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THE UNIVERSITY OF ALBERTA

A DESCRIPTION OF GRADE 10 STUDENTS' READING

COMPREHENSION OF SOCIAL STUDIES MATERIAL

ABOUT PERIODS OF ANCIENT, MEDIEVAL

AND MODERN TIMES

by

ⓒ DONNA CLARE FEDORATION

A THESIS

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ABSTRACT

Previous research has established that time is a difficult area of learning, while the literature suggests that written social studies material presents reading problems for students at all grade levels. Thus, it may be that Grade 10 students experience difficulty with social studies reading, the topic of which concerns historical periods of time. The purpose of the present study was to assess Grade 10 students' reading comprehension of social studies passages about specific periods of Ancient, Medieval and Modern Times and to subsequently explore by description of student responses in the test situation, the aspects of such material which may influence reading comprehension.

The test population consisted of four Grade 10 social studies classes from three high schools of the Edmonton Catholic School System. The final sample consisted of 81 subjects for whom complete sets of data were obtained. All students were given The Gates-MacGinitie Reading Test, Survey F, Form 1 and three social studies passages prepared in cloze test form: Life in Ancient Athens, Life on a Medieval Manor, and A World Divided by a Cold War. Interviews were carried out with 21 subjects from the final sample in an attempt to gain information about the factors which may have influenced the level of reading

achievement on the cloze tests. The analysis of data revealed the following major findings:

1. Grade 10 students' highest achievement on cloze tests constructed to measure reading comprehension about Ancient, Medieval and Modern Times was on the passage concerning Modern Times, while their lowest achievement was on the passage concerning Ancient Times. Scores indicating a level of independent reading comprehension were achieved by 21 students on the passage concerning Modern Times, 9 students on the passage concerning Medieval Times, and 7 students on the passage concerning Ancient Times.

2. Overall, Grade 10 girls demonstrated a higher level of reading achievement than Grade 10 boys on the cloze tests.

3. Using the Pearson Product Moment Correlation, correlations of .644, .813, and .806 were found between The Gates-MacGinitie Reading Test, Survey F, Form 1 and the cloze passages concerning Ancient, Medieval and Modern Times respectively.

4. Students appeared to perform best on the figurative expressions deletion type and worst on the time concepts deletion type. The technical terms deletion type evoked the highest instance of no response.

5. Interviews with Grade 10 students resulted in three kinds of information: their feelings about social studies reading, their approach

to the cloze tests, and their reasoning for responses to specific deletions.

The implications of these findings for authors and teachers of social studies were discussed and suggestions were made for future research.

ACKNOWLEDGEMENTS

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CHAPTER I

INTRODUCTION AND STATEMENT OF THE PROBLEM

Reading must be a serious consideration for every high school social studies teacher since studies of peoples and places removed in time and space increase students' dependence on reading as a means of accumulating information and forming concepts. Unfortunately, social studies reading assignments, in the experience of the investigator, cause many high school students to recoil. Why? Is there something about social studies material in print that presents specific problems for high school students?

Though students may appear to grasp social studies concepts in an oral milieu with teacher support, it cannot be assumed that they are able to work independently with these same concepts in the printed medium. An examination of social studies passages and a review of articles by authorities in the social studies field reveals that written social studies materials have certain characteristics, among them the presence of social studies concepts, a special vocabulary, a particular writing style, and the assumed need of background experience in the reader.

Understanding of a span of historical time is one vital concept which pervades the entire social studies curriculum and reflects these characteristics in combination. The suggestion has been made that a sense of historical perspective does not begin to develop until age eleven (Oakden and Sturt, 1922; Jenkinson, 1962). A question therefore arises. Can Grade 10 students, four years later, read social studies passages about specific periods of time with understanding? And what are the factors which seem to assist or prevent their reading comprehension of such material?

Purpose of the Study

The purpose of the study was to assess Grade 10 students' reading comprehension of social studies passages, the content of which dealt with specific periods within Ancient, Medieval, and Modern Times and to subsequently explore, by description of student responses in the test situation, the factors which may assist or prevent comprehension of such material.

Research Questions

In accordance with the purposes of the study, the following general questions were posed to assess comprehension and to subsequently gain an understanding of the factors which may assist or prevent Grade 10

students' reading comprehension of social studies passages about specific periods within Ancient, Medieval, and Modern Times.

1. What level of reading achievement do Grade 10 students demonstrate on a cloze test constructed to measure reading comprehension of passages about Ancient, Medieval, and Modern Times?

