables Three and Four). This test item taps into understanding the behavioral factors in the story as they are related to the main character. The pre and post mean gain scores of the Reciprocal Teaching group was .3, the Explicit Teaching group was .11, and the Non-intervention group was .38 . Based on the interaction effect that was evidenced, a simple effects test was performed. However, when the simple effects test was performed, no significant differences were observed. Further clarification of this result will be taken up in the discussion section.

TABLE 3

Group Mean and Standard Deviation Character Analysis and Strategy Use Scores for Narrative Passages at Pre, Post and Maintenance Testing

Comprehension Cluster Items	Reciprocal Teaching Group (N=10)				Explicit Teaching Group (N=9)				Non-Intervention Teaching Group (N=8)			
	Pretest		Posttest		Pretest		Posttest		Pretest		Postte st	
	Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std
Narrative 1												
Character Analysis	14.50	3.78	16.60	2.76	12.33	4.58	15.89	2.67	10.75	3.81	13.75	2.96
Strategy Use *	12.50	1.43	15.80	1.55	11.78	3.38	13.11	2.26	11.00	2.14	12.13	3.00
Narrative 2												
Character Analysis	12.80	2.44	16.30	3.59	12.67	3.71	14.22	2.64	12.25	3.11	14.38	3.11
Strategy Use **	12.00	1.56	15.90	1.60	11.11	2.37	12.89	1.90	12.13	1.55	12.13	1.96
Stanford Reading Comprehension	65.40	20.55	72.30	20.57	70.89	21.71	71.00	19.91	67.63	20.73	65.25	24.00
	Maintenance Test				Maintenance				Maintenance			
	Mean		Std		Mean		Std		Mean		Std	
Narrative 1												
Character Analysis	17.00		2.26		16.22		2.33		16.13		2.75	
Strategy Use	16.40		1.35		15.56		1.13		14.88		1.36	
Narrative 2												
Character Analysis	18.40		2.88		15.33		3.32		15.25		2.96	
Strategy Use	16.90		1.10		14.11		1.69		14.63		2.26	

* $p<.05$ ** $p<.001$

TABLE 4

GROUP MEAN AND STANDARD DEVIATION CHARACTER ANALYSIS SUBSCORES AT PRE AND POST TESTING

Character Analysis Subscores	Reciprocal Teaching Group (N=10)				Explicit Teaching Group (N=9)				Non-Intervention Teaching Group (N=8)			
	Pretest		Posttest		Pretest		Posttest		Pretest		Posttest	
	Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std
Figurative Reasoning	4.50	1.08	5.90	2.33	4.11	2.26	4.89	1.76	3.63	0.74	4.38	1.69
Analytic Reasoning	5.60	2.88	9.20	1.69	5.56	2.13	8.56	2.19	5.75	2.49	8.63	2.20
Interactive Reasoning	5.60	1.08	5.90	1.10	5.11	1.76	5.22	0.83	4.50	1.85	4.88	1.36
Interpretive Reasoning	4.40	1.43	5.70	1.25	4.78	1.48	5.00	1.66	4.63	1.60	4.50	1.41
Evaluative Reasoning	5.80	1.69	6.00	0.94	4.67	2.29	5.67	1.00	4.88	1.64	5.25	0.89

TABLE 5
GROUP MEAN AND STANDARD DEVIATION STRATEGY USE SUBSCORES AT PRE AND POST TESTING

Strategy Use Subscores	Reciprocal Teaching Group (N=10)				Explicit Teaching Group (N=9)				Non-Intervention Teaching Group (N=8)			
	Pretest		Posttest		Pretest		Posttest		Pretest		Posttest	
	Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std	Mean	Std
Summarization *	5.40	1.17	6.20	0.42	4.33	1.22	5.78	0.97	5.13	0.83	5.00	1.41
Self-Questioning**	3.90	1.29	6.80	0.79	4.11	1.17	4.33	1.22	4.50	1.41	3.75	1.04
Prediction	7.90	0.32	7.00	0.82	6.89	1.90	5.89	1.36	6.88	1.36	6.00	1.41
Clarification	2.90	1.37	6.00	0.94	2.78	1.39	5.00	1.58	2.00	0.00	5.00	1.51

* $p<.05$ ** $p<.0001$

Training Probes

When examining the learning curves across the five week intervention period, two different patterns emerged when examining students, progress based on the character analysis mean scores and the strategy use mean scores (See Table Six and Figures Five and Six). The character analysis mean scores revealed that the Non-Intervention group rapidly declined from week one to week two (14.63 to 10.75) and then progressed rapidly from week two to week three (19.75 to 14.50) and continued to progress until week four at which time the group slightly declined in progress (14.50 to 14.00). By week five, the group was at the same approximate point at which they started at the beginning of the program. The Explicit Teaching group slightly declined from week one to week two (14.89 to 13.56) and then steadily increased from week two to three (13.56 to 14.11). During week three progress declined until week four (14.11 to 12.78), after which the group rapidly increased until the end of the training period (12.78 to 16.11). The Reciprocal Teaching group learning curve was very erratic. From week one to week two, the students rapidly declined (12.50 to 18.40) and while weeks two to three indicated a rapid increase (12.59 to 17.00) during weeks three to four the students again declined (17.00 to 14.70) and the scores from week four reveals that the group again proceeded to increase in its learning progress, finishing at the same approximate point where it started training.

The groups' learning progress from the strategy use component of the probe mean scores were generally steadier compared to what emerged from the mean scores of the character analysis scores. All groups slightly declined from week one to two: R.T.

(15.70); E.T. (12.44 to 12.00); N.I. (12.88 to 12.00) and then steadily increased from week two to three: R.T. (15.30 to 15.90); E.T. (12.00 to 13.33); N.I. (12.00 to 13.13). However, both the Explicit Teaching group (E.T.) and Non-Intervention group (N.I.) slightly declined from week three to week four: E.T.(13.33 to 12.78); N.I. (13.13 to 12.38) while the Reciprocal Teaching group continued to steadily increase: R.T. (15.90 to 16.60). From weeks four to five both the Explicit Teaching group and Non-intervention group began to steadily increase: E.T. (12.78 to 13.33); N.I. (12.38 to 13.00) and by the end of training the students in these two groups finished with a slightly higher score when compared to their performance at baseline. Whereas, by week four the Reciprocal teaching group seemed to reach a plateau and neither declined nor increased in its performance level by week five.

As well, when comparing the learning progress of the three treatment groups from week one to week five it was observed that the Reciprocal Teaching group made slightly higher learning progress when compared to the other two groups although the actual difference in terms of mean gain scores was minimal: R.T. (.70), E.T. (.89), N.I. (.12).

TABLE 6

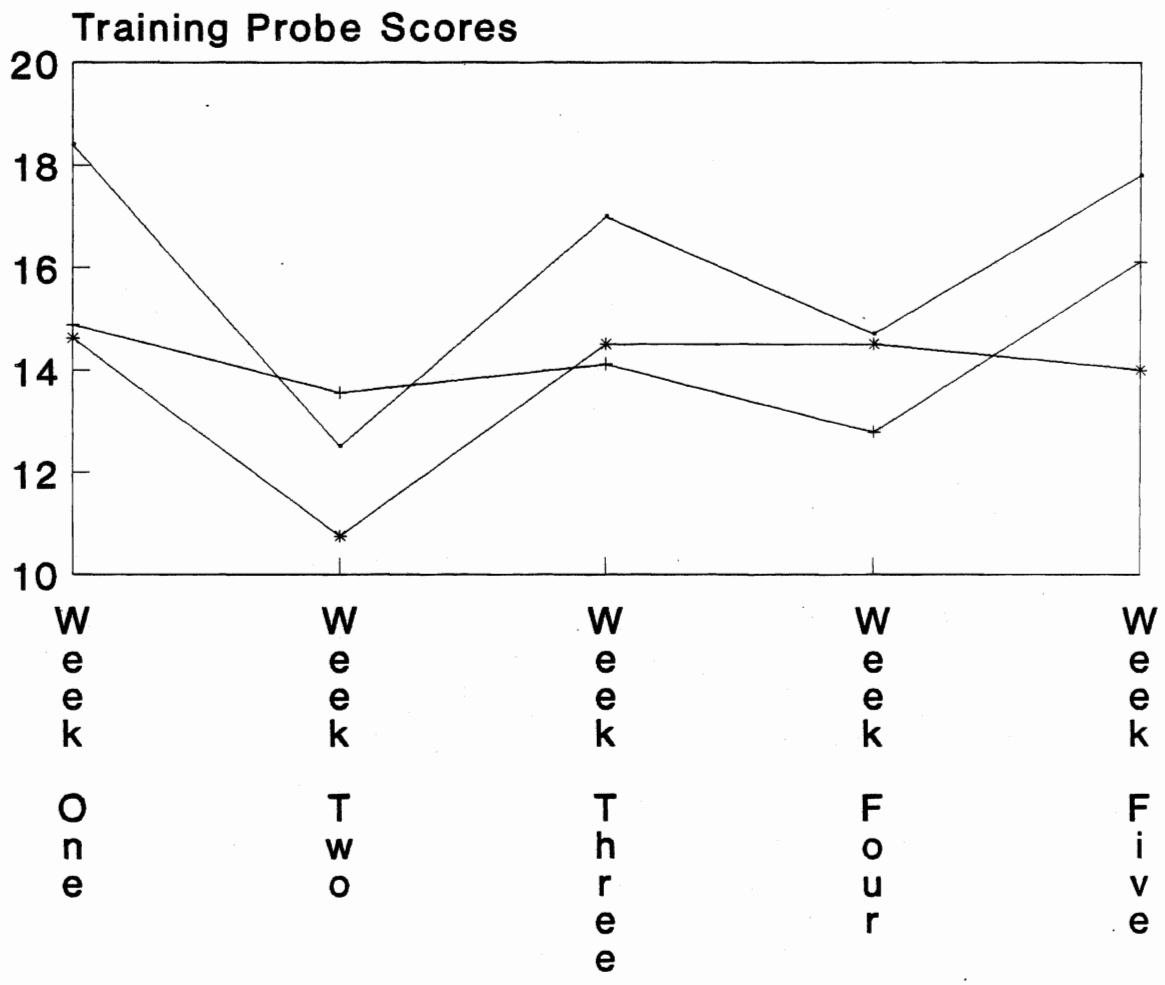
Group Character Analysis Probe Subscores During Intervention

	Reciprocal Teaching Group (N=10)		Explicit Teaching Group (N=9)		Non-Intervention Teaching Group (N=8)	
	Mean	Std	Mean	Std	Mean	Std
Week One	18.40	2.46	14.89	3.76	14.63	2.45
Week Two	12.50	2.64	13.56	5.08	10.75	2.96
Week Three	17.00	3.06	14.11	3.02	14.50	2.39
Week Four	14.70	2.11	12.78	3.63	14.50	3.12
Week Five	17.80	3.22	16.11	3.48	14.00	3.74

Group Strategy Use Probe Subscores During Intervention

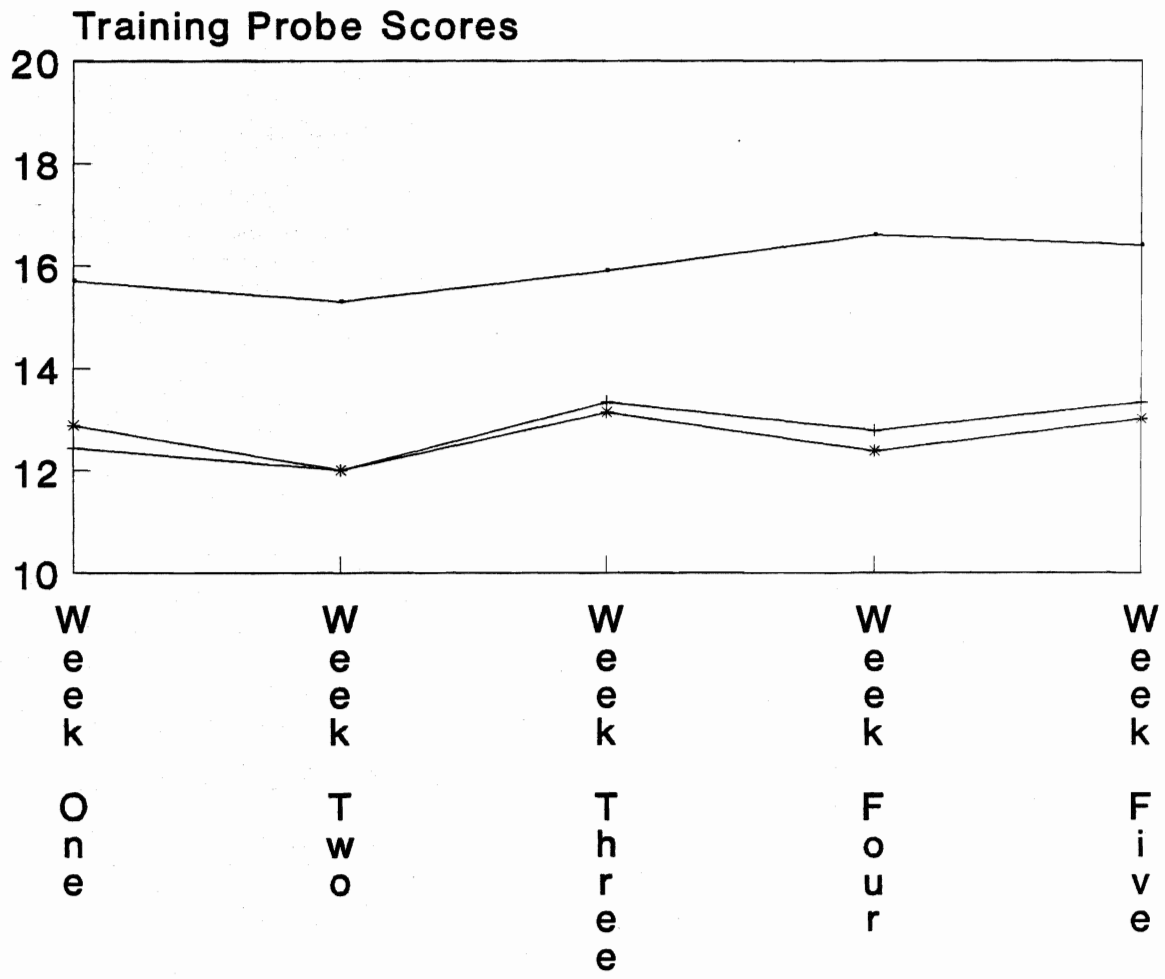
	Reciprocal Teaching Group (N=10)		Explicit Teaching Group (N=9)		Non-Intervention Teaching Group (N=8)	
	Mean	Std	Mean	Std	Mean	Std
Week One	15.70	2.58	12.44	3.09	12.88	2.17
Week Two	15.30	1.16	12.00	2.87	12.00	2.27
Week Three	15.90	1.85	13.33	2.35	13.13	3.04
Week Four	16.60	1.65	12.78	2.86	12.38	2.33
Week Five	16.40	1.51	13.33	1.73	13.00	3.02

FIGURE 5
Learning Curves for Character Analysis



Probe Scores Across Treatment Groups

FIGURE 6
Learning Curves for Strategy Use



Probe Scores Across Treatment Groups

Interviews

Analysis of interview data on metacomprehension awareness (Table Seven) suggested no significant differences as a result of training. A chi square analysis was conducted to determine the frequency count of each of the ten study strategies that were identified as ones that could be used in three learning contexts. There were no level differences within groups, however the frequency of responses was quite variable across contexts. For example, students within the same reading achievement level may have indicated that a particular study strategy was used 0 percent of the time in one learning context, whereas in another learning context the students revealed that they used the same strategy 83 percent of the time. (See Table Seven and observe the low level students and the memorization strategy response).

The following will describe the frequency of student responses by level of each of the ten strategies as illustrated on Table Seven. The data collected in this study reveal that self-evaluation, record keeping, environmental structuring, self-consequences, and organizing information were rarely or infrequently used by students across the three learning contexts. However, having said that the organizing information strategy was utilized 41.70 percent of the time by the high level students when they were asked to engage in an "in class" reading assignment, whereas the low and mid level students, as well as the high level students in the other two learning contexts indicated that they would only use this particular strategy 25 percent of the time or less.

The study strategies that were used more frequently were goal setting, memorization, seeking social help and reviewing records. However, when examining the data associated with these strategies, it must be noted that in many cases there is a large

variation between the frequency of response across the three learning contexts. Low level students used the goal setting strategy 50 percent of the time when doing an "in class" reading assignment, however they used the strategy less than 17 percent of the time when studying for a test and when poorly motivated. In contrast, the mid level students used the goal setting strategy most frequently when engaged in an "in class" reading assignment (66.70 percent of the time). It was also observed that the mid level students would use this particular strategy more frequently in the other two contexts when compared to low students. Similarly, high students indicated that they would use the goal setting strategy 75 percent of the time when engaged in an "in class" reading assignment, and also responded that they would use the strategy when studying for a test and when poorly motivated at a rate of 41.7 percent. Use of the memorization strategy probably summoned the most erratic responses across all three reading achievement levels. The low students indicated that they would most frequently use this strategy when studying for a test (83.3 percent), but use the strategy less when working on an "in class" reading assignment (33.3 percent) and never use it as a strategy when poorly motivated. The mid level students indicated that they would use the memorization strategy when studying for a test 22.2 percent, when doing an "in class" assignment and when poorly motivated 11.1 percent of the time. The high level students indicated that they would use the memorization strategy most frequently when engaged in studying for a test (75 percent). However, their use of this strategy was below 17 percent in the other two learning contexts. The strategy that was used the most frequently across all three learning contexts, and reading achievement levels, was seeking social help. In addition, the low and mid groups tended to use this strategy more frequently than the high level students, particularly when one observes the responses in the context studying for a test: Low = 83.3%, Mid= 88.9%, High= 66.7%.

TABLE 7

STUDENT PERCENTAGE FREQUENCY OF RESPONSE FOR STUDY SKILL INTERVIEW BY READING ACHIEVEMENT LEVEL

	Low (N=6)			Mid (N=9)			High (N=12)		
	In Class Reading	Studying For a Test	Poor Motivation	In Class Reading	Studying For a Test	Poor Motivation	In Class Reading	Studying For a Test	Poor Motivation
Self-Evaluation	0.00	0.00	16.70	0.00	0.00	0.00	8.30	0.00	0.00
Organizing Information	0.00	16.70	0.00	22.20	22.20	22.20	41.70	25.00	0.00
Goal Setting	50.00	16.70	16.70	66.70	55.60	33.30	75.00	41.70	41.70
Seeking Information	33.30	16.70	0.00	0.00	0.00	22.20	0.00	8.30	33.30
Record Keeping	0.00	16.70	0.00	0.00	11.10	0.00	0.00	8.30	8.30
Environmental	0.00	16.70	0.00	0.00	0.00	0.00	0.00	8.30	0.00
Consequences	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.30
Memorizing	33.30	83.30	0.00	11.10	22.20	11.10	8.30	75.00	16.70
Seeking Social Help	66.70	83.30	83.30	88.90	88.90	55.60	58.30	66.70	66.70
Reviewing Records	50.00	66.70	0.00	66.70	44.40	22.20	25.00	58.30	8.30

Chapter Five

Discussion

The present study was concerned with several issues. First, it examined the effectiveness of reciprocal teaching, a metacognitive reading comprehension program with a peer group interaction component, as it compared to two other reading comprehension instructional programs that did not incorporate peer interaction. In assessing the value of a reciprocal teaching program, this study also focused on teaching students literary elements found in complex short stories. This aspect was included to examine if reciprocal teaching could further improve comprehension of the often difficult concepts encountered in complex narratives. As well, the investigation examined the four learning strategies taught within the reciprocal teaching method to observe any improvements associated with training. Another issue associated with reading comprehension instruction was to explore if students would improve in their awareness of study strategies as a result of the program.

Unfortunately, the overall quantitative results that support any significant gains as a result of the reciprocal teaching program were scanty. However, the rare exceptions are worth noting, particularly with regard to students who underwent training in the reciprocal group. The most significant training effects were observed in the students' strategy use of summarization and self-questioning. When the students in the reciprocal teaching group were individually asked how the program helped them, the most salient feature they highlighted was the improvement they made in their ability to summarize. One student commented that "the program has helped me in History class because when we have to write down notes, it's easier just to summarize instead of recording all of the

information given to me." While another student expressed that "the program has improved my summarization skills because I used to write a lot of unnecessary details but now I can shorten material and get to the main point." Moreover, there were other comments that succinctly addressed the struggles that the students underwent during the initial stages of training, particularly when they were required to use the summarization strategy. In fact one student commented that although he felt that his summarization skills had improved, he still recognized that there was a need for refinement in this area. In fact he was even able to qualify his observation by saying that his summaries had gone from being saturated with too many details to the other extreme of being too brief.

In addition, strategy training also helped the students learn the self-questioning strategy with a greater degree of proficiency. In fact, although the number of students who felt that the training benefitted them through use of this strategy it was not as high as the benefits they seemed to get from learning summarization skills, seventy percent of the students in the reciprocal group commented that learning the self-questioning strategy was useful. In fact, each student rationalized the utility of the strategy differently. Student comments included: "The strategy helped me study for tests and to make up questions about the main idea; my questions are more effective because I didn't really know what to ask for before and now the questions I'm asking are better. Now I can design questions better because I can get rid of trivial information."

Aside from the significant findings from quantitative data as they relate to qualitative evidence, it is probably just as important that the students had been able to use the strategies, evaluate their own shortcomings, and monitor the success of their learning (Brown, Armbruster & Baker, 1986). In essence, the students keyed into the

value of metacognitive learning strategies.

Despite the success that strategy use training in the two specified areas seemed to demonstrate, there was no indication that the program significantly helped students grapple with literary aspects of narrative text, as measured by the character analysis component of the study. In addition, there was no indication that reading achievement levels were affected by training. In accounting for the non-significant reading achievement effects the designation of achievement levels must be considered. Although significantly different from each other the three reading level groups might be considered artificial boundaries comprised of skilled readers. Thus one might say that although the classroom teacher experienced her group of students as comprising three distinctly different types of reader, and these distinctions were supported by the Stanford achievement results, it is possible that these groups did not represent uniquely different groups in terms of reading comprehension skills.

Another point to consider in terms of the character analysis component of reading comprehension is the highly refined skill involved and the measurement problems involved in detecting slight differences which would be difficult to detect in the best circumstances where design and numbers are controlled.

Both of these points may contribute to the conclusion that skilled readers may reach a ceiling level effect quickly when introduced to a training program such as the one used in this study.

Additional limitations of the study included the difficulty of maintaining a high level of uniformity in materials as well as the variability associated with busy school routines. However, despite some of these problems associated with the implementation

of a reciprocal teaching study in a naturalistic setting, the present research accomplished the development of a set of practical procedures for observing and implementing reciprocal teaching in the classroom.

In light of this, some of the most important insights that were gained from this study were perceptions of the classroom teacher. The teacher experienced difficulties understanding the complexities involved in teaching the summarization strategy. Since the teacher was not given a specific scripted guideline to follow when explaining this strategy to students, the teacher had difficulties describing what was involved in the process of doing a summarization task. In response to this, the researcher needed to offer ongoing support and guided explanation even after the teacher had undergone a training workshop. As well, a similar problem surfaced when the teacher initially used the self-questioning strategy. Instead of encountering problems when actually engaging in the task demand associated with using the strategy, the teacher found it difficult to understand the meaning of self-questioning in the reciprocal teaching context.

The students also experienced difficulties, particularly midway thorough the program. The students had difficulties evaluating the strategy use of other students. Yet after the program the teacher indicated that the four strategies could be used by the students in other subject areas, and the teacher believed that they were being applied. This was reinforced when a student expressed that the reciprocal teaching program helped her in History class because the clarification strategy taught her to identify difficult parts in History class, which has helped her solve her own problems. Another student indicated that reciprocal teaching has helped her in Creative Writing class. She stated "Now I recognize that I have to make my writing reader-oriented. To do this I

add more details. When I write, after I make up the paragraph, I go over the paragraph to see if I can use the strategies."

As well, student awareness of study skills did not significantly improve as a result of training, probably due to the relatively short five-week intervention period. However, students in the reciprocal group did observe that the program helped them to improve in their ability to synthesize and record information, it helped them to concentrate better and recognize the complexities involved in a story, and it helped them to ask more appropriate questions. One student also indicated that she has refined her silent reading skills when she reads for enjoyment outside of the classroom context. She indicated that now when she reads at home and finds a confusing part in the story, she will stop and try to resolve the difficulty before she continues to read.

Overall, both the students and classroom teacher seemed to enjoy the reciprocal teaching program. Most students indicated that they enjoyed discussing the stories more than their usual routine of responding to stories in a written answer format, because the dialogues allowed for more fluency and personal insight.

Some ongoing concerns about the reciprocal teaching method should be addressed in future research efforts. Moreover, these efforts should focus more on the role of the classroom teacher in the implementation of this technique. In fact, this investigation observed that typical teacher-training workshops may not be applicable. Instead, peer coaching for a period of time may be more appropriate. As well, the teacher needs to gain an adequate understanding of the learning strategies. During the social interactive learning, the teacher should be able to provide immediate feedback in the form of identifying poor strategy use, and should also abe able to regulate the

dialogue so that all students have an equal opportunity to participate. The teacher also needs to be aware at all times of his or her role in the program. As the students progress, the teacher should provide fewer instructional statements and instead participate with the students by providing prompts and reinforcing statements (Palincsar, 1986).

Future research efforts need to focus on the implications of the reciprocal teaching method in broad educational contexts. In fact, rigorous research efforts in the areas of comprehension instruction need to be employed in order to determine if it is an appropriate methodology to be used in a naturalistic setting, where the majority of students are functioning at grade level. As well, the feasibility of training practitioners to use the procedure is another consideration that should not be ignored, seeing that the training techniques are rigorous and the implementation of the procedure is labor-intensive. All of these factors need to be examined before the technique can be readily adopted by educators who teach a variety of grade and ability levels.

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APPENDIX:

Instructional Material, Tests, and Interviews

Appendices

Appendix A: Pretest, Posttest, and Maintenance Test

PRE-TEST

GRADE SEVEN CURRICULUM-BASED READING TEST

Name of Student:

Class Code:

STORY A

The First Day of War

My father was a fighter pilot. During the summer he would fly past me while I was playing in the fields by our house. Today was different. The sound of my father's plane was gone by the time I rushed outside. Then I heard another. Not just one but several planes were flying overhead. Next to me was my newest possession, one he had not yet seen- a Doberman puppy. The dog had no name yet. He was brand new, and I loved him. Yesterday, as we were playing he tore himself away from me, and I chased him through a swamp, across what I was afraid was a bed of quicksand, wanting to catch him and yet also wanting him to get away. Now his black glistening body, for he had fallen into a puddle, was jumping over weeds and disappearing into the tall grass.

Now there was another plane. I looked up, but it wasn't his- it did not have white and red squares under the wings. The plane dipped down and flew low, parallel with my running dog. It slid down even lower, and there was a sound- a sound I didn't understand, a sound I had never heard before. As my dog leaped up, I saw him for a brief moment over the grass, shadowed by the plane's wing. Then the plane rose and flew away.

I stood in that field not moving, waiting for my dog to continue running in that sunlit place, which was at the edge of my summer world, but I couldn't see him anywhere. And there were no sounds- not one single sound since that sound that I was now beginning to understand. As I started to walk forward, I already knew what I would see, and knowing was evil and I wanted to take back what I knew.

STORY A: Part A

1. In your own words explain what the author means by the following metaphor.

   "As I started to walk forward, I already knew what I would see, and knowing was evil and I wanted to take back what I knew."

2. Sequence the order of events as they occur in the story.

   ____ A plane that the girl had never seen before starts to fly in the same path as her dog is running.

   ____ The girl's father flies off to fight in the war before the girl has a chance to see him.

   ____ The girl hears a strange noise that she does not recognize.

   ____ The girl looks for her dog.

   ____ The girl and her puppy frolic in the swamp.

3. Compare how the girl responded to the war at the beginning of the story to the way she responded to the war at the end of the story.

4. Why did the girl's feelings about war change?

5. How would you feel if you were the girl in this story? would your reaction be different or similar? Explain.

Part B

1. What was the passage mainly about?

2. Re-read the whole passage again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question.

3. Re-read this passage one more time. Please read carefully so that you can write about what you think you will read next.

   What do you think will happen next in the story?

4. Were there any ideas that you didn't know the meaning of or that you didn't understand. (If yes, write them in the space below.)

5. What is the author trying to tell the reader in the following sentence?

"Now there was another plane. I looked up, but it wasn't his - it did not have white and red squares under the wings."

Story B

Journey By Night

Sher Singh's family lived in the deepest parts of the jungle far away from civilization. One day his little brother fell ill and would die if he wasn't brought to an hospital. Unfortunately Sher Singh's father was away in the jungle with a photographic expedition. The only person that could carry the sick boy on the long journey to the hospital was Sher Singh.

After many tiring days of carrying his brother Sher Singh continued on his journey. As Sher Singh swashed up on to the shore, water twinkled in his footprints before sinking into the sand. Coming up out of the river went another set of prints- a tiger's, and there was glitter in them too. Even as he looked, it dried.

He plodded steadily on.

Every hour or so he had to rest, and each time it became more difficult to go on, although he had now mastered the knack of loading himself again. His body panted and sobbed, no matter what he himself wished to do.

But towards midnight he heard the second river ahead of him. He heard it from far away, and what he heard was the steady roar of flood. When he came out on the shore he saw it.

A big head of snow must have melted yesterday, and here it was. From bank to bank, the river foamed. He looked for the bridge. It was not there. Only a fierce crest of water to show where it lay, submerged. That, and a drowned goat held against it by the torrent. Branches rose like dying arms in the vortex and caught against the bridge and feathered the wild glissade of water. Underneath, boulders moved. He could hear the river grinding its teeth.

Then on the cataract appeared an entire tree, churning slowly over and over, gathering speed and crashing against the drowned bridge. In all the thunder came a loud tearing sound; the bridge moved like a monster, heeled over and broke, throwing up its bamboo ribs like a fan. A fresh gush of flood poured over it.

So, now, how to cross? there was not a chance to swim. Even alone he would be lost. But perhaps among the wreck of the bridge there was a way?

Part A

1. Explain what the author means by the following simile in your own words.

   "Branches rose like dying arms in the vortex and caught against the bridge and feathered the wild glissade of water."

2. Sequence the order of events as they occur in the story.

   ____ A tree bangs into the bridge and splits it and moves it.

   ____ Sher Singh manages to get across the first river.

   ____ Sher Singh encounters a flooded river.

   ____ Sher Singh searches to find the bridge.

   ____ A drowned goat is being pushed by the river against the submerged bridge.

3. In this passage what difficulties does Sher Singh encounter on his journey to the hospital?

4. Was Sher Singh's attitude about his journey positive or negative? Explain your answer.

5. If you were Sher Singh do you think that you would be able to save Sher Singh's brother? Explain.

Part B

1. What was the passage mainly about?

2. Re-read the whole passage again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question.

3. Re-read this passage one more time. Please read carefully so that you can write about what you think you will read next.

   What do you think will happen next in the story?

4. Were there any ideas that you didn't know the meaning of or that you didn't understand. (If yes, write them in the space below.)

_____

_____

_____

5. What is the author trying to tell the reader in the following sentence?

"Coming up out of the river went another set of prints - a tiger's and there was glitter in them too. Even as he looked, it dried."