2. Do Grade 10 girls demonstrate a higher level of reading achievement than Grade 10 boys on a cloze test constructed to measure reading comprehension of passages about Ancient, Medieval and Modern Times?

3. Is performance on a standardized test of general reading comprehension a predictor of performance in social studies reading?

4. In an analysis of student performance on cloze tests, on which deletion types did students (a) perform best, (b) perform worst, and (c) make the least response?

5. What, if any, additional information may be gathered from selected students in an interview situation, to suggest further factors which may affect the level of reading achievement on a cloze test constructed to measure reading comprehension of passages about Ancient, Medieval, and Modern Times?

Definition of Terms

For the purposes of this study, the meaning attached to certain terms was as follows.

Cloze Procedure — refers to the technique whereby a reading passage previously unread is mutilated by the deletion of every 5th word and administered to subjects who attempt to restore the missing words.

Reading Achievement — refers to level of student performance on the comprehension section of the Gates-MacGinitie Reading Test, Survey F, Form 1.

Social Studies Materials — refers to those materials used for instructional purposes to give students an understanding of the relations of human beings to one another and their physical surroundings.

Ancient Times — refers to a period of time whose boundaries are arbitrarily defined as the prehistoric ages and 399 A.D.

Medieval Times — refers to a period of time whose boundaries are arbitrarily defined as 400 A.D. and 1499 A.D.

Modern Times — refers to a period of time whose boundaries are arbitrarily defined as 1500 A.D. and the present.

Design and Methodology of Study

Sample

The test population for the study consisted of four Grade 10 social studies classes in three senior high schools assigned to the investigator by the Edmonton Catholic School District. The final test sample consisted of 81 subjects for whom complete sets of data were obtained.

Data Collection

On the first day of the testing procedure all subjects received the Gates-MacGinitie Reading Test, Survey F, Form 1 as an assessment of reading achievement.

On the second day of the testing procedure, all students received three social studies reading passages dealing with specific periods within Ancient, Medieval, or Modern Times. These passages had been prepared as cloze tests, whereby every 5th word was deleted and the subjects' task was to supply the words missing as they read through the passages for the first time. The three cloze tests were taken by the subjects during one class period of 60 minutes.

Analysis of Data

The cloze tests were scored by the exact word deletion method

to be further described in Chapter III. The level of reading achievement demonstrated by the subjects was described by reference to Bormuth's research (1967). The Pearson Product Moment Correlation was used to calculate correlations between student achievement on the Gates-MacGinitie Reading Test and on each of the three cloze passages. This information was used to suggest whether there is a relationship between general reading comprehension and social studies reading.

Responses on the cloze tests were placed into categories in order to serve as a basis for description of the factors which may affect the reading comprehension of social studies passages concerning periods within Ancient, Medieval, and Modern Times.

Interviews with a selected number of subjects were used to supplement the information obtained from the difficulty analysis of responses given on the cloze tests.

Assumptions

1. A major assumption basic to the study is that cloze procedure is a valid and reliable means of testing reading comprehension. The assumption is held on the basis of evidence presented by a large body of research.

2. It is also assumed that the nature of the reading passages used

for the test instrument in this study are characteristic of social studies reading material. This assumption is held in light of current teacher practice to use many supplementary materials as opposed to one textbook. The passages used have been judged by the investigator, as a former teacher of high school social studies, to be acceptable for classroom use at the Grade 10 level.

3. It is also assumed that the test instrument was used by the subjects in good faith since the writer's assessment and description of reading comprehension of social studies material is based on the further assumption that responses to the cloze items reflect the students' thought processes while reading such material.

This assumption is based on the investigator's personal observations made during the administration of the test instruments. Students were cooperative, completed all work assigned, and appeared to work diligently throughout the testing sessions.

Limitations of the Study

The study is limited to a group of 81 subjects who had to be in attendance on two different school days in order to give complete sets of data. Absence by a number of subjects on one of the given days reduced the sample from 120 subjects to this size.

No attempt was made to account for individual differences in intellectual ability, reading achievement, attitude, personality, or socio-economic status or school experience of the subjects. Rather, the sample was viewed globally as a group of Grade 10 social studies students within the Edmonton Catholic School District. It was the investigator's intent to carry out the study in a setting as close as possible to the real conditions encountered by social studies teachers. One such condition is the heterogeneity in any one class. It is understood that any generalizations which might be made from this study must be limited to a similar population.

The amount and quality of information gained during student interviews may be limited by the investigator's unstructured approach and lack of experience as an interviewer.