_____

_____

_____

_____

_____

Story C

The Caribou and the Highway

Tourists and adventurers were thrilled with the opening of the Dempster's Highway in August 1979. It's a dusty road that leads from Dawson City in the Yukon all the way north to Tuktoyaktuk in the Northwest Territories. But environmentalists are afraid that the highway may change the far North forever.

The chief concern is a herd of more than 100,000 caribou known as the Porcupine herd. These gentle animals live on the northern tundra in a delicate balance with their environment. The Dempster Highway cuts right through their seasonal migration routes. Nobody seems to know what the opening of the Dempster will do to the herd, but there are fears that its numbers will decline. Another giant herd was reduced from 500 000 to 6000 after the construction of the Alaska Highway in 1942.

Many wildlife biologists believe that this highway will harm the Porcupine herd by acting as a barrier to the caribou during their annual migrations. The caribou travel thousands of kilometers each year in the annual cycle of migration. In the spring and summer the herd has its calves and grazes along the Beaufort Sea in Alaska and the northern Yukon. In the fall, the herd moves south along fronts that can extend for twenty kilometers to reach winter grazing land. The Arctic and sub-Arctic grazing land doesn't support much vegetation and the herd needs all it can find. To be cut off from forty per cent of its grazing range might mean as much as a forty per cent reduction in the size of the herd.

In addition to presenting a barrier in itself, the highway opens up the area to hunters. Highway traffic and aircraft using the roadway as a navigational guide can also cause disturbances. What will happen? The herd can probably be conserved, experts say, but Canadians will have to put up a lot of money and effort to do so.

STORY C

1. What was the passage mainly about?

2. Re-read the whole passage again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question.

3. Re-read this passage one more time. Please read carefully so that you can write about what you think you will read next.

   What do you think will happen next in the story?

4. Were there any ideas that you didn't know the meaning of or that you didn't understand. (If yes, write them in the space below.)

_____

_____

_____

5. What is the author trying to tell the reader in the following words?

"To be cut off from forty per cent of its grazing range might mean as much as a forty per cent reduction in the size of the herd."

_____

_____

_____

_____

_____

POST-TEST

GRADE SEVEN CURRICULUM-BASED READING TEST

Name of student:

Class Code:

STORY D NAME: _____

A Long Anger

It had all begun one Tuesday afternoon, two weeks before the end of term, when Colin had been summoned from class to his Headmaster's study, to be told that he had been allocated one of the coveted places in the School Orchestra. It was something he had been longing and hoping and working for, for more than two years. And now, his long dream had come true. For one exultant, enchanted moment, he stood staring speechlessly at Dr. Fowler. Then, as inevitable as a pendulum on its return stroke, the dry, precise voice sliced his happiness away.

"I suppose, it said, "that you have an instrument of your own?"

Colin went on staring, delaying the fatal moment of his reply. It was not a difficult question to answer; its answer was "Yes", or "No". The difficulties began behind the answer. Colin explained that he did not have a flute of his own. His mother paid for his lessons, but he was allowed to use one of the school instruments, and take it home two evenings a week to practice on. Whereupon Dr. Fowler nodded gravely, and with regret in his voice pointed out that this arrangement was really only made for beginners, and that they had to insist that members of the Orchestra provide their own instruments, since the school ones were of poor quality and in short supply, and it was necessary to practice oftener than twice a week. Colin left the music room. He returned to Math class, with his mind a whirling chaos and the knot of misery already pulling tight inside him.

That evening, he and his mother had a session in the kitchen which was very painful for both of them. And as he had expected, Mrs. Ramsay replied that the expense of buying a flute was such as to make it completely out of the question.

STORY #4: Part A

1. In your own words, explain what the author means by the following metaphor:

   "Then, as inevitable as a pendulum on its return stroke, the dry, precise voice sliced his happiness away."

2. Sequence the order of events as they occur in the story. Place the number in the blank space.

   ____ Colin returns to his class.

   ____ Colin discovers that talent is not the only thing that is needed to become a member of the band.

   ____ Colin and his mother argue.

   ____ Colin informs the Headmaster that he had formerly been permitted to borrow an instrument from the school.

   ____ Colin is given an opportunity to join the school band.

3. Explain how Colin reacted when he left the Headmaster's office.

4. In your own words write a short paragraph that explains how Colin feels about his situation.

5. If you were Colin, how would you respond to this situation?

STORY D: Part B

1. What was the passage mainly about?

2. Re-read the whole passage again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question.

3. Re-read this passage one more time. Please read carefully so that you can write about what you think you will read next.

   What do you think will happen next in the story?

4. Please select an area from the story that needs to be explained so that the ideas will become more clear to you.

   The part of the story that needs clarification is ...

   _____

   _____

   _____

5. What is the author trying to tell the reader in the following sentence?

   "Colin went on staring, delaying the fatal moment of his reply."

   _____

   _____

   _____

   _____

   _____

STORY E

Journey Outside

For some mysterious unknown reason a seemingly primitive group of people left their homesteads on earth and began living on 20 floating rafts for over a century. They drifted through dark caves searching for a better place to live. Dilar, a curious young boy, begins to wonder why his people had never found a abetter place to live in all of the years they have been travelling.

"Grandfather," he asked softly, "where are we going?"

"To a Better Place," he answered at last.

"A better place than what?" insisted Dilar.

The old man looked agitated. "A better place than where we were before," he said uneasily.

"I do not believe," said Dilar slowly, "that we are going anywhere, Grandfather. I think we go around and around and around. I think we pass the same caves and the same cliffs time after time."

"Hush, hush!" cried the old man. "What wicked things to say. It is not true. You'll see. I myself mean to live to see that Better Place."

He walked away from his Grandfather disappointed. And who was there to ask otherwise? Not his father, who never answered questions, but just went on drawing up net after net of fish. He went over to talk to his friend Gimal about this matter and asked him, "Do you think we are headed for some Better Place?'

Gimal did not answer. He walked on carrying the net.

Realizing that he would not get an answer from anyone he began to think of ways to figure out if they were headed for a better place. He decided that if he made a mark on that shelf, or piled stones, he could have seen it if they ever passed that way again. Even if no one else believed him, he would have known. He would have known for certain.

But he was fairly certain anyway. It was the others he wanted to convince. It would take something much more than stones.

Suddenly he sprang up and jumped from the raft onto the rim of rock. All of the rafts slid away from him and there was darkness. Dilar's heart thumped painfully in his chest as the darkness enclosed around him and he realized that nothing, nothing, nothing could call the rafts back.

Part A

1. In your own words explain what the author means by the following metaphor.

   "Dilar's heart thumped painfully in his chest as the darkness enclosed around him and he realized that nothing, nothing, nothing could call the rafts back."

2. Sequence the order of events as they occurred in the story.

   ____ Dilar attempts to ask his friend if he knows where they are going.

   ____ Dilar jumps off of one of the rafts to test out his ideas.

   ____ When talking to his Grandfather, Dilar tries to find out more about the destination of their journey.

   ____ Dilar decides that one of the ways he can discover if they are aimlessly travelling around in circles is by marking a cave wall and then waiting to see if they ever pass it again.

   ____ Dilar realizes that his father is not the type of person that would appreciate him asking him questions about where they are going.

3. How does Dilar act differently from the other raft people described in this passage?

4. What was Dilar thinking when he decided to risk his life and jump out of the raft to the side of a cave ridge?

5. Do you think what Dilar did was wise? Explain.

PART B

1. What was the passage mainly about?

2. Re-read the whole passage again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question.

3. Re-read this passage one more time. Please read carefully so that you can write about what you think you will read next.

   What do you think will happen next in the story?

4. Please select an area from the story that needs to be explained so that the ideas will become more clear to you.

   The part of the story that needs clarification is...

   _____

   _____

   _____

5. What is the author trying to tell the reader in the following sentence?

   "It was the others he wanted to convince. It would take something much more than stones."

   _____

   _____

   _____

   _____

   _____

STORY F

Farms of the Future- 100 m Down!

For thousands of years, people have used the sea as a source for food. Now, thanks to a new science called aquaculture, we are almost ready to set up huge farms under the sea. (Aqua is the Latin word meaning "water", and culture means "cultivation".) The sea farmer will, in a sense, plant, cultivate, and then harvest the sea. The various "crops" - both fish and plants- will be raised entirely in captivity and under controlled conditions.

Sea farms will become increasingly important in the future. One reason is that the world's population is steadily increasing. Even though our crop yields from land farming get better all the time, the land will not provide enough food in the future to keep pace with population growth. The amount of food in the sea- even in its "unfarmed" state - is probably twice as great as the earth's total present agricultural output. Another reason is that more and more land that was once devoted to farming has to be used for houses, apartment buildings, factories, schools, parks, and so on. The seas, on the other hand, cover a much larger portion of our planet - about seventy per cent. And, generally speaking, more food can be produced in a given area of the sea than on a land farm of the same size. For example, on a sea farm, fish could be raised (and caught) all the way from the bottom of the sea right up to the surface. Furthermore, many plants and animals of the sea multiply much faster than those of the land.

In Canada, it will be some time before planned sea farming gets off the ground, so to speak. Advances in marine research, combined with the need for ever-greater quantities of food will, however, see more and more young people involved in this food frontier.

PART B

1. What was the passage mainly about?

2. Re-read the whole passage again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question..

3. Re-read this passage one more time. Please read carefully so that you can write about what you think you will read next.

   What do you think will happen next in the story?

4. Please select an area from the story that needs to be explained so that the ideas will become more clear to you.

   The part of the story that needs clarification is...

5. What is the author trying to tell the reader in the following sentence?

   "The amount of food in the sea - even in its "unfarmed" state - is probably twice as great as the earth's total present agricultural output."

MAINTENANCE TEST

GRADE SEVEN CURRICULUM-BASED READING TEST

Name of Student:

Class Code:

STORY G

Adrift on a Pan of Ice

Spring can be the most dangerous time of year in northern climates. Labrador's famous Dr. Grenfell found this out when he set forth from his mission hospital at St. Anthony to reach a patient by dog sled.

All went well on this journey till we were within about a half kilometre of our objective point. Then the wind dropped suddenly, and I noticed simultaneously that we were travelling over thin ice. We had not gone twenty metres when the dogs scented danger and hesitated, and the komatik sank instantly into the soft ice.

As I was in the water I could not make out anything that would bear us up, but I noticed that my leading dog was wallowing near a piece of snow, some twenty-five metres away. Perched up there out of the frigid water he seemed to think the situation the most natural in the world, and the weird black marking of his face made him appear to be grinning with satisfaction. The rest of us were bogged like flies in molasses.

Gradually I succeeded in hauling myself along the lead dog's line which was still attached to my wrist. I hauled myself, using him as a kind of bow anchor, and I soon lay, with my dogs around me, on the little island of slob ice.

Though it was hardly safe to move about on my little pan, I saw that I must have the skins of some of my dogs, if I were to live the night out without freezing. With some difficulty I now succeeded in killing three of my dogs - and I envied those dead beasts whose troubles were over so quickly. I questioned if, once I passed into the open sea, it would not be better to use my trusty knife on myself than to die slowly.

Part A

1. In your own words explain what the author means by the following metaphor.

"Perched up there out of the frigid water he seemed to think the situation the most natural in the world, and the weird black marking of his face made him appear to be grinning with satisfaction."

2. Sequence the order of events as they occur in the story.

____ The leading dog manages to escape the cold ocean water.

____ The doctor regrettably thinks of a way to prevent himself from freezing to death.

____ The dogs begin to realize that the ice they are travelling on is dangerous.

____ The doctor is able to get out of the water by pulling himself along the line attached to his leading dog.

____ The doctor kills a few of his dogs.

3. In this passage what difficulties does the doctor encounter on his journey to reach a patient?

4. Was the doctor's attitude about his journey positive or negative? Explain your answer.

5. If you were the doctor do you think you would be able to survive this journey?

STORY G: PART B

1. What was the passage mainly about?

2. Re-read the whole passage again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question.

3. Re-read this passage one more time. Please read carefully so that you can write about what you think you will read next.

   What do you think will happen next in the story?

4. Please select an area from the story that needs to be explained so that the ideas will become more clear to you.

   The part of the story that needs clarification is...

   _____

   _____

   _____

5. What is the author trying to tell the reader in the following sentence?

   "The rest of us were bogged like flies in molasses."

   _____

   _____

   _____

   _____

   _____

STORY H

The Invention of the Terrible Ball

from Peter Graves

"Is this the invention with which you could completely wipe out Houndstooth?"

"Did I say that? Well, I might not be able to wipe all of it out with one, but I could certainly cause a tremendous amount of damage.

Then Dr. Houghton handed the aluminum-coloured ball to Peter, "It feels and looks rather innocent doesn't it?"

Peter's heart was pounding fast. He felt that he'd been handed a bomb with a sizzling fuse. He had a feeling that if he let it drop to the floor it would mean the end of everything.

"You see," said Dr. Houghton, "it bounces higher than the height from which you drop it. That's what makes it so dangerous. In the ball's core there is a small ball of Furloy. When this substance becomes activated, it multiplies the normal bounce and makes the ball bounce higher than the height from which it is dropped. Do you know why it is a dangerous weapon?"

"Vaguely," said Peter.

Dr. Houghton paused for a moment. He was staring at the remarkable ball. "Let's imagine that we really did want to wipe out Houndstooth. Where should we start?"

"Let's start with the high school," said Peter.

"All right, the high school. I could innocently bounce my ball from the height of about one metre or less on the concrete pavement in front of the school. The ball would start bouncing, each time higher than the time before, and each time harder than the time before. When it hits the pavement it would violently crack the pavement and eventually ruin everything in its path." Dr. Houghton wiped his brow. "That's the general idea. Of course I could shorten the destruction process proportionally if I started with twenty or thirty balls all bouncing at once."

"Whew!" exclaimed Peter. "It's terrible and such a simple idea - a bouncing ball!"

"Please believe me most completely I keep it securely locked up. You, are the first outsider to see or feel the terrible invention."

Part A

1. In your own words explain what the author means by the following metaphor.

   "He felt that he'd been handed a bomb with a sizzling fuse."

2. Sequence the order of events as they occur in the story.

   _____ Dr. Houghton asks Peter if he relaizes the potential danger of his invention.

   _____ Dr. Houghton gives Peter the ball to examine.

   _____ Dr. Houghton informs Peter that he is the first to know about his secret.

   _____ In an attempt to explain the power of his invention, Dr. Houghton describes a situation that helps to illustrate what would happen if he started bouncing the ball out in public.

   _____ Dr. Houghton and Peter discuss what the ball is made of and how it functions.

3. Compare how Peter reacts to the invention at the beginning of the story to the way he reacts to the invention at the end of the story.

4. Explain how Dr. Houghton feels about his invention.

5. How would you feel if Dr. Houghton told you about his invention?

STORY H: PART B

1. What was the passage mainly about?

2. Re-read the whole passage again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question.

3. Re-read this passage one more time. Please read carefully so that you can write about what you think you will read next.

   What do you think will happen next in the story?

4. Please select an area from the story that needs to be explained so that the ideas will become more clear to you.

   The part of the story that needs clarification is...

5. What is the author trying to tell the reader in the following sentence?

   "Of course I could shorten the destruction process proportionally if I started out with twenty or thirty balls all bouncing at once."

Story I

Mystery Whales

by Fred Buemmer

The whales arrive in July. The gleaming, ivory-white creatures glide smoothly through the clear, cool, green waters in the High Arctic. Newborn calves swim with some of the females, pressed close to them like miniature dark shadows; their heart-shaped flukes beat rapidly to keep pace with their massive mothers. They are whites whales or belugas. Why belugas gather in the Arctic bays every summer is a mystery.

There is something about certain estuaries that attracts white whales. In summer, they are common near the Mackenzie River delta. They congregate in the estuaries of the Seal and Churchill Rivers on the west coast of Hudson Bay.

Scientists have three main theories to account for the large numbers of belugas in certain bays. Unfortunately, each theory has a major flaw. The first theory is that they assemble in the shallow bays to evade their most deadly enemy (after humans), the killer whale, who fears shoal water; but many schools of belugas are seen in summer in deep water, far from protective shallows. The second theory is that the whales are attracted by the food of estuaries, which consists of fish, crustaceans, and marine worms; but whales killed in bays often have empty stomachs. The favored theory at present is that shallow bays with river-warmed waters are the nurseries of the white whales. Adult belugas, measuring 4 to 5 m in length, are well padded with blubber, 22 cm thick, that protects them from the chill of Arctic water, but newborn calves, measuring about 1.5 m at birth, are thinly wrapped in blubber that averages only 3 cm in thickness. The calves may chill easily and mothers, therefore, probably move to the relatively warm water of certain bays. However, females with newborn calves are occasionally seen in the coldest Arctic waters, far from the bays, so the calves evidently can endure extremely low temperatures.

STORY I: PART B

1. What was the passage mainly about?

2. Re-read the whole passage again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question.

3. Re-read this passage one more time. Please read carefully so that you can write about what you think you will read next.

   What do you think will happen next in the story?

4. Please select an area from the story that needs to be explained so that the ideas will become more clear to you.

   The part of the story that needs clarification is...

   _____

   _____

   _____

5. What is the author trying to tell the reader in the following sentence?

   "Newborn calves swim with some of the females, pressed close to them like miniature dark shadows; their heart shaped flukes beat rapidly to keep pace with their massive mothers."

   _____

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Appendix B: Training Probes

STORY # 1

NAME: _____
CLASS CODE: _____

Small World in the Snow

Sean and Alan both decided to go cross-country skiing in the woods. After a couple of hours the first flakes of snow began to filter into the forest like stealthy scouts in advance of the coming storm. Before long the indifferent snow began to blow mercilessly in an effort to cover the landscape. The boys soon lost their bearings and were about to lose hope when they suddenly came across a man, named Mr. S. The man took the boys into his tee-pee shelter and fed them.

After dinner, Mr. S had left the room. The boys began an inspection of the room. There were books piled everywhere. Some had English titles but many others were in another language.

Alan whispered to Sean. "Pretty heavy stuff. Mostly technical books of some kind. I can't figure out what the language is; it looks really weird."

Sean pointed to a photograph. "Look , all these guys in uniform, like some kind of army, and here's a bunch with beards and some kind of flag in the background. Must be someplace in Europe with those buildings. Same language on the pictures. Hey, that's why he has an accent. He speaks that language. What's he doing our here in the woods, I wonder?"

Alan was inspecting a large wall map. "Look at all these places he's marked. I know that one; it's Chalk River. they have atomic reactors there. These places must have something to do with atomic energy, maybe uranium or something. Wow!"

The boys could hear Mr.S talking on a CB radio. He's talking to somebody in that language. Remember what he said about not wanting police or anybody around here?"

Sean gulped. "Do you think...?"

"I think he's some kind of spy, and he's after those places on the map. Sshh. He's stopped talking."

Mr. S. reappeared. "Well, it's too bad, I couldn't reach your parents." Then he shrugged into his parka and went out.

STORY #1: Part A

1. In your own words explain what the author means by the following metaphor?

   "Before long the indifferent snow began to blow mercilessly in an effort to cover the landscape."

2. Sequence the order of events as they occur in the story. Place the number in the blank space.

   _____ The boys conclude that they have discovered a dangerous man.

   _____ The boys meet a man who offers them food and shelter.

   _____ The boys get lost in the woods while skiing.

   _____ Based on an analysis of Mr. S's belongings, the boys begin to question Mr. S's motives for living in this remote part of Canada.

   _____ Mr.S. tells the boys that he has been unsuccessful in contacting their parents.

3. What made the boys suspicious of Mr. S's motives for living in this remote area?

4. In order to conclude that Mr. S was a spy the boys had to make assumptions about the things they found and heard. Find the assumptions that they made that may not lead to the truth and may in fact distort the boys perception of the man they think is a spy. Explain why you think they are misleading assumptions.

5. Let's pretend for a minute that Sean and Alan's judgments about Mr. S. are wrong. Based on all of the information you have available to you in this passage, what other reason could possibly explain why Mr. S. is living in this remote area?

STORY #1: Part B

1. What was the passage mainly about?

2. Re-read the whole passage again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question.

3. Re-read this passage one more time. Please read carefully so that you can write about what you think you will read next.

   What do you think will happen next in the story?

4. Please select an area from the story which needs to be explained so that the ideas will become more clear to you.

The part of the story that needs clarification is ...

_____

_____

_____

5. What is the author trying to tell the reader in the following sentence?

"After a couple of hours the first flakes of snow began to filter into the forest like stealthy scouts in advance of the coming storm."

_____

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STORY #2 NAME: _____

Challenge the Sea

Mafatu paddled his canoe out into the ocean but quickly realized that he had tarried too far from shore.

Mafatu was powerless to guide his craft. From far off came a muffled thunder of the reef: the boom of the surf highbursting on the barrier coral. That sound - was it the voice of the Sea? "Someday, Mafatu, someday." Involuntarily the boy shuddered. Would his ears never be free of the Sea's threat?

Mafatu could only watch helplessly as the little canoe, swift as the following gulls, rushed to meet the tides of the island where they met and churned in a cross-sea of conflict. Now across the swells came a sound like a chorus of tired fishermen weary with their day's toil; sea birds, always complaining, never at rest; while softer, yet rising above it was another sound- the voice of the reef itself, quieting with sundown, like the reassuring hush of a mother to her child. ...A soft land breeze, heavy with scent of flowers, wafted out across the dark waters, tantalizing, bittersweet.

All at once he felt the canoe under him lifted and flung high into the air. Then down it crashed into splinters upon the reef. He was hurled headlong into the boiling surf.

Blindly he struck out, fighting for survival. The boy was aware that the canoe must have been flung over the barrier reef, for here was scarcely troubled by wind or tide. Now he was swimming, swimming... Somewhere ahead a strip of beach, salt-white in the darkness, lured him onward. His muscles did it of themselves. Only a will to live. A strip of sand white in the night...He caught the gleam of a shark's belly, close at hand, but on he swam. His unhampered limbs moved freely through the water.

STORY # 2: Part A

1. In your own words explain what the author means by the following simile. (The simile I want you to interpret is underlined.)

   "Now across the swells came a sound like a chorus of tired fishermen weary with their day's toil; sea birds, always complaining, never at rest; while softer, yet rising above it was another sound- the voice of the reef itself, quieting with sundown, like the reassuring hush of a mother to her child."

   _____

   _____

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   _____

   _____

2. Sequence the order of events as they occur in the story. Place the number in the blank space.

   _____ Mafatu begins to hear the Sea threaten to kill him.

   ____ Mafatu is thrown into the water and his boat is torn apart.

   ____ After Mafatu spends many weary hours on the Sea, Mafatu begins to notice signs indicating that he is approaching land.

   ____ Mafatu sees a shark while fighting for his life.

   ____ While struggling to survive, Mafatu concentrates on the sandy beach he sees in front of him.

3. Compare how Mafatu responds to the ocean at the beginning of the story to the way he responds to the ocean at the end of the story.

4. Why does Mafatu eventually decide to fight for his life?

5. Do you think Mafatu survives? Explain.

STORY #2: Part B

1. What was the passage mainly about?

2. Re-read the whole passage again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question.

3. Re-read this passage one more time. Please read carefully so that you can write about what you think you will read next.

   What do you think will happen next in the story?

4. Please select an area from the story which needs to be explained so that the ideas will become more clear to you.

   The part of the story that needs clarification is...

   _____

   _____

   _____

5. What is the author trying to tell the reader in the following words?

   "...the canoe must have been flung over the barrier reef, here was scarcely troubled by wind or tide."

   _____

   _____

   _____

   _____

   _____

STORY # 3 NAME: _____

Skyscraper Athlete

They called him "Gawk". He was a giant boy with long, bony arms. He had red hair, bristling every-which-way like an old paint brush. The first day he walked into Marville High, he stumbled over a wastebasket. Then he tripped on the iron leg of his desk and dropped his books.

"This elephant-trap country?" he drawled.

Just before Christmas vacation he ambled out for the basketball team.

"How tall are you?" said Mr. Farley, the coach.

"Two metres."

"Ever play ball?"

"Nope."

Gawk picked up a basketball with one hand - like it was a grapefruit. He examined it curiously.

"G-get a uniform,." stammered Mr. Farley.

But he was no good. They threw him the ball - it bounced off his thumbs. They told him to dribble - he got tangled in his feet.

Yet Mr. Farley kept him on, maybe to strike terror into Marville's opponents. Just the sight of him standing up to stretch -well, a ripple of jitters would go down the opposite bench.

One night he got hurt - inside.

On this night Gawk loped onto the court, his big knees knocking with fright.

"Look what's here - Old Thumbs-and Feet, howled the voice.

It was awful. Gawk lurched around, tripping himself, bobbling the ball. Finally Tom Walsh stationed him under Marville's basket to knock down Belmont's shots. This was more successful. Gawk screened the hoop with his big hands. He slapped the ball into the stands ... over the backboard ..."Oh, you big, wonderful player," he heard the voice jeer.

Marville won. But Belmont stands booed every time Gawk knocked down a shot. "He's a derrick, not a ballplayer," they shouted. "No fair. Cheat, cheat, cheat..."

The next day Gawk turned in his uniform.

STORY # 3: Part A

1. Explain what the author means by the following simile in your own words.

   "Gawk picked up a basketball with one hand- like it was a grapefruit."

2. Sequence the order of events as they occur in the story. Place the number in the blank space.

   ____ Gawk makes the team, but soon after, everyone on his team realizes that he can't play basketball very well.

   ____ The audience loudly protests the way Gawk is playing.

   ____ Gawk tries out for the basketball team.

   ____ A tall, red-headed, and incoordinated boy readily acquires a nickname at school.

   ____ One night Gawk was told to do nothing else but to stay by his own team's basket.

3. Explain how Gawk reacted after his team had won the game.

4. Why did Gawk quit playing for the basketball team?

5. If you were at the game would you have shared the perspective of the Belmont audience? Explain your answer.

STORY #3: Part B

1. What was the passage mainly about?

2. Re-read the whole passage again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question.

3. Re-read this passage one more time. Please read carefully so that you can write about what you think you will read next.

   What do you think will happen next in the story?

4. Please select an area from the story which needs to be explained so that the ideas will become more clear to you.

   The part of the story that needs clarification is ...

5. What is the author trying to tell the reader in the following sentence?

   "This elephant-trap country?" he drawled."

STORY #4 NAME: _____

The Last Race of the Bluenose

Canada's favorite schooner, the Bluenose, entered one of the last series of races against an old rival - the American schooner, Thebaud in 1938.

On the first day of the competition, the Canadian schooner was beautiful in the way that a pair of capable hands are beautiful and tell more about a person, sometimes, than a face. Inspired with their sense of mission, the crew sprang to the Captain Angus Walter's orders.

After the first two races, the score for the series stood at one to one.

There followed days of fog and calm, and in the heat of all the talk an American with a very sharp eye noted that Bluenose had swollen around the waist, that its waterline was over the maximum length of 112 feet (about 37 m) provided for in the racing regulations. Measurements were taken and sure enough, middleaged spread had added fully two feet (60 cm). The crew set about removing some of the ballast so that Bluenose would ride higher and shorter on the water. The adjustment boomeranged against the Americans, for, with its mass reduced, the schooner handled more nimble than ever.

Bluenose won the third race, and then Thebaud won the fourth. The series stood two to two.

On the day of the final race, Angus knew full well, when he stepped aboard Bluenose that day, that this was to be no ordinary race. At stake was a 150-year-old contest between Canada and its big neighbor.

But the Captain knew that the structure of the Bluenose was in rough shape. The Captain wondered if he could possibly win. His whole being, everything he had ever wanted to prove in his lifetime, was at stake.

The starting gun sounded, and Thebaud and Bluenose sprang across the line like a pair of wild, winged horses.

The Bluenose whipped through the water and crossed the line three minutes ahead of America's best.

The awed crowd paid a silent tribute to the aged queen. The Bluenose had fought for Canada with sheer spirit, and sheer spirit had won the race.

Part A

1. In your own words explain what the author means by the following metaphor.

   "... the Canadian schooner was beautiful in the way that a pair of capable hands are beautiful and tell more about a person, sometimes, than a face."

2. Sequence the order of events as they occur in the story.

   ____ Bad weather arises.

   ____ Canadians stand proud as the Bluenose crosses the finish line for the last time.

   ____ The Americans win the fourth race.

   ____ The author reveals Captain Walter's anxious thoughts about the upcoming race.

   ____ An American observes that the Canadian schooner is too long to participate in the race in its present condition.

3. What events may have influenced the outcome of the race?

4. Why did the Canadian Captain feel that this was such an important race to win?

5. Pretend you are an American radio sports commentator. Comment on the race from this perspective.

PART B

1. What was the passage mainly about?

2. Re-read the passage again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question.

3. Re-read this passage one more time. Please read carefully so that you can write about what you think you will read about next.

   What do you think will happen next in the story?

4. Please select an area from the story that needs to be explained so that the ideas will become more clear to you.

   The part of the story that needs clarification is ...

   _____

   _____

   _____

5. What is the author trying to tell the reader in the following sentence?

   "The adjustment boomeranged against the Americans, for, with its mass reduced, the schooner handled more nimble than ever."

   _____

   _____

   _____

   _____

   _____

STORY #5 NAME: _____

Drum Beat

I am a private investigator who was hired by the Federal government to bring a man, Sam Heyn, to the Midwest to testify in a trial. While we were in flight on the way to the trial I heard a threatening sound.

I stood up quite calmly, but a pulse had begun to hammer in my throat, as if in time to the ticking. I began to look for the source of the ticking.. Finally I spotted it- it was an attache case and it wasn't Sam Heyn's. The ticking was very loud, or maybe it was my imagination. It sounded almost like a drum- each beat drumming our lives away and the lives of forty other innocent people in the plane.

Then a voice said: "Bomb..." and the passengers scrambled from their seats toward the front and rear of the cabin. In the confusion I told the captain quickly, "My name is Chet Drum. I'm a private investigator bringing Sam Heyn, a marked man, to testify in Washington. If he can prove what the Underworld has been up to in the Midwest, there's going to be trouble."

"I can prove it," Heyn said.

I stared at the attache case. I heard the ticking. It didn't look as if he'd get the chance.

"We could unload it out the door," the captain told me.
"Cabin's pressurized, isn't it?"
"So?"
"Who knows how it's rigged? Change of pressure could be enough to set it off."

The captain nodded. "All we need is twelve hundred metres of runway, There's a small airport near New Albany..."

A few minutes later the captain prepared for an emergency landing. We came in twice. The first time the wind was wrong, and the captain had to try it again. Buzzing the field, I saw a windsock tower, two small lonely hangars and three shiny black cars waiting on the apron of the runway.

Three black cars waiting for what?

I studied these vehicles and realized that they were not carrying airport officials. I grabbed the attache case and ran to the pilot's cabin. I warned the pilots not to land because it could be potentially more dangerous than they realized. I did the only thing I could do to make them listen. I smashed the attache case open and discovered a little clock inside a noisy one. No bomb.

STORY #5: Part A

1. In your own words, explain what the author means by the following simile:

"It sounded almost like a drum- each beat drumming our lives away and the lives of forty other innocent people in the plane."