Significance of the Study

The findings of this study could have implications for teachers of social studies at the Grade 10 level. Student reading problems in the experience of the investigator, often become an obstacle to the fulfilment of a teacher's and students' goals in the social studies. Specific information which may point to the source of students' problems and frustrations in social studies reading may lead to teaching strategies

which acknowledge potential reading problems within instructional

material and thus prevent or correct the occurrence of such.

It is also hoped that the findings of this study may say something

to authors of social studies reading material. The difficulty analysis

of student responses may point to the need for expanded discussion of

certain concepts and vocabulary as well as a re-evaluation of the style

in which such material is presented to students.

The Organization of the Study

Chapter I has given a general introduction to the research problem

and the methodology of the study. Chapter II presents a review of

the research and related literature on reading comprehension, the nature

of written social studies material and the problem of the concept of

time which served both as the stimuli and theoretical bases for the present

study. The design and methodology of the study is described in

Chapter III and includes a description of the student sample; an outline

of the data collected; choice of the research instrument and the sub-

sequent selection and nature of social studies reading passages for use in

the study; and the adoption of the cloze procedure. In addition, the

scoring and analysis of the data is given while the chapter concludes with

a discussion of the pilot study. Chapter IV reports the performance of

the subjects and presents the findings of the study. Chapter V summarizes

the investigation and notes possible implications for the classroom teacher

as well as makes suggestions for future research.

CHAPTER II

REVIEW OF RELATED LITERATURE AND RESEARCH

This chapter presents a review of related literature and research which served both as a stimulus to and a theoretical basis for the present study. The nature of reading and reading comprehension is discussed since this study attempts to assess and describe Grade 10 students' reading comprehension on a test of written social studies material. Because this study concerns Grade 10 students' reading comprehension of social studies material whose topics deal with specific periods of time, a discussion is presented on temporal learning and the subsequent reading problem time concepts may present when they appear in written language.

Social studies materials about periods of time are seen to present many other possible obstacles to reading comprehension. Thus, in addition to the discussion of time concepts, a section of this chapter is devoted to the nature of social studies material and its inherent features are seen to be possible factors affecting reading comprehension. A number of these features will be later used as categories for purposes of describing students' responses to the social studies reading test. The chapter concludes with a report on research substantiating the investigator's

choice of cloze procedure in the construction of a test instrument to assess and describe Grade 10 students' reading comprehension of social studies material about specific periods of time.

The Nature of Reading and Reading Comprehension

There seems to be as many definitions or descriptions of reading as there are "reading experts." No area of the school curriculum has received as much attention or created as much controversy (Jenkinson, 1973). It seems possible to categorize reading definitions into three types: 1) those that equate reading with interpretation of experience generally, 2) those that equate reading with interpretation of graphic symbols, and 3) combinations of types 1) and 2), (Dechant, 1970). The most common of definitions in professional texts seem to correspond with type 2.

Bond and Tinker (1957) wrote that reading involves the recognition of printed or written symbols which serve as the stimuli for the recall of meanings built up through the reader's past experience. Reading is a form of thinking triggered by print symbols (Jenkinson, 1973). The reader in a dynamic mental process must use his experience and knowledge to construct the concepts presented by the writer. As he encounters each word or phrase he must take into account the total context, the problems, the perplexities, and the novelties of the ideas presented.

There must be systematic examination of the ideas put forth and a reciprocal exchange between reader and writer. Thus, a view of reading as the process of getting meaning from the printed page is not adequate. Bringing meaning to the printed page reflects more accurately the reciprocal process between the printed symbols and the mind of the reader. The construction of meaning is basic to all other aspects of reading but it is remembered that comprehension also involves analyzing, discriminating, judging, evaluating and synthesizing.

For Goodman (1966), reading is a psycholinguistic process whereby the reader goes from written language, visually perceived, toward the reconstruction of a message which has been encoded in written language by the author. The author's mode of encoding this message becomes an important factor in reading comprehension since the message is a product of his own ideas and concepts. These ideas and concepts are expressed within words, sentences, and paragraphs so constructed by the author to convey his intended meaning. Subsequently, the reader, stimulated by the author's written language must attempt to reconstruct the author's message as nearly as possible. The extent of one's reading skills is a major factor in this reconstruction of the author's message. An adequate vocabulary is necessary to understand the author's choice of words; an adequate understanding of syntactic structure is necessary to understand the author's threading of separate words into whole and meaningful

sentences. And finally, within the larger unit of paragraphs, the reader

must be able to identify main ideas, supporting details, relationships,

inferences, and author's purpose.

Though reading skills are of major importance, reading comprehension

demands an adequate experiential background on the part of the reader

related to the topic of discourse. The author's written language must

stimulate appropriate ideas and concepts in the mind of the reader to

correspond with those of his own at the time of writing. Thus, Goodman

(1966:188) wrote: .