2. Sequence the order of events as they occur in the story. Place the number in the blank space.

____ The Private Investigator and the Captain try to figure out how to get rid of the bomb.

____ The Private Investigator identifies himself and explains his mission to the Captain.

____ The Private Investigator hears a suspicious noise.

____ The Captain decides to land the plane at a local airport.

____ One of the passengers shout that there is a bomb on board.

3. Explain what the Private Investigator was doing while he was escorting the man to a trial in the Midwest.

4. Based on what you have just read, what thoughts may have gone through the Private Investigator's mind that lead him to open the attache case?

5. Based on the information in the story, would you have reacted in the same way as the Private Investigator? Explain how you would have reacted.

STORY #5: Part B

1. What was the passage mainly about?

2. Re-read the passage again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question.

3. Re-read this passage one more time. Please read carefully so that you can write about what you think you will read next.

   What do you think will happen next in the story?

4. Please select an area from the story which needs to be explained so that the ideas will become more clear to you.

   The part of the story that needs clarification is ...

   _____

   _____

   _____

5. What is the author trying to tell the reader in the following sentence?

   "It didn't look as if he'd get a chance."

   _____

   _____

   _____

   _____

   _____

Appendix C: Curriculum Training Materials

UNDERGROUND TO CANADA

Barbara Smucker

"There's a place the slaves been whisperin' around called Canada. The law don't allow no slavery there. They say you follow the North Star, and when you step onto this land you are free. Don't forget that place."

When Julilly and Liza stole away one night from the Riley cotton plantation, they knew that the slave-hunters would soon be after them with their dogs. The girls travelled by dark, secretly aided by friends. They knew Julilly's mother was right-they couldn't rest until they reached that promised land where slavery had been abolished.

"I don't like bein' tied up in a sack, Julilly." Liza scowled and there was a look of terror in her eyes. But she pulled the harsh cloth over her head and sat waiting in the carriage seat. Julilly did the same.

The driver opened the door and crawled inside. He tied each sack tightly at the top. Then he picked up Liza and handed her to his waiting helper outside.

"Make yourself as small as possible," he told Julilly, "and I will carry you over my shoulder."

Julilly knew if she stretched out she would be twice as long as Liza. She huddled together as best she could.

A swirling sound of people and train noises, together with the drip of steady rain, surrounded Julilly. She felt the arms of the driver tighten about her.

A voice cried out above the confusion:

"Search all those cars for runaway slaves."

Julilly's heart pounded. She was glad for the sack and glad for the protecting arms around her.

"Two packages of dry goods go in this car," she heard another voice call.

She was lifted into the car and carried far back into what must have been a dark corner. She was placed next to the sack that was Liza.

"Don't move and don't talk until the train starts," the driver said softly. "You're going to Cleveland. A friend of the Underground Railway will meet you there. It's best you stay in the sacks until you reach your destination. But I'll loosen the top so you can stick your heads out for the trip."

After he left the two girls dozed off to sleep for a time, and was surprised when their freight cart banged into the car ahead of them and the rhythm of the wheels became slower and slower and then stopped.

"Liza!" Julilly cried out in alarm, feeling her friend's body slumped against her legs.

"I'm not dead," Liza groaned. "I just can't sit up."

In the middle of the car a light appeared. The door of their car slowly opened and a wild whip of cold fresh air blew in around them.

"I am seeking two parcels of dry goods shipped to me from Cincinnati," a familiar voice called out. "I will take care of their transfer aboard the schooner Mayflower personally."

Julilly remembered. The voice belonged to Massa Ross from Canada! He must have escaped from jail. He had come, as he promised, to take them into the land of freedom.

"Ah, here they are!" he cried. He leaned over the girls without speaking and quickly tied the sacks over their heads. Then he picked up a girl in each strong arm and strode from the car. Within minutes he lifted them into a carriage with heavy drawn curtains. He untied the sacks at once and pulled the girls free from them.

Liza fell onto the floor. She was too twisted and bent to sit on the seat. Julilly stooped to lift her and came face to face with Massa Ross. But was it Massa Ross? He had no beard; his hair was dark red but shorter; his chest and stomach were puffed out round and full as before, but the clothes that covered them were plain. The ruffled shirt was gone.

He rubbed his smooth chin and his eyes crinkled with laughter.

"Julilly and Liza." His voice was muffled but still lofty as though he might be preaching a sermon. "Praise God that you have overcome innumerable hardships and are now on the brink of freedom."

Moments later the carriage began to move. Julilly could see only the outlines of Mr. Ross's face in the seat opposite her and Liza. Liza clutched the seat with both hands, struggling painfully to straighten her back.

"Freedom ain't easy,, Massa Ross." Liza sounded again like the sullen, angry girl of the long-ago slave cabin on the Riley plantation. "Even you got put in jail, and your face don't look so well."

Mr. Ross was weary. He leaned his back against the carriage seat.

"They had to release me when the slave whose disappearance caused my trial returned. He came into the courtroom just when I was about to be condemned."

Mr. Ross spoke again, but quieter this time:

"Injustice is the weapon of evil men. But there are always brave and noble souls who proceed on the course of right and are impervious to the consequences. I feel rewarded for all my efforts, just to free the two of you."

Julilly was pleased with the ring of his words. Whatever Massa Ross was saying, it helped her lift her head and straighten her back and think of Mammy Sally, who never bent low to anyone.

Julilly thought back to the hot day in the cotton fields, when Massa Ross marched down the rows and chose Lester and Adam! Why hadn't she and Liza asked about them right away? Massa Ross would know where they were.

"Massa Ross," Julilly blurted out in a jumble of fear and hope, "did Lester and Adam get to Canada?"

Mr. Ross leaned forward slowly.

"They reached Canada, all right," he said. "They both knew freedom."

He paused. "Lester has a job in the town of St. Catharines. He wants both of you to come there....Adam died."

There was a shocked moment of silence.

"How did he die, Massa Ross?" Liza asked.

Mr Ross's shoulders slumped. "It was the chains." His voice was husky. "They were too tight and cut through the flesh. When we filed them off, there was blood poisoning. Adam lived in Canada only one day. We buried him under a tall pine tree."

There was nothing more to say. The evil chains. Julilly felt herself wanting to pry them apart for ever - to strain every muscle in her body to pull every chain loose from the legs, and arms, and necks of every slave.

The carriage jolted. The door opened and the girls with Mr. Ross stepped into a dusky, lead-grey street. It was evening. To be safe, they pulled their new hats far down over the blackness of their faces. They tucked their hands under the warmth of the wisteria-blue sweaters.

Before them was a vast, grey stretch of water. It didn't have the sound of the rolling Mississippi. The water heaved and pushed towards the shore and then splashed in one long row of waves. Great hulks of boats, anchored along its sides, rocked with the rhythm of the moving water. On one of the largest, the sails were being pulled aloft.

"That one is the Mayflower- the Abolition Boat," Mr. Ross said. "It will take you across Lake Erie to Canada under its waving sails."

"Then you aren't comin' with us? Julilly faced him soberly.

Mr. Ross heaved his great shoulders and breathed long and full into the vastness of his chest. "I must return again to the South and free more of your people," he said. He picked up the skimpy bundles from the carriage floor and walked towards the boat.

"Keep your caps pulled down and don't raise your heads to look at anyone," Mr. Ross turned and whispered to the girls. "With those new clothes a passer-by would think you were my children. It's fortunate the day is grey and cloudy."

It was only a few steps to the boat and at once Mr. Ross began shaking the hand of a man he called "the Captain". Mr. Ross didn't raise his voice with his usual flourish but spoke quietly.

"A friend with friends, he said at first. The magic password of the Underground Railway. Julilly felt warm and excited each time she heard it.

"These are my children, " Mr. Ross continued.
"Take them safely to Fort Malden."

The Captain was a jolly man with a hat cocked to one side of his head.

"Aye, that I will." He hung onto each word with peals of laughter. "Come with me lads, to your bunks below."

Mr. Ross patted each girl gently on the shoulder and bade them good-bye as the girls walked aboard the Mayflower with the Captain.

"I know ye are lassies," the Captain laughed again, "but for this trip ye will be laddies to me and my mates."

The Captain then led the girls to a small cabin where he had planned for them to stay for the journey.
He showed the girls how to lock their door and warned them to open it only when they heard three knocks and then the words "a friend with friends". He would bring them food and water at once. Then they were to crawl into their beds and sleep with all their clothing on.

"If all goes well"- the Captain smiled broadly beneath his thick black moustache- we will reach the banks of Canada in the early morning light." The r's in his speech trilled together like the song of a bird, Julilly thought. She would have no trouble recognizing his voice behind a door that was closed.

The Captain bent down and walked out of the little door. The girls locked it behind him.

There was barely time for Julilly and Liza to look about the cabin, when three raps were heard on the door, and the Captain's voice whispered,

"A friend with friends. Open the door, lassies, there's trouble aboard.'

Julilly turned the lock. The Captain's face puffed with anger.

"I've had word there's a slave-hunter and sheriff coming aboard, with a warrant to search the schooner before we set sail." He peered closely at the girls.

"I've a notion that ye're the lassies they're making all the stir about."

The girls ran with the Captain across the deck to the far side of the schooner where a little lifeboat, covered with canvas, hung against the side. The captain pulled back the canvas and helped Julilly and Liza inside.

"Ye'll find blankets, water, and a bite of food in there. Take care and pray that the Good Lord will protect ye." He pulled down the canvas and left them alone.

Seconds later two large men shoved their way up the plank and approached the Captain. They could be the sheriff and slave-hunter. Julilly and Liza didn't know. They had never seen them before. The men spoke to the Captain, waving their arms in his face and pacing impatiently up and down beside him. They seemed like horses pawing the ground, wanting some kind of action. But the words they spoke were lost to Liza and Julilly in the wind and the splashing noise of lapping water.

The Captain shook his head. He threw his arms into the air as though in despair. He walked towards the thin stairway. The big men followed.

"They are going to search the cabins, Liza!" Julilly gasped, realizing just how lucky their escape had been. "We're gonna get to Canada, if we've got to hang onto the bottom of this boat and get pulled across Lake Erie." Julilly was angry now. What right had these men to keep chasing them up to the border, as if they were two runaway dogs? She and Liza were not going to be slaves no more.

Late that night the Captain and the two large men popped out of the stairway. They heaved and puffed and ran to the entrance

plank. They shook their fists in the Captain's face, but he shoved them onto the plank and waved good-bye.

The Mayflower turned. It swung around into the wind. The sails high above began cutting through the sky.

"I feel that I'm flyin' through the sky just like those sails." Liza hugged Julilly as they both pushed a wider opening in the canvas so they could see more of the outside.

The joy that Julilly felt was so intense that there was pain around her heart.

Without wanting to, they slept in the hollow shelter of the small life-boat. When the Captain found them later, peaceful and warm, he left them to rock through the night and be refreshed for the morning.

Julilly and Liza woke with the sudden stillness of the schooner's landing. They grasped each other's hand for comfort, and at once remembered the Mayflower, Lake Erie, and their nearness to Canada.

Julilly and Liza then looked around and noticed that they had arrived in Canada. They then ran down the plank and jumped to the ground.

"Canada?" they cried together.

The Captain nodded.

Liza dropped to her knees. She spread out her arms and kissed the ground. "Bless the Lord, I'm free!" she cried.

Julilly stood as tall and straight as she could. She pulled the cap from her head and held her head high. There was no longer any need to hide her black skin. She was Julilly, a free person. She was not a slave.

From the Nelson Series: Contexts Anthology One

Grade 7 Underground to Canada

by Barbara Smucker

Directions: Read the story and then answer the following questions in complete sentences.

1. Why were Julilly and Liza tied up in sacks before being placed in the freight?

2. What was the story mainly about?

3. What were the girls' feelings before the train started to move? Why did they feel this way?

4. Re-read the whole story again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your answer.

5. What was their train ride like? What sounds did they hear?

6. Re-read the story one more time. Please read carefully so that you can write about what you think you will read next. What do you think will happen next in the story?

7. Who was the "friend of the Underground Railway" who met them?

8. Please select an area from the story which needs to be explained so that the ideas will become more clear to you.

   The part of the story that needs clarification is...

9. Why did Julilly call Mr. Ross, "Massa" Ross?

10. Why did Massa Ross say, "I am seeking two parcels of dry goods"?

11. Why was Massa Ross sent to jail? Why was he released?

12. What information did Massa Ross have about Lester and Adam?

13. Where do you think the girls got their new clothes? Why did they need them?

14. What was the password of the Underground Railway?

15. Do you think the events in the story might actually have happened? Why or why not?

THE FUN THEY HAD

Isaac Asimov

First, a little arithmetic! Counting twenty-five years as a generation, what year are you likely to become a grandparent - a great grandparent? Don't laugh. You are very likely to be raising a family in twelve to fifteen years from now. Now work out the number of years between your great-grandparent days and the date of the story, 2155. This will help your imagination to grasp the age of the world inhabited by Margie Jones and Tommy.

Margie even wrote about it that night in her diary. On the page headed May 17, 2155, she wrote, "Today Tommy found a real book!"

It was a very old book. Margie's grandfather once said that when he was a little boy his grandfather told him that there was a time when all stories were printed on paper.

They turned the pages, which were yellow and crinkly, and it was awfully funny to read words that stood still instead of moving the way they were supposed to - on a screen, you know. And then, when they turned back to the page before, it had the same words on it that it had had when they read it the first time.

"Gee," said Tommy," what a waste. When you're through with the book, you just throw it away, I guess. Our television screen must have had a million books on it and it's good for plenty more. I wouldn't throw it away."

"Same with mine, "said Margie. She was eleven and hadn't seen as many telebooks as Tommy had. He was thirteen.

She said, "Where did you find it?"

"In my house," He pointed without looking, because he was busy reading, "In the attic."

"What's it about?"

"School."

Margie was scornful, "School? What's there to write about school?"

Tommy looked at her with very superior eyes. "Because it's not our kind of school, stupid. This is the kind of school that

they had hundreds and hundreds of years ago." He added loftily, pronouncing the word carefully, "Centuries ago."

Margie was hurt. "Well, I don't know what kind of school they had all that time ago." She read the book over his shoulder for a while, then said, Anyway, they had a teacher."

"Sure they had a teacher, but it wasn't a regular teacher. It was a man."

"A man? How could a man be a teacher?"

"Well, he just told the boys and girls things and gave them homework and asked them questions."

"A man isn't smart enough."

"Sure he is. My father knows as much as a teacher."

"He knows almost as much I betcha."

Margie wasn't prepared to dispute that. She said,"I wouldn't want a strange man in my house to teach me."

Tommy screamed with laughter. "You don't know much, Margie. The teachers didn't live in the house. They had a special building and all the kids went there."

"And all the kids learned the same thing?"

"Sure, if they were the same age."

"But my mother says a teacher has to be adjusted to fit the mind of each boy and girl it teaches and that each kid has to be taught differently."

"Just the same they didn't do it that way then. If you don't like it, you don't have to read the book."

"I didn't say I didn't like it," Margie said quickly. She wanted to read about those funny schools.

They weren't even half finished when Margie's mother called "Margie! School!"

Margie looked up. "Not yet, Mamma."

"Now," said Mrs. Jones. "And it's probably time for Tommy, too."

Margie said to Tommy, "Can I read the book some more with you after school?"

"Maybe," he said, nonchalantly. He walked away whistling, the dusty old book tucked beneath his arm.

Margie went into the school room. It was right next to her bedroom, and the mechanical teacher was on and waiting for her. It was always on at the same time every day except Saturday and Sunday, because her mother said little girls learned better if they learned at regular hours.

The screen lit up, and it said: "Today's arithmetic lesson is on the addition of proper fractions. Please insert yesterday's homework in the proper slot."

Margie did so with a sigh. She was thinking about the old schools they had when her grandfather's grandfather was a little boy. All the kids from the whole neighborhood came, laughing and shouting in the schoolyard, sitting together in the schoolroom, going home together at the end of the day. They learned the same things so they could help one another on the homework and talk about it.

And the teachers were people.

The mechanical teacher was flashing on the screen: "When we add the fractions 1/2 and 1/4 ..."

Margie was thinking about how the kids must have loved it in the old days. She was thinking about the fun they had.

From the Impression Series: <u>Inside Outside</u>

OF A SHOE AND A SHIP AND SAILORMEN

Ted Ashlee

He must have been a goodlooking man at one time. We could see that in spite of the harsh cheek and chin stubble and the encrusted grime. That was the left side of his face. His battered right profile was hideous to look upon. The right ear, a tattered remnant, appeared to have been torn away. HIs cheekbone was caved in, his eye blind, half-closed, whitish, unmoving. We kids figured that maybe he was an old-time logger who had been struck down by a falling tree of a big whirling widow-maker. Another theory was that the old guy had been a trapper mauled by a grizzly.

Now he spent his time rowing all over False Creek dragging a grapnel over the muddy bottom. Whatever he hooked onto he pulled to the surface and heaved over the gunwale. Sometimes his treasure slipped off the hook and the old man would cut loose a stream of picturesque profanity that smacked of the sea.

One Saturday afternoon as we were exploring among the float houses at the north side of False Creek we came across the one-eyed salvage expert unloading his boat. He had picked up various bits of scrap metal, a tattered oilskin and one oxford shoe, medium sized, and thick with slime.

"What do you do with all that stuff?" we wanted to know.

"Sell it," he replied, "I do all right."

"Who would buy one shoe?"

"Maybe a one-legged man. I see you looking at this face of mine. Sickens you, don't it? never mind. It sickens me. This battered mug has been past of me for over fifty years. Want to know what happened? Sit down. Sit!" he repeated with a terrifying roar, "and listen good. Maybe you'll learn something from my story."

"In the winter of 1875 it was. We set sail out of Halifax in a three masted barquentine with a cargo of pine lumber bound for Liverpool. Newfoundlanders, as tough a crew as any man could wish for."

"Did you know that in the old days it was claimed that Yarmouth, Nova Scotia, produced the most efficient and the most brutal ship's officers in the world? I think that's true I don't claim to have been one of the most efficient of bucko mates, but I was one of the most brutal. I don't say that with pride. Just a fact.

"I mentioned the Cape Breton-Newfoundland crew? Well, they were fighting mean all the time. I didn't dare turn my back on any one of 'em. But thy were seaman, good seamen. All except one man. He turned out to be a farmer from somewhere in the Annapolis Valley. We got him by mistake. You see, about an hour before departure time we were short one A.B. The captain sent a message ashore to a crimp he knew. Well, the crimp turned up with two friends practically carrying a man they guaranteed was an able bodied seaman.

"Well, the captain paid the crimp his ten dollars and we hauled the man aboard. He was no able-bodied seaman, let me tell you. He was a farmer who didn't know one thing about a ship. He couldn't tell a capstan from a keelson. I was pretty angry with the crimp. Being unable to get at him I took it out on the farmer. I worked him sixteen or eighteen hours a day doing the hardest and dirtiest jobs. I'd watch for every mistake he made and then I'd punish him. I'd order him to stand out on deck in freezing weather barefooted and bareheaded, holding a steel crowbar in each hand. After an hour or two of that, when he was nearly frozen to death, I'd order him back to chipping rust. The crew didn't like it. They got muttering among themselves. I'd catch a man staring at me with murder in his eyes. Oh, I recognized the signs of mutiny, but I chose to ignore them. More fool me.

"About midnight, three days out of Liverpool, the lookout sang out about a strange light dead ahead. Being officer of the watch I ran to the forepeak to take a look. There was no light, of course. A big Newfoundlander jumped out of the shadows and swung a capstan bar at my head. I jerked my head aside. The bar tore off my ear and did all the other damage you see. Smashed

my collarbone, too. It's a wonder they didn't hear me yelling in Liverpool. Then I passed out. The skipper told me later on that he and the mates ran out on deck, saw what happened, and attempted go arrest the Newfoundlander."

"The crew got into the spirit, swinging capstan bars and belaying pins. Half-dressed men poured out ot the forecastle. Some of them took sides with the Newfoundlander but the rest joined the officers. You know, I'll never understand why because in the past on this ship the crew had been treated very poorly by the officers. The crew could have taken over the ship, sailed her to the South Seas or vanished along the China coast. I guess after centuries of harsh treatment, most seamen couldn't be anything but obedient to authority."

"We finally limped into Liverpool with a third of the crew in irons. No sooner were the mooring lines secured than the Annapolis Valley farmer vaulted the rail and hit the dock on the run. The skipper figured the man had just jumped ship to vanish in the city. Not so. Then sawbones patched me up as best he could and I was hauled off to hospital. The captain and the mates were arrested and tossed into jail."

"Weeks later, when I was able to move my head without feeling that it was about to fall off, we were hauled into court. The trial lasted ten days. At the end of the trial we were all charged. I was the guilty party. I was the one who had mistreated the farmer but the captain and mates had justa stood by and let it happen. In law that made them as guilty as I was. Our certificates were cancelled for life. We were not permitted to sail on any ship ever again except as able seamen. Because of my injuries I didn't go to prison. I was shipped home to Halifax courtesy of the British Crown.

"That was the turning point in the general treatment of seamen. Over the following three or four years the story of that trial travelled around the world. Ship's officers smartened up. New laws were passed that gave some protection to sailors. The crimps gradually went out of business. Bucko mates yelled threats but couldn't follow them through. Seamen

continued to work long hard hours and the grub they were fed would have poisoned a shark. But at least no man ever again stood out on deck barefooted and barehanded in freezing weather holding two crowbars. Cruel and inhuman treatment of seamen became a thing of the past. That's my story, boys. What do you think of it?"

We sat stunned in silence for I don't know how long while the rain soaked through our thin jackets.

"Well," one of my friends said, "we're glad you told us your story. We believe every word. Hope you find a one-legged man to buy that shoe."

We took off as fast as we could and didn't stop for breath until we reached Granville Street bridge a few blocks away. We never went back to the float houses, though we often saw the ole one-eyed seaman, in the distance, dragging for junk.

From the Impression Series: Inside Outside

Grade 7 — The Fun They Had

Directions: Read the story and then answer the following questions in complete sentences.

1. Why did Margie think the book was strange?

2. What was the story mainly about?

3. What do you think a "telebook" would be?

4. Re-read the whole story again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question.

5. Tommy looked at her with "very superior eyes". What does that mean?

6. What did Margie find funny about the old school?

7. How did Margie feel about doing her arithmetic lesson?

Of a Shoe and a Ship and Sailormen

Directions: Read the story and then answer the following questions in complete sentences.

1. What theories had the children developed about the cause of the old man's looks?

2. Re-read the story. Make sure you read carefully so that you can write about what you think you will read next. What do you think will happen next in the story?

3. Who would have lived in the float houses?

4. Please select an area from the story which needs to be explained so that the ideas will become more clear to you.

   The part of the story that needs clarification is...

5. Why did the man think he should tell his story?

6. What was a mutiny? What caused the attempted mutiny on board that ship?

7. What was meant by "in irons"?

8. What effect did the trial have on other sailors?

Discussion Questions:

The Fun They Had

1. How do you feel about the two kinds of teacher: machine and human?

2. Do we have any "telebooks" now?

3. What changes would you like to see in schools?

4. Do you believe in "the fun they had"? Who are "they"? Would Margie's teacher and school be more fun than you school?

Of a Shoe and a Ship and Sailormen

1. Why do you think the children never went back to the float houses?

2. What did the narrator think had caused some of the men to help the officers in the fight, instead of the sailors? So you agree or disagree?

3. Why do you think the man told the children his story?

4. How does studying about the past help us learn about the present?

THE FINAL FACE-OFF

Patricia Hancock

Jamie trudged through the snow, leaning into the wind under the weight of his hockey gear. He looked up every now and then, expecting to see one of his teammates as he approached each intersection. Eventually as he trudged on to the area he realized why he did not meet one of his friends on the way to the practice. He had his days confused and thought that it was Sunday instead of Monday, which was the actual day of his practice. *1*

Jamie was about to turn for home when he thought he glimpsed a light come on in the arena. It couldn't have been one of the big overhead lights. But there was definitely a light on now somewhere in the south end of the rink.

He crossed the parking lot. There was a navy blue Cadillac parked beside the rear entrance to the arena, and several sets of footprints led from the car to the door. Jamie didn't recognize the car. But then why should he? Hundreds of people used the place. Still, he was curious. *2*

Without really thinking about it, he tried the door. It opened. Won't hurt to see who's here, he thought, and put his kit down just inside. The sound of the skates cutting the ice drew him to the closest aisle entrance. Jamie moved quietly up the stairs leading to section B, and slipped into a seat.

Three overcoated men sat in the penalty box down to his left. A fourth man in a sweat suit leaned against the boards at the far end of the rink. And one of the fastest hockey players Jamie had ever seen was flying up and down the ice, dodging imaginary opponents and turning on a dime at the end red lines. *3*

But who was this guy? Jamie hadn't seen skating like this since Orr. The skater's practice jersey offered no clue to his identify. And the lighting was terrible. Why were they using only two end spots? A fellow could get hurt on such poorly lit ice. *4*

Just then the skater turned at the red line closest to Jamie, and stopped to wipe his forehead. Jamie poked his head up a little more and stared hard. It was Fotheringham. Rod Fotheringham of the Arrows. Jamie had been to nearly every Arrows' home game this season, and he'd never seen Fotheringham skate like this before. Oh, he was a good player, a steady defenceman with quite a few goals to his credit, and rumour had it he'd make the NHL next season, after only one year with the juniors. *5* But then he'd started late - he was almost twenty when the Arrows got him. Only one year of eligibility for Junior A hockey left. He had just arrived from some place in the Northwest Territories one day and asked for a chance to try out. He made the team but he never preformed up to this calibre. Weird! Why was he keeping all that talent hidden? And what was he doing here, working out all alone? *6*

"Stay there!" the man in the sweat shirt called out, and skated toward Fotheringham.

"Well, you haven't lost it, D.J.," he said, throwing a towel around the young player's neck. Then he looked up, straight at Jamie. "Hey, who's that?" he shouted, pointing.

One of the men in the overcoats spotted Jamie.

"Who let him in here?" one called out.

"Just get him!" the other shouted. *7*

Jamie ran home as quickly as he could, not bothering to check behind him for fear that he would see the men chasing him. He arrived home safely but pretty shaken up. After the initial shock, curiosity overtook him.

The next morning after practice, Jamie intercepted one of the rink managers on his way to the arena office.

"Hey, Barney, could you wait up?"

The old manager turned. "It's Jamie Stewart, isn't it? What can I do for you?"

Jamie asked, " I was wondering who used the ice yesterday morning." *8*

"Hmmm, let me think. Sunday mornings. I usually don't come in Sundays. Oh, now I remember ... it's a figure skater.

Someone named Clayton. Yeh, that's it, Clayton. Been renting the six o'clock time for nearly five months now." *9*

"Oh. You sure, Barney?"

"Sure I'm sure. Why do you want to know, Jamie? Are you thinking of switching to figure skating?"

"No. I was just wondering who'd ben here. Thanks, Barney. See you." *10*

Jamie trudged home from practice, his head still filled with thoughts of Fotheringham. Two things are certain. The man he'd watched was no figure skater. And his name wasn't Clayton. Maybe Fotheringham's friends had rented the time from Clayton. That must be it. Jamie tried to push the whole affair to the back of his mind. He had a science project to present that morning, and it was time to start concentrating on it. *11*

A few weeks later Jamie got tickets to go to see the next Arrows' home game.

After the game Jamie went back to the dressing-room area, telling himself he was only after a few more autographs for his scrapbook. While Garland was signing his game program, Fotheringham emerged from the dressing room. Fotheringham saw Jamie. Looked right at him. Then right past him. *12*

"All right, he doesn't recognize your, so get out of here while the getting's good," an inner voice warned. Instead, Jamie walked toward the player and asked for his autograph, too.

Fotheringham looked surprised.

"Sure it's mine you want, kid?" He smiled as he reached for Jamie's pen and program. "Not too many people ask for mine." *13*

"Why not? You're going to make the NHL next season, and I'll never be able to get near you then. I keep a separate scrapbook just for defencemen and you belong in it."

"Hey, thanks for the vote of confidence... uh, what's your name?"

"Jim." Well, his granddad called him Jim every now and then.

"There you are, Jim. Bet I can guess what position you play, with a special book on defence." *14*

They were walking along the hall toward the exit now.

"You're right. Defence, same as you," Jamie answered.

"Well, keep at it, Jim," Fotheringham said, opening the door." After you."

Then Jamie saw it: a big blue Cadillac waiting in the lot. And it wasn't empty.

"Thanks," Jamie said, turning quickly away from the door." Uh, I nearly forgot. My buddy's waiting for me out front. See you." *15*

It was late when he got home, so it wasn't until the next afternoon that Jamie remembered his autographs. As he tore out the program page with Fotheringham's signature, he couldn't resist a chuckle. Some people can't even write their own name without making a mistake, he thought as he stared at the name in front of him: D. Fotheringham. Since when did Rod or Roderick start with a D? *16*

Then Jamie remembered. Sweat Suit had called Fotheringham "D.J.". He'd thought it was a nickname at the time . Now he wasn't so sure.

D...D. Jamie repeated the letter. Don, Dan, Dennis... *17*

Jamie started flipping through his scrapbook. It went back five years, to when he was eight and his first team had made the local sports page. Don Janley... Jamie paused at the picture of a defenceman from out west. Janley was playing now in Europe. He kept on turning, page after page. Suddenly a headline caught his eye. EX STAR DEFENCEMAN VICTIM OF 401 FOG *18*
Jamie read on.

> Former Civics star Dave Jergens rolled his late-model Firebird on the MacDonald-Cartier Freeway near Kingston last night. Jergens apparently lost control of his vehicle in dense fog that blanketed a twenty kilometre stretch of the highway. He suffered extensive burns about the face and hands when the car's gas tank exploded. His condition is listed as fair. Police are still investigating the cause of the flaming crash. It is six montns to the day since Jergens was banned for life from hockey, following a vicious attack on a referee during a match with the Owen Sound Bucks. This attack on the referee was not an isolated event, but only the last of a series of unacceptable incidents both on and off the ice. He seems to have got tied up with a bad crowd, but that's no excuse. *19*

Jamie finished reading the article, which told how Jergens had destroyed all hopes for an NHL career during his second season in Junior A. The article claimed that Jergens had let fame go to his head, and that the young star had connections with some unsavory characters.

Was it possible that Fotheringham was really Dave Jergens? The picture accompanying the article did look a little like Fotheringham, but only a little. Anyway, the terrible affair had taken place three years ago. Jergens would now be too old for Junior A, Jamie thought, even if he wanted to try and play again. So stop playing the Hardy Boys, he ordered himself, and went down to dinner. *20*

Jamie decided to go to the next Arrows' game. After the game he met Fotheringham. They decided to go and get a pop.

What'll you have Jim?" Fotheringham interrupted, pointing to the selector buttons.

" A root beer, please."

It was when Fotheringham bent down to reach for the pop can that Jamie saw it - a shiny, taut, white patch of skin running across the back of the player's neck. *21*

"What's that mark on your neck?" he blurted.

"Some scar, eh?" Fotheringham chuckled as he stood up. "It's an old one. From a fire." he held out the root beer to Jamie.

Slowly, Jamie reached for the pop. Just then a voice called out. "What's keeping you, D.J.?"

Jamie spun around. *22*

"And what's he doing here?" the voice hissed. It was Overcoat Number One. Numbers Two and Three were right behind.

Fear froze Jamie's legs. All he could think of was how empty the lower hall was now.

"Just a kid, a fan of mine," Fotheringham began.