> The array of graphic marks, familiar patterned cues,
> signals and symbols which are the words in context call forth
> in the reader's mind previously acquired associations,
> experiences, and concepts.

The reader's own fund of associations, experiences, and concepts

is seen to be an essential factor in the ability to achieve comprehension

and again it is stressed that these, previously acquired, become the

"raw materials" of reading comprehension. The ideas and concepts that

form this raw material become, through the process of reading, refined,

developed, and arranged into new patterns of combinations and associa-

tions (Walker, 1968).

The emphasis on the reader's mental resources is recurrent in the

literature. Gray (1960) wrote of the importance of the reader's

interests, background experience, biases, preconceptions, processes of

clear thinking, and sound judgment. Competent readers must be equipped with many experiences, understandings, and skills. Goodman (1966) wrote that comprehension is the end product of a long chain of prior experiences, conceptual developments and language learning on the part of the reader. Or as Frank Smith (1975) more recently and succinctly wrote, comprehension means relating new experience to the already known.

Repeating, in summary, comprehension in this study is seen as a thinking process, stimulated by the printed symbol. The Grade 10 students in the study were required in this process to use their experience and knowledge to construct the concepts presented by the writer. They participated in this process through the completion of cloze tests whose content dealt with Ancient, Medieval, and Modern Times.

Time in the Social Studies Curriculum

Introduction

The clear comprehension of time has always been considered an important factor in the interpretation of historical data. The need to understand and deal with concepts of time and chronology pervades the entire social studies curriculum. Other social studies concepts cannot be fully developed without reference to time and chronology. Textbooks in the social studies area are, in the investigator's experience

as a social studies teacher, crammed with concepts relating to time,

yet little is known about the ability of high school students to under-

stand and use these terms effectively in working with written social

studies material. There is need for teachers of the social studies to

become conscious not only of the concepts of social studies, but how

the concepts are expressed through print.

Teachers should be able to analyze both students' language and

instructional materials in order to develop teaching strategies which may

improve the understanding of time and related concepts.

Research Concerning Students' Understanding of Time

Research efforts concerning students' understanding of time appears

to have produced two distinct types of information. One line of research,

discussed in this chapter, has pursued a knowledge of what time concepts

are found to be developed in children at various age levels. Such

research would seem useful in pointing out what time concepts are under-

stood or misunderstood and could influence the writing of social studies

material and the development of instructional strategies for teaching

time concepts as an integral part of the social studies curriculum.

Another line of research seeks to determine the effects

of systematic instruction about time at various age levels. Though little

research has been done in either of these topics at the secondary level,

it should not be interpreted to mean that the need does not exist. This

is especially true since 1) history courses tend to be very concentrated,

and 2) widespread misunderstanding of time concepts have been found

at this level (Decaroli, 1972).

Development of Time Concepts in Children

The sense of chronology which deals with events in sequence and

which is so indispensable to the study of the past comes late with children.

Knowledge of conventional time is a slow process, starting at age four.

Children appear to learn first the meaning of time words in ordinary use,

for example, days, and weeks. The understanding of chronology and

the arrangement of historical periods is a culminating point in temporal

learning which is not reached until adult years and it is said that some

never reach this level of understanding (Pistor, 1939).

The power to think of the past as different from the present does

not seem to develop before the age of eight. Most children are eleven

years old before they have a full understanding of reckoning time and

most do not have any sense of chronology before grade six. (Oakden

and Sturt, 1922; Pistor, 1940).

Preston (1958), wrote that students are sixteen years old before

they catch up to adults in their understanding of time words and dates

and it is not until grade twelve that they seem to acquire a satisfactory

perspective in being able to number events in chronological order.

Spiro (1948) noted the inability of both junior and senior high school students to cope with social studies problems involving time relationships. Though he did not cite the actual surveys, Spiro referred to instances in these where "a significant percentage" of high school graduates and college students could not date the middle ages, nor see the relationship between 1066 and Feudalism, interpret time phrases of a general nature, recognize the word decade, nor associate prominent Americans with the period of their contribution to national development. Wesley and Wronski (1958) report a study where 204 high school students and 233 college and graduate students were asked to respond to phrases with a specific date. The college students showed a greater grasp of chronology and maturity was assumed to be a considerable factor in the development of concepts of time. The investigators reported a "surprising number" of occurrences where people did not know the meaning of words like decade, modern time and where expressions such as soon, in the past, centuries ago were loosely interpreted. A frequently cited study by Friedman (1945) attempted to get an over-all picture of students' time comprehension. The study involved 667 subjects from grades seven through twelve. Friedman's study, as did the Wesley and Wronski study, conceded that general maturity is the major factor in the understanding of of time since students were seen to progress in their understanding of time

with each succeeding grade. It was reported that students "approach

maturity" in comprehension of time concepts by the tenth grade. The

data also revealed low relationships between scores on tests dealing with

time and I.Q., sex, and socio-economic status.

Basically, then, the literature seems to emphasize a difficulty in

the understanding of time concepts and concludes that this understanding

is a slow developmental process. Even at the high school level, there

remains a question as to how well this understanding is developed.

What then is the level of understanding of Grade 10 students when they

are confronted with social studies passages with themes surrounding periods

of time? Can these students be expected to exhibit an adequate appre-

ciation of the evolutionary relationships between other periods of time

and our own? Questions related to the difficulties of such material,

and the skills and abilities needed to work with such material remain unasked

and unanswered.

It is because of these questions that this investigator attempted to

assess Grade 10 students' reading comprehension of social studies passages

whose content dealt with Ancient, Medieval, and Modern Times and to

subsequently explore, by description of student responses in the test

situation, the factors which may affect comprehension of material which

is so concentrated with concepts of time and concepts dependent on an

understanding of time.

The Nature of Social Studies Reading Material

Introduction

As stated previously, the reader's cognitive processes and matura-
tional level in language and cognition are important factors in his attempt
to comprehend written material.

However, certain features within written social studies material may
present obstacles to reading comprehension. The following section considers
those characteristics of social studies reading materials which may in
themselves be sources of reading problems for the Grade 10 student. A
number of the features cited here as characteristics of social studies
reading material will later be used as the basis for categorization of
deletion types in the cloze tests. The resulting categories will be used
for purposes of describing students' responses to the social studies reading
test.

A number of authorities in the social studies field have shown
concern in their writing for the enormous vocabulary load in social studies
material. (Wesley & Wronski, 1958; Preston, Schneyer, & Thyng, 1962;
Witty, 1965; Jarolimek & Walsh, 1969.

Technical terms. A portion of the vocabulary load consists of
technical terms: those words of restricted use and meaning within the
social studies field. Such words may present reading difficulties since

their meanings cannot always be determined through contextual clues.

For example, "The serf took the grain to the mill."

Figurative expressions. There are also figurative expressions:

those having a different connotation from the literal meaning usually

associated with the terms themselves. These can be a source of confusion

as students often use the literal rather than the intended meaning. For

example, the statement, "India was the jewel of the British Empire,"

illustrates a use of figurative language which many students may find

confusing as they read social studies material.

Multiple meanings. Social studies material also contains many

words with multiple meanings and thus, the choice of appropriate meaning

depends on the context. For example, Preston, Schneyer & Thyng (1963:

39) cited the word "power" used in five different ways within one history

text:

        The Supreme Court had no power to issue such an order.
        ...smaller buying power.
        ...Europe's military power.
        ...the policies and interests of foreign power.
        The Republican Party was then in power.

Social Studies concepts. Finally, there are words which denote

social studies concepts specifically. Table 1 presents Wesley & Wronski's

(1958) attempt to delimit the major classes of these concepts dealing

directly with human relationships. It would seem that an understanding

TABLE 1

WESLEY AND WRONSKI'S MAJOR CLASSES OF SOCIAL STUDIES CONCEPTS

Concept	Example
1. Action	(serve, entertain, thinking, reveal)
2. Agency	(company, mediator, clerk, ticket)
3. Behavior	(worship, lawless, beg, lying)
4. Belief	(democracy, deity, capitalism, scientism)
5. Change	(new, develop, large, improve)
6. Communication	(publish, poem, newspaper, speak)
7. Custom	(holiday, bow, game, title)
8. Entity	(gift, man, flag, custom)
9. Group	(class, army, board, team)
10. Ideal	(truth, respect, order, happiness)
11. Institution	(university, marriage, religion, government)
12. Instrument	(street, barn, strike, sword)
13. Invention	(legislation, discovery, constitution, irrigation)
14. Obligation	(obey, taxes, debt, renew)
15. Place	(island, beyond, China, far)
16. Problem	(crime, delinquency, unemployment, war)
17. Process	(voting, impeachment, packing, recreation)
18. Profession	(doctor, lawyer, minister, teacher)
19. Quality	(loyalty, respect, pure, kindly)
20. Relationship	(Husband, cousin, captain owner)
21. Situation	(prisoner, opportunity, blind, witness)
22. Status	(poor, fortunate, private, health)
23. Time	(long, century, quickly, whenever)

of these concepts is dependent on the reader's background of experience and maturity. (Jarolimek, 1963).

Certainly the student must have an understanding of both the author's and the field's vocabulary in order to succeed with social studies reading. In confronting this specialized vocabulary, students may have two difficulties: first, vocabulary that is unknown to them; and second, vocabulary that consists of familiar words that become incomprehensible in a new context.

Passages such as those used in the present study where the topics concern fifth century Athens, the medieval manor, and the cold war, because of their descriptive explanatory nature, would be expected to contain many examples of words used in ways peculiar to the period and the purpose of the author in his discussion of the periods. Thus, confronted with technical terms of limited usage, words with various meanings, and words whose function is to evoke concepts, an inadequate social studies vocabulary may seriously impede Grade 10 students' attempts to read and secure the intended meaning of passages dealing with periods of time which are outside the realm of his direct experience.

Concept Load

Social studies courses are overloaded and overly-compressed with concepts (Preston, Schneyer, & Thyng, 1962). The concepts in text books and courses of st   numerous to be mastered by reading or any other means. Wesley and   8) attempted to delimit the categories of social studies   ed a list of twenty-three major classes of

concepts while noting that they do not cover the entire range. The number of words that can fit into these classes is overwhelming. The reader may have many difficulties as he attempts to acquire concepts through the printed medium. A word may label an experience he has not had; it may be worthy of more than one interpretation, or it may be highly abstract, figurative, even facetious, insincere, rhetorical or erroneous. Faced with all these difficulties, students sometimes fail to respond. They may vaguely postulate a meaning and proceed as though they understand, thus impairing adequate reading comprehension.

This would certainly seem to pose a reading hazard in social studies passages dealing with topics like fifth century Athens, the medieval manor, and the cold war which Grade 10 students may view as detached and remote from human life. Because such passages explain and describe specific periods of time, they would be expected to involve many of the major classes of social studies concepts as delineated by Wesley and Wronski (1958). If students are limited in their personal experience with these concepts or lack in maturation of these same concepts, reading this type of material may present problems in terms of understanding and interpreting the selections.

Specific Concepts of Time and Place

Because the investigator views the concepts of time and place to be so vital to the understanding of social studies material about periods of time, they are discussed separately from the general discussion of social studies concepts.

Social studies material is, to a great extent, historical; it inevitably focuses on the past since present time is but instantaneous. Thus, the concept of time is one that pervades the entire social studies curriculum and is of fundamental importance in social studies reading material. Though the vocabulary of time concepts is not especially large, it is in constant use. Wesley and Wronski (1958) cite the occurrence of over one hundred time concept words in The Teachers' Word Book of 30,000 Words, by Thorndike and Lorge (1944). The more recent American Heritage Word Frequency Book, a survey of 1,000 published texts for grades three to nine, (Carroll, Davies, & Richman, 1971) records the frequency of occurrence of time words important to the present study. The words time, ancient, medieval and modern occurred 8,490; 531; 43; and 751 times respectively.

Most time expressions are indefinite and as such are subject to misinterpretation by the reader. Expressions such as "ancient times," "medieval days" and many others must be accurately understood by the reader or he misses important elements in the author's communication to him. A realization of time and the concepts that indicate it would seem to be an essential element in social studies reading.

Wesley and Wronski (1958:445) quoted von Herder, the German geographer, who termed history and geography:

the stage and book of God's household--history the
book and geography the stage ...whoever studies one without

the other understands neither and whoever despises
both should live like the mole, not on, but under the
earth.

As indicated above, time and place concepts are inseparable
in history and geography. Time and place furnish the two specific elements
that make events tangible and significant and supply the differentiating
aspects that make each event unique. Social studies materials make
constant use of words that locate places upon the earth's surface and
those proper nouns that are used to indicate a definite area or space.
Students must be prepared in social studies to read and understand words
which describe when and where history was made in order to appreciate
the periods under discussion. Many topics within social studies material
require an understanding of both time and place if the reader is to
achieve a clear understanding. For example, a passage concerning fifth
century Athens would have only vague meaning if the reader has no
appreciation of how long ago the fifth century was and what conditions
were characteristic of that time or where Athens is. Similarly, topics
concerning the medieval manor and the cold war would necessitate
location of events within a certain time and place if they are to be
clearly understood.

Writing Style

Nature of style and content. Authorities in the reading field cite
distinctive characteristics of the writing style of social studies material

which may be a source of difficulty for students (Fay, Horn, & McCullough, 1961). Most social studies material is expository yet the reader must be prepared for shifts in the nature of the style and content. Material may be at one time chronological (it is going somewhere); descriptive (telling the characteristics of something); explanatory (telling why or how); comparative or contrastive (telling how two things are alike or different).

.Lack of personal references. Another characteristic of social studies writing is its lack of personal references. Time, place, events, and their interrelationships are given prominence while information about romantic characters is often incidental. The emphasis is on social patterns and the reader must orient his thinking to consideration of a whole society; its characteristics, values, and its relation to contemporary as well as preceding and succeeding societies.

Grammatical constructions. In social studies material, grammatical constructions have much to do with the ease of interpretation and understanding by student readers. Material which is logically presented requires a special mind set for reading. For example, connectives are often used to join contrasting sets of data and this necessitates awareness of the shift in meaning and retention of one set of data as items of the second are presented. The reader must also be alert to parts of speech used

in uncommon ways such as starting sentences with connectives, using familiar prepositions in unfamiliar ways, and using adjectives to modify adjectives. It is important that punctuation and notation be noted and used. Italics may signal the use of a foreign language, a technical term, or emphasis. Abbreviations and symbols must be learned. The colon frequently alerts the reader to a list; the comma often sets up an appositive; and parentheses enclose a pronounciation, definition, explanation, or an aside. Avoidance of these and other additional cases (headings, underscoring, notes, footnotes) in sole favour of the usual print may deprive the reader of information which contributes to greater understanding of the material being presented (Herber, 1970).

It would seem that passages about fifth century Athens, the medieval manor, and the cold war may pose reading difficulties for Grade 10 students. The nature of such material with its varying shifts from chronology to description, to explanation, to comparisons and contrasts along with the grammatical constructions often used to make these shifts require a certain logical mind set for reading which Grade 10 students may not have. This material which lacks the human element, imagery, and relevancy in its discussion of times, places, and conditions of the past which they cannot know first hand, may pose reading problems for students of the "now" generation who may not be sufficiently matured to have a true historical perspective.

Summary

The test of social studies reading in this study involved three

cloze passages: <u>Life in Fifth Century Athens</u>, <u>Life on a Medieval Manor</u>,

and <u>A World Divided by a Cold War</u>.   If time is viewed as a con-

tinuum, these passages can be seen to consider periods of time within

the whole continuum.   These periods of time are seen by this writer

to have boundaries along the time continuum and are noted historically

because they involve outstanding, specific happenings, specific people,

and specific life styles within certain geographic locations.

These concepts themselves have already been discussed in this

chapter as potential problems to Grade 10 student readers of social

studies.   But it would seem that the reading of social studies material

about periods of past time may present a more complex problem than at

first indicated.   It would seem that to understand material about past

time, students must move themselves from their own place in time to

the period they are reading about.   They must be able to "transplant"

themselves to that period and in order to read with understanding, they

must live that period as the people of the period.   They are forced,

for example, to contend with vocabulary specific to the description

of that period, and sometimes descriptions of life styles with which they

have, in many cases, no experience.   The students involved in this study

had yet another task to accomplish. They moved back from their own historical point of reference in 1974 to three distinct periods within Ancient, Medieval and Modern Times. Furthermore, it was occasionally necessary to move from one period of time to another while reading the same passage. For example, in the passage Life on a Medieval Manor, the sentence, "Probably the Roman in 100 A.D. used more advanced methods than did the serf of 1000 A.D.," required the students to adjust their "time gears" while reading.

It has been seen that the reading of social studies material is a complex process. It cannot be assumed that Grade 10 students will automatically learn new connotations of familiar words, grasp new concepts, or understand chronology. By examination of their responses on the cloze test, it is expected that certain patterns of response may suggest the types of words which cause Grade 10 social studies students reading comprehension problems as they attempt to understand written material about topics removed from their personal time and space.

CHAPTER III

DESIGN AND METHODOLOGY OF THE STUDY

This chapter describes the test sample, the test instruments and the data collection. A rationale is presented for the investigator's use of cloze procedure. The selection and nature of the reading passages chosen for the study is discussed as well as the adoption of cloze procedure for the same passages. In addition, the procedures for the scoring and treatment of data are given. The chapter concludes with a report of the pilot study.

The Sample

The testing population consisted of four Grade 10 social studies classes (120 students) from three senior high schools assigned to the investigator by the Edmonton Catholic School System. These schools were described by an official of the school system as a representative cross section of the students attending the high schools of the Edmonton Catholic School System. One school draws students from an average socio-economic area, another from both high and low socio-economic areas, and the third, due to the multiplicity of programs offered, draws students from all socio-economic areas of the city.

The final test sample consisted of 81 Grade 10 students from the four social studies classes. No attempt was made to stream for individual differences in intellectual ability, attitude, personality, socio-economic status, or school experience of the subjects. Rather, the sample was viewed globally as a group of Grade 10 social studies students. It was the investigator's intent to carry out the study in a setting as close as possible to the real conditions encountered by social studies teachers. One such condition is the heterogeneity in any one class.

The test sample was smaller than anticipated by the investigator. This was due to the absence of a number of students on one of the two testing days. Attendance at both sessions was necessary in order to obtain complete sets of data. Testing occurred in the final weeks of May and first week of June in 1974 and this apparently is a time when high schools experience attendance problems.

The students in the final test sample of 41 girls and 40 boys ranged from 15 to 17 years of age. This data was obtained from class lists and record sheets completed by students.

The Testing Instruments

The Standardized Reading Test

The Gates-MacGinitie Reading Test, Survey F, Form 1 was the standardized test chosen for the assessment of general reading ability.

This test consisted of three parts: Speed and Accuracy, Vocabulary, and Comprehension. The final data analysis used only the results of the comprehension section. This section of the test measures students' ability to read complete prose passages with understanding.

This 1969 Survey F test is a recent addition to the well known series of Gates-MacGinitie Reading Tests covering Kindergarten to Grade 12. Because the latest Sixth Mental Measurements Yearbook dates to 1965, the new Survey F of the Gates-MacGinitie Reading Tests has not been reviewed. However, this investigator finds many of the comments in the 1965 edition's review written by George Spache to be applicable to Survey F.

Spache found the Gates-MacGinitie Reading Tests to have a good format and to be a useful instrument for determining the level of competence in reading of a group of pupils. The material in the tests has face validity and the reliability coefficients are satisfactory. (The Technical Supplement of the 1969 test reports a .91 reliability coefficient for the comprehension section at Grade 10 level). He refers to "minor limitations" of the test, for example, vague directions and lack of information on the establishment of norms. Examination of the 1970 teacher's manual shows improved directions to students and the technical supplement contains detailed information on the procedures for establishing norms. Spache concludes that the Gates-MacGinitie Reading Tests will find wide and profitable use in survey testing and in evaluation of reading programs.

The Cloze Tests

Three social studies passages, Life in Fifth Century Athens, Life on a Medieval Manor, and A World Divided by a Cold War were chosen and prepared in cloze form for administration to all students. The rationale for the use of cloze procedure and the selection and nature of these social studies passages are discussed later in this chapter. Samples of cloze tests are included in Appendix I.

The Interview

Within 10 days of the administration of the cloze tests, twenty-one students were interviewed to discuss, in retrospect, their reasoning for answers to specific deletions. To choose candidates for the interview, students were ranked according to their performance on the cloze tests, and the total sample divided into thirds. The resulting three groups were classified as High, Middle, and Low. Seven students from each group were chosen to participate in recorded interviews with the investigator. The seven students chosen came from the high, middle, and low positions within their respective groups. Data concerning the interviewees' performance on all aspects of testing is summarized in Table II.

The deletions chosen for discussion were the result of an "eyeballing" of the data and were perceived by the investigator at the time to be representative examples of the deletions causing frequency of confusion

TABLE II

IDENTIFICATION AND BACKGROUND DATA
OF SUBJECTS INTERVIEWED

Subject	Group	Rank of Gates-MacGinitie Within Total Sample	Rank on Cloze Tests Within Total Sample	Raw Scores on Cloze Tests		
				Ancient	Medieval	Modern
				66	72	70
1	High	7	1	31	32	40
2	"	4	2	36	44	43
3	"	3	3	36	39	64
4	"	10	10	34	35	44
5	"	18	11	31	35	37
6	"	11	19	31	31	32
7	"	27	20	24	32	35
8	Middle	14	30	28	32	31
9	"	37	31	27	18	36
10	"	29	32	26	27	27
11	"	23	39	22	20	34
12	"	25	42	22	37	26
13	"	45	47	14	24	32
14	"	52	50	20	24	25
15	Low	58	55	18	28	17
16	"	67	56	18	19	26
17	"	75	60	17	20	24
18	"	28	63	14	19	24
19	"	63	65	22	24	8
20	"	56	73	18	18	12
21	"	76	75	17	17	13

as the students read the passages. Interviews were conducted with reference to completed cloze tests. The examiner pointed to specific responses and asked the students to verbalize