"What do you mean, just a kid? He's the one we chased that Sunday," Moustached Overcoat snapped. *23*

A stunned Fotheringham turned to Jamie.

"Then you are Jergens!" Jamie couldn't stop the words.

"Hear that, Boss?" Short Overcoat barked, grabbing for

Jamie.

"Bring him with us," the boss ordered coldly.

"But the kid can't know anything. He's just guessing." Fotheringham sounded desperate. *24*

"Let's get going," the boss ordered. Short Overcoat started pushing Jamie down the hall.

"Leave him alone," Fotheringham shouted, suddenly stepping between Jamie and Short Overcoat.

"Run, kid, run!" he yelled, as he blocked a punch from his infuriated companion. *25*

Jamie ran. He turned toward the safety of Maple Avenue. Then he remembered Fotheringham -that is, Jergens. What would they do to him? Jamie had to get help. But how? The nearest house was a block away.

The taxi stand! There were always cabs waiting in front of the arena.

Jamie darted down a side lane and circled back toward the front of the arena. He flung himself against the window to the nearest cab and gasped, "Call the police!"
A startled cabbie obeyed instantly. *26*

It was over in a few minutes. The Boss and the two men wearing overcoats were arrested.

Jamie and Jergens were driven to the nearest police station to give their statements. On the way, the young player explained. *27*

"It was a chance to play hockey again," he said.
"Even before the accident I owed these guys something for helping me out with a bit of extra money. Then, afterwards, they arranged to give me a new identify -plastic surgery for my face, new name, new papers, the works. I couldn't see any other way for me." Jergens winced at the memory. *28*

"One day they came to collect. I should have known you don't get something for nothing. These guys had never been able to touch hockey but they figured they had an "in" through me."

"But what did they want?" Jamie asked.

"Oh, they just wanted me to play Junior A level again. And,

boy, how I wanted to play. All I had to do was play good, steady defence, good enough to make the NHL." *29*

"But why?"

"Because only somebody good could throw a game now and then without being noticed."

"Throw a game?"

"That's how they planned to collect. Then they could place a few big bets against the NHL team I'd be playing for and ..." *30*

Jamie pushed himself away from Jergens, stopping him in mid-sentence.

"And I thought you loved hockey," he whispered scornfully. He could understand Jergens' passion to play no matter what. but to throw a game? Jamie scarcely heard the man's attempt at reconciliation. *31*

"I know what you're thinking, kid, and you're right. I don't belong in the game. But you do. What do you say to a few more pointers when all this is over? Even it I do say so myself, I wasn't that bad - at hockey, anyway."

Jamie looked away, then changed his mind and held out his hand. "It's a deal," he said, as the police car pulled up in front of the station. *32*

From the Nelson Series: Contexts Anthology One

Grade 7 — The Final Face-Off — Group # 3, Week # 3

Directions: Read the story and then answer the following questions in complete sentences.

1. What mystery does the main character come upon?

2. What was the story mainly about?

3. Why were the men holding a secret practice?

4. Re-read the whole story again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question.

5. Why was Rod Fotheringham so much better in this practice than in games?

6. Re-read the story one more time. Please read carefully so that you can write about what you think will happen next.

   What do you think will happen next in the story?

7. In your own words, explain what the thugs wanted Fotheringham/Jergens to do.

8. Please select an area from the story which needs to be explained so that the ideas will become more clear to you.

   The part of the story that needs clarification is...

9. How were the thugs going to benefit from their scheme?

10. Why do you think Jamie kept digging for information about what was going on?

11. Why did the thugs try to catch Jamie at the end of the story?

12. What do you think the thugs would have done with Jamie if they had caught him?

13. Why did Jergens accept the thugs' terms to play hockey even though he knew he was doing wrong?

14. If you were Jamie, would you have made up with Jergens at the end of the story? Explain.

15. How did Jamie show near the end of the story, that he was a quick thinker?

Discussion Questions

The Final Face-Off

1. How might a person go about concealing her or his identity?

2. If you were Jamie, would you have made up with Jergens at the end of the story? Explain.

3. Do you think Jergens should receive the same punishment as the older men? Why or why not?

4. Which part of the story did you find most suspenseful and exciting? Why?

5. Did you find the story believable? Tell why you think as you do.

6. Why did Jergens accept the thugs' terms to play hockey even though he knew he was doing wrong?

7. Why do you suppose Jergens offered, at the end of the story, to help Jamie with his hockey?

8. Jamie's hockey team has its first practice after the criminals are captured. Imagine that an argument occurs in the dressing room, where some of Jamie's fellow players criticize Dave Jergens for what he did. Explain how Jamie would defend him.

WE LIVED IN THE ALMONT

Eleanor Clymer

Everybody wants something. I used to be always wanting something I couldn't have. I guess I still do. Doesn't everybody? Even grownups? I used to think grownups were different, because my mother was always telling me, You can't have everything. Be satisfied with what you have. Stop asking for the impossible.

I thought, Why does she say that? If you stop asking for the impossible, you might as well be dead. But maybe grownups get so discouraged, they just give up. Or maybe they're afraid you'll get too mad and do something you shouldn't.

But sometimes it seems as if you can't help it. When you're young you want things so much, you think you'll die if you can't have them.

Sometimes you don't even know what you want.

Like, when I was younger I used to mope around a lot. I was about seven, my brother Joe was twelve. He was out all the time playing in the street, and my mother would be busy with the house. She used to help Pop. He was a Super, and we always lived in these ole houses, and Mama was always trying to keep the place clean. I was always complaining.

Mama would say, Linda Martin, what do you want? But I didn't really know.

So I saw this doll house in a store window, and I said I wanted that. I'd stand in front of that window and look at every single thing in that doll house, tables and chairs and beds, and the baby doll in the crib. I thought about it at night. It got so I almost couldn't sleep, I wanted it so much.

Well, I didn't get the doll house, and after a while I forgot about it and wanted something else. I wanted a pair of yellow patent shoes. This was when I was about ten. I was just crazy for those shoes. I pestered my mother for weeks. I must have been a real pain. She said she didn't have the money, but I didn't believe her. When I went to the store with her I could

see she had money. I didn't understand that she didn't have enough for toys and fancy shoes. I guess I was dumb. I pestered her till finally she got disgusted and said, All right. Get them.

So we bought them and they hurt my feet. But still I like to look at them.

Well, then when I was about twelve, I saw a picture in a magazine of a girl's room. It was so beautiful I couldn't stop looking at it. It was all white, with a white fur rug on the floor. I wanted that. Can you imagine? I showed it to Mama and said, I want a room with a fur rug.

Mama said, Linda, are you out of your mind? A fur rug! What next? Suppose you sweep the floor, that would make some sense.

She was always trying to make me help her. I hated it, because it wasn't any use. The houses we lived in were always so crummy. Old buildings with crackled plaster and lumpy paint and broken floor boards, and always roaches. You couldn't clean a place like that. All I wanted was to get out in the street and play with the kids out there. They were climbing up fire escapes and poking in trash cans and swiping things from stores. I thought they were so lucky. Mama wouldn't let me go. I guess she was right. We lived in some bad neighborhoods.

Joe was out a lot, Mama couldn't stop him, but being a girl, and younger, I had to stay in the house.

I liked school because it was a change. The teachers would praise me for doing my homework. Lots of kids couldn't even read. That didn't make the kids like me any better, so I didn't have many friends. That was something else I always wanted, some friends.

Besides, we were always moving. See, we had to live where Pop's job was, and either the building would be torn down, or it was so bad Pop couldn't fix it, and he'd find another job and we'd pack and move. I hated moving, because it was never any better. I thought, even if the place we lived in was terrible, at least you knew what it was like. We always hoped the next place would be better and it never was.

Then finally when I was almost thirteen, we moved to the worst place of all. The worst thing about it was, our apartment was so small, only two rooms for the four of us. You couldn't ever get away from anybody. The only place was the bathroom, and that was in the hall. Maybe that's why I had this crazy idea about the room with the fur rug.

That was when Joe started staying away from home. He was seventeen. He had quit school and got a job in a garage, and Mama kept nagging him to go back to school. So he just stayed away from the house. That made it worse for me because Mama was in such a bad mood.

Well, the furnace wouldn't work, and the lights would go out, and the sinks were all stopped up. Pop couldn't fix them. And believe me, my Pop can fix anything. He should have been an engineer, only he could never go to school. Joe is the same way, that's why Mama was so upset when he quit school.

Pop got so discouraged, he would slump down in his chair when he came in for coffee. Then he and Mama would get into arguments. Mama would say, Sam, I can't take this any more. Pop would say, You don't think I like it, do you?

Well, one day I came in from school and they were sitting at the table and talking. They didn't even notice that I came in. Mama was saying, Sam, this is it. You'll have to do something or I'm finished.

Pop said, What can I do?

Mama said, Talk to Jim.

Jim was Pop's friend from the Army. They came from the same town. Jim used to be a plumber but he got in the real estate business and now he's well off. He owns his home and has a big car.

Pop said, I can't go to Jim. I don't like to ask favours.

Mama said, Never mind that. It's not for yourself, it's for your family. Look at Joe. Look how he's growing up. Sam, you have to.

Pop sat there and stared at his hands, as if he didn't recognize them or something.

Finally he said, All right. And he got up and went out. A few days later he went to see Jim, and Jim knew of a job. Pop didn't think it would be much use going. He said if it was any good somebody else would have grabbed it. But Mama kept talking to him, and finally he went there, and what do you know, he got the job.

He came back looking real pleased. Mama asked him what the place was like, but he couldn't tell her. He went every day for a week to get it ready. Finally he borrowed a truck and Joe loaded out things into it, the beds and chairs and a couple of trunks, and we rode downtown.

It was Sunday. It was a nice sunny day in summer, and we rode past some real nice streets and houses, not slums like we had been living in. People were out walking with their good clothes on. Pop was in a good mood. I don't know when I ever saw him so happy.

Finally he stopped the truck in front to a building and said, All off.

Mama said, What do you mean, all off?

He said, I mean this is it.

Mama sat there looking at the building. She said, Sam! You mean it? And he said, Yes.

Mama was speechless. She just stared. Finally she said, It's beautiful!

I thought so too. I could hardly believe it. It wasn't like any other house we had ever lived in. It had a big front stoop with two stone lions, one on each side. The lions' noses and tails were a bit broken, but we didn't notice it then. There was a big front door with coloured glass in the top. And over the door was the name ALMONT, carved in the stone.

Mama explained to us later, that that's how they used tao make the best buildings in the old days, where rich people lived. And this used to be a very good building. Now it wasn't so swell any more, and nobody in it was rich. I didn't know it at the time. I saw some people leaning out of their windows, looking down at us, and I thought, Those must be rich people

living here.

Pop said, Well, you just want to sit here, or should we go inside? So we went in, and then we stared some more. The hallway was wide, with a marble floor and a big side staircase. Of course the floor had cracks, and the stair rail had some parts missing, but who cared about that? It was big and light, not dark and narrow like that other place.

We went on back and Pop unlocked a door, and showed us our apartment. Well I'll never forget that first look. The rooms were so light! I'll never forget those empty rooms with the sun shining through the dusty windows.

Mama kept saying, My goodness! My goodness! Sam, are you sure you didn't make a mistake? And Pop grinned at her.

There was a living room with a dining room attached to it, and a big kitchen and two bedrooms. One of the bedrooms was small. Mama said Joe should have it. I could see she was hoping he'd stay home more. But Joe said no, he didn't need it, he'd sleep in the dining room. But then we found another room, a tiny little room off the kitchen.

Mama said it was the maid's room. I said, Are we going to have a maid? Mama laughed and said that in the old days each family had a maid, and this was where she slept, so she could get up early and cook breakfast. Mama said, You can be the maid. So that was how I got my own room.

Joe and Pop brought in our furniture. We didn't have much, and Mama said, We will start saving up for a sofa. Then there was a surprise. Pop and Joe went away and soon they came back with another man helping them, and they were bringing a sofa!

Mama screamed, Where did you get that?

Pop said some tenant left it in the basement, and he found it and fixed the springs. Mama almost cried. Then she laughed. Then she said, All right, we'll start saving for a rug. All my life I wanted a sofa and a rug.

I was surprised when I heard that. It was the first time I ever thought about her wanting something like that.

Then Pop had to take the truck back, and Joe helped us put

up the beds. Then Mama sent me to the store to get stuff for supper. The store was around the corner. There was some ladies there, talking. When I walked in they looked at me and one said, Aren't you the new Super's girl? I said yes, and she said, that's nice. Tell your father I'd like to see him in 5B.

I forgot the groceries and the man winked at me and gave me a candy bar. I went home and told Mama about the ladies, and she said, I suppose they're thinking up jobs for him already. Well, they'll get good service. It's about time he had a decent job, a man like him!

We washed the dishes, and Pop came back and ate supper, and I went outside on the stoop and leaned on one of the lions. I watched the street lights go on, and the sun go down at the end of the street, and I thought, This is a good place. I have my own room, and Pop has a good job, and Joe is home. It's going to be different now.

For the first time since I could remember, I couldn't think of anything to wish for.

From the Impression Series: Inside Outside

Grade 7 — We Lived in the Almont — Group # 3
Week # 4

Directions: Read the story and then answer the following questions in complete sentences.

1. Why do you think Linda used to mope around a lot?

2. What was the story mainly about?

3. What is a "super" in this story?

4. Re-read the whole story again. Think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question.

5. Why do you think her mother finally bought the patent shoes for Linda?

6. Re-read the story one more time. Please read carefully so that you can write about what you think will happen next.

   What do you think will happen next in the story?

7. Why didn't Mother want Linda to play with the kids on her street?

8. Please select an area from the story that needs to be explained so that the ideas will become more clear to you.

   The part of the story that needs clarification is ...

9. Why did Joe begin staying away from home?

10. What evidence was there that the family had to have a change?

11. Why was Mama "speechless"?

12. What did Mama mean when she said "it wasn't so swell any more"?

13. What was Linda's first impression of the new apartment?

14. Why did Mama almost cry?

15. What evidence is there to show how Mama felt about her husband?

Discussion Questions

We Lived in the Almont

1. What made it difficult for Linda to have friends?

2. Why do you think Pop didn't want to ask Jim for a favour?

3. Why was Linda surprised at what her mother said? (referring to her wanting a rug)

4. How do you know that Linda felt totally satisfied?

5. What effect do you think moving to the Almont would have on each of the family members?

6. How did Mama feel when Joe quit school? Do you agree or disagree with her reaction?

7. What kind of freedom did Linda gain by the end of the story?

8. What experiences do you think the author may have had in order to write this story?

A BOTTLE FOR THE BOSUN

Ted Ashlee

The next time you are steaming through Caicos Passage, outward bound, keep an eye on a string of islands protected by a surf-creamed coral reef. When Fort George Island is fair on your starboard beam, it is worth your while to train your binoculars on a wrecked building sprawled near the beach. What's so great about a pile of lumber? you may ask. Well, nothing- ordinarily- but that wreckage was once the scene of a highly successful business venture owned by a Spanish woman and her husband, who happened to be a Newfoundlander. The story of their meeting on that remote Bahamian island is a strange one, and it happened like this. *1*

We were the crew on the tanker S.S. Marlin. We had taken on a cargo of kerosene in San Pedro, California, and were bound for Aruba.

We cleared the Panama Canal and creaked our way past Cristobal into the open Caribbean, logging a dignified eleven knots through gentle seas under a clear sky. Then all of a sudden the sky became dark and a storm arose.

Our storm ended as abruptly as it started. Dawn broke over a gently heaving sea that turned a brilliant cornflower blue in the early light. *2*

Suddenly Bosun Thorensen, a tough wiry little alley cat of a man whose bright blue eyes and curly red hair and beard betrayed his Viking ancestry, let out a whoop of joy. The pride of Bonavista.

"I've found a bottle, b'ys," he yelled, " and there's a letter into it."

"Better show it to the skipper," someone suggested. "Might be important."

Dutifully, the bosun handed his find to Captain Wellesley, who carefully cut the sealing wax from the bottle's neck and withdrew the cork. He shook out a tightly rolled paper onto the chart table, then flattened it carefully. It was a letter,

written in Spanish. *3*

"This was written two months ago," he remarked. "No, longer than that." He flipped the pages of his desk calendar. "Sixty-seven days ago, to be exact."

"But it's Spanish, sorr," said Thorensen. "Can you read it?"

That was an unnecessary question. Captain Wellesley was widely travelled and amazingly well read. After a few moments of study the skipper translated.

Written this 17th day of February,
1962, from Hotel Tropicana on
Fort George Island, Bahamas. *4*

I am in deepest trouble. I know that the trouble lies with Captain Gomez. That pig! I spit on him. Gomez owns the only trading schooner that hauls supplies to this small island. He charges me ten times the going rate for freight. Why Gomez is doing this to me I do not know. *5*

I own this hotel. It was my husband's. One day he took two men fishing for marlin. They never returned. It was a good boat and my husband was a good seaman. To sink and drown in calm seas-do you believe this? I cannot believe it. My cook, who has strange dreams, said that my husband's boat was rammed and sunk by a big sailing vessel. Could this be the work of Gomez? I think so, but how can I prove it? *6*

Sirs, it is difficult. This is a British colony with British law, the best in the world. I cannot get a letter to the police because I dare not fully trust anyone, not even my friends. So I throw this letter into the sea, hoping that someone will find it and make a plan. I pray to the good God that Gomez does not find it first.

Signed, Margarita Vasquez *7*

"Well, now, Thorensen," said the captain, "what do you think of that?"

"Probably some kind of a practical joke," Ivanov butted in. "Pay no attention to it, sir. Who sends out letters in bottles? Has to be a joker or a crazy person. To my mind, it's none of our business." *8*

"I just made it my business, mister." The bosun's red whiskers bristled belligerently. "I thinks that woman is in real

trouble."

"So do I," the skipper agreed. "I had the advantage of reading that letter in the original language. There's a real sense of desperation running through it." *9*

"I wish we could take a look at the situation," said the bosun gloomily, "but I guess that's no hope of that, eh? Where are we going after Aruba, Captain?"

"Baltimore, by way of the Windward Passage. But maybe we can do something. Suppose we had some engine trouble, drifted a little off course, anchored neat Fort George Island, and spent a day doing some detective work?" He lifted an eyebrow in the direction of a burly but cheery-faced cap. "How is your old engine running, Chief?" *10*

"Terrible," Chief Engineer MacTavish replied, winking knowingly. He always kept the engine operating at top efficiency in spite of its advanced years and eternal crankiness. "I've got hot bearings, plugged fuel lines, and multiple mechanical problems a deck officer wouldn't begin to understand."

"This is trickery," Ivanov interrupted. "A little off course, you say, Captain? Since when is a hundred and twenty-five nautical miles in the opposite direction a little off course? Besides that , there's nothing wrong with the thumping coffee-grinder MacTavish calls an engine." *11*

"Bear in mind, Mr. Ivanov, that I command this ship, not you," the skipper replied calmly. "I think that plea for help is genuine. The trouble is that we may be too late to do any good. That letter was written more than two months ago, remember?"

One hundred and thirty-eight hours later, treading softly on the cargo of casinghead gasoline we had taken on in Aruba, we dropped anchor. *12*

"I see the Tropicana Hotel," the captain called out. "At least, it's the only sizable building in the lagoon."

Travelling in a lifeboat we found docking space at a crowded string of floats. The snug lagoon was fairly well filled with commercial fishing vessels, smart-looking sailboats, and a couple

of glittering cabin cruisers. Dominating everything, however, was a decrepit three-masted schooner of some three hundred tonnes. There were rough patches visible on its untidily furled sails. General scruffiness and blistered paint, however, failed to hide proud and graceful lines. The schooner's name was Culebra. *13*

Bosun Thorensen snorted in disgust. "That could be an able vessel, by the lines of her," he growled. "Anyone who would treat a fine ship that way should be tossed to the sharks. I wonder what kind of person she belongs to. And what does 'culebra' mean?" he asked. *14*

"It means 'snake'," the skipper explained. "That vessel's owner has a weird sense of humour, maybe. Could be we'll find out."

"You're suspicious about something, sorr," the bosun remarked. "Do you figure the letter is a fake like the mate said?"

"Not the letter, Thorensen, but maybe the schooner," replied the captain. "Did any of you notice that white drum just forward of the mizzenmast?" *15*

"Sure, skipper," someone replied. "That's a canister for an inflatable life raft."

"No, it isn't," the captain declared. "I studied that tub with my binoculars as we rowed into the lagoon. The camouflage is pretty good, but I'll swear that drum is made of steel, not fiberglass. No, indeed, that canister doesn't contain a life raft. Nothing of the sort. And did you see that short pipe curving up from the forward end of the ship? To me that indicates a muffler for a diesel engine, and a big engine at that." *16*

"But why, skipper?"

"Good question. Simple answer. Now you take a tug, for instance. Seems over-powered, but it really isn't. Needs all the power it can cram into its hull to tow heavy barges and fight its way upstream on big rivers." The skipper's eyes narrowed. "I have an idea that Culebra faces the same sort of problem.

River navigation.' *17*

We struggled to follow the skipper's line of reasoning.

"Margarita Vasquez said that this Gomez character is often away for weeks at a time," he continued. "Why? he's got some kind of business that takes him upriver. Yes," - he drew a breath- "I think we're onto something big." *18*

Arriving on the beach, we stared at the hotel, a massive ramshackle affair festooned with tropical creepers of all kinds, many of them in glorious full bloom. The whole building was leaning drunkenly, as the saying goes, toward the sea. Was it the victim of suffocating plant life, earth tremors, or merely millions of termites industriously chewing on the foundations?

We strolled into a large room, surprisingly cool, and crowded with relaxed customers. As we looked around, a swarthy, smooth-faced character rapped loudly on his corner table. *19*

It was Mr. Gomez. We took a table close to Gomez and his three companions. There was nothing remarkable about the man except his coal-black, utterly expressionless eyes. The snake? A graceful young woman hurried to his table, delivered four glasses without pausing a moment, then walked over to take our order... The captain addressed her in Spanish. *20*

"Please, Senor Capitan," she said, with a bright smile that did not reach her worried eyes, " I am the owner of this hotel. I want to practice my English. Is very bad, no?"

"No, indeed, Senora, it is very good. Much better than my Spanish. We're just killing time here for an hour or two, if you don't mind. My ship is anchored just beyond your lagoon. Engine trouble. The chief and his assistants will have everything put to rights in short order. In the meantime, refreshments for all hands, if you please." *21*

I noticed that Gomez had taken all this in and then apparently lost interest in us. We discussed generalities- the weather, our ship, the troublesome engine. Bosun Thorensen, however, said nothing. With a dazed expression, his eyes followed the young woman's every movement. This, then, was Magarita Vasquez. Before our very eyes, "Love walked right in

and took his troubles away." *22*

Without noticing the love-struck look on his bosun's face, Captain Wellesley tore a page from his notebook, wrote a few words, and folded the paper into some money with all the skill of a card sharp. He handed the lot to the young woman when she returned with a tray.

An hour later we strolled outside. Margarita Vasquez was waiting for us, her face anxious.

"Your note told me this meeting was important, Senor Capitan. Please tell me why." *23*

The skipper launched into rapid-fire Spanish. He produced the letter Thorensen had discovered, and pointed to the bosun. Margarita replied in the same language. The rest of us stood around looking foolish. Finally, Captain Wellesley filled us in. *24*

"Gomez is probably responsible for sinking Vasquez's ship, and now he's putting the squeeze on the senora. I'm sure he never thought she'd hold out so long."

"But why? What's he want?" asked the bosun with a worried frown.

"He wants to buy this hotel," said the captain. "No doubt it would make a perfect cover for his operation." *25*

"But what's his game?" I asked.

"Can't you guess?" replied the skipper, lowering his voice. "Remember Margarita's weird cook? He had another of his mysterious hunches just last night. He sneaked aboard the Culebra and came across a cache of boxes covered with Chinese writing. One of them was open, and under the trinkets he discovered a load of automatic rifles. I'll wager Gomez is running guns to outlaw bands up the Orinoco River." *26*

"What can we do for Margarita, sorr?" the bosun wanted to know.

"Best thing is to get Gomez put safely behind bars. And the quickest way to do that is to radio the police. Let's get back to the Marlin, fast!"

We radioed Nassau as soon as we got on board. An exchange

of messages with the police made it clear that the Culebra would be kept under close surveillance, starting forthwith. We'd done all we could, and it was time to move on. But when the order to pull up anchor was given, Boson Thorensen appeared uneasy. He shuffled his feet and looked as embarrassed as a hard boiled sailor could possibly look. *27*

"I'd like to stay ashore, Captain," he blurted out at last. "Sort of keep an eye on things."

"An eye on things? Like Margarita Vasquez, for example?"

"Well, I, ah ... that is ..." stammered the bosun, red-faced.

"All right. A few of the boys can drop you off on shore. But stay out of sight until the Culebra has cleared the reef and is hull down on the horizon." *28*

As they say, the rest is history. When we went ashore in Baltimore to unload our explosive cargo, the papers were full of a battle in the Bahamas between gun-runners and the Coast Guard. The survivors, a Pedro Gomez and two others, could not expect a very bright future at the hands of the law. Three years later we met Margarita and Thorensen along with their children. They told us that their hotel tumbled over one stormy night and that they were on passage to Vancouver to start a ships' chandlery. Thorensen figured that Vancouver's warm climate would be easier for his family to get used to than down-east snow and ice. *29*

From the Nelson Series: Contexts Anthology One

Grade 7 — A Bottle for the Bosun — Group # 3, Week # 5

Directions: Read the story and then answer the following questions in complete sentences.

1. What information does the storyteller (narrator) give about the setting?

2. What was the story mainly about?

3. How does the storyteller make the setting sound real?

4. Re-read the whole story again. think carefully about what you are reading so that you can think of a good question at the end.

   Now, please write your question.

5. How does the story opening make you feel that he (Ted Ashlee) is telling the story to you, personally?

6. Re-read the story one more time. Please read carefully so that you can write about what you think will happen next.

   What do you think will happen next in the story?

7. How do you know that the narrator is a sailor?

8. Who is telling the story?

9. What is the S.S. Marlin like?

10. What was the purpose of the voyage? Where was the Marlin travelling?

11. How do you know that the cargo was dangerous?

12. What did the bosun look like?

13. What does the bosun's actions tell you about him?

14. What was the captain like? Compare him with the chief officer, Ivanov.

15. Discuss the details of the letter in the bottle:

    a. Why was the letter sent in a bottle?

    b. What problem does the writer have?

    c. What is Margarita Vasquez like?

Appendix D: Study Strategy Interview Schedule

COMPREHENSION MONITORING, MEMORY, AND STUDY STRATEGIES OF GRADE SEVEN READERS

INTERVIEW SCHEDULE

Name of Student:
Class Code:

CONTEXT: When preparing for tests

INTERVIEWER'S QUESTIONS	STUDENT'S RESPONSES
1. Most teachers give tests at the end of marking periods, and these tests greatly determine report card grades. Do you have any particular method for preparing for this type of test in Language Arts?	
2. What if you are having difficulty? Is there any particular method you use?	
3. You have mentioned that there are (number of methods) things that you do. Now I would like you to look at this scale and tell me how often you do each of the things you mentioned. (The interviewer recalls each method and the student indicates his rating.) Rating Scale: Seldom or Never, Occasionally, Frequently, Always	

CONTEXT: Reading and written assignments in class

INTERVIEWER'S QUESTIONS	STUDENT'S RESPONSES
1. When you are given a set of questions, based on a novel you are studying in class do you have any particular method to help you plan to answer the questions.	
2. What if you are having difficulty? Is there any particular method you use?	
3. You have mentioned that there are (number of methods) things that you do. Now I would like you to look at this scale and tell me how often you do each of the things you mentioned. (The interviewer recalls each method and the student indicates his rating.) Rating Scale: Seldom or Never, Occasionally, Frequently, Always	

CONTEXT: Reading and written assignments outside of the classroom

INTERVIEWER'S QUESTIONS	STUDENT'S RESPONSES
1. Teachers often assign their class the task of writing a short paper outside class on a topic such as one's family history. They frequently use one's scores as a major part of one's grade. In such cases do you have any particular methods to help you plan and write the paper.	
2. What if you are having difficulty? Is there ny particular method you use?	
3. You have mentioned that there are (number of methods) things that you do. Now I would like you to look at this scale and tell me how often you do each of the things you mentioned. (The interviewer recalls each method and the student indicates his rating.) Rating Scale: Seldom or Never, Occasionally, Frequently, Always	

CONTEXT: When poorly motivated

INTERVIEWER'S QUESTIONS	STUDENT'S RESPONSES
1. Often teachers assign their class a task of reading an article. In some cases one may not be interested in reading the article thoroughly because for whatever reason one may have begun reading it and found the article uninteresting. When you find yourself in this situation, do you have any particular methods to help you plan and read the article?	
2. What if you are having difficulty? Is there any particular method you use?	
3. You have mentioned that there are (number of methods) things that you do. Now I would like you to look at this scale and tell me how often you do each of the things you mentioned. (The interviewer recalls each method and the student indicates his rating.) Rating Scale: Seldom or Never, Occasionally, Frequently, Always	

INTERVIEW SCALE

I have some methods that other students use and I'd like you to tell me how often you use these methods.

As a guideline we are going to use a scale and I want you to pick the term that best describes how often you use each method. (The student is given a card with the scale on it.) Here are the terms:

1. Seldom, 2. Occasionally, 3. Frequently, 4. Always.

Categories	Definitions
1. Self-evaluation RATING: _____	Statements indicating student-initiated evaluations of the quality of progress of their work, e.g., "I check over my work to make sure I did it right."
2. Organizing and transforming RATING: _____	Statements indicating student-initiated overt or covert rearrangement of instructional materials to improve learning, e.g., "I make an outline before I write my paper."
3. Goal-setting and planning RATING: _____	Statements indicating student setting of educational goals or subgoals and planning for sequencing, timing, and completing activities related to those goals, e.g., "First, I start studying two weeks before exams, and I pace myself."
4. Seeking information RATING: _____	Statements indicating student-initiated efforts to secure further task information from nonsocial sources when undertaking an assignment, e.g., " Before beginning to write the paper, I go to the library to get as much information as possible concerning the topic."
5. Keeping records RATING: _____	Statements indicating student-initiated efforts to record events or results, e.g., "I took notes of the class discussion." "I kept a list of words I got wrong."

6. Environmental Structuring RATING: _____	Statements indicating student initiated efforts to select or arrange the physical setting to make learning easier, e.g., "I isolate myself from anything that distracts me." " I turned off the radio so I can concentrate on what I am doing."
7. Self-consequences RATING: _____	Statements indicating student arrangement of imagination of rewards or punishment for success or failure, e.g., " If I do well on a test, I treat myself to a movie."
8. Rehearsing and memorizing RATING: _____	Statements indicating student-initiated efforts to memorize material by overt or covert practice, e.g., "In preparing for a math test, I keep writing the formula down until I remember it."
9. Seeking social RATING: _____	Statements indicating student-initiated efforts to solicit help form peers, teachers, and adults, e.g., "If I have problems with math assignments, I ask a friend to help."
10. Reviewing records RATING: _____	Statements indicating student-initiated efforts to re-read test, notes or textbooks to prepare for class or further testing, e.g.," When preparing for a test, I review my notes."
11. Other RATING: _____	Statements indicating learning behaviour that is initiated by other persons such as teachers or parents, and all unclear verbal responses, e.g., " I just do what the teacher says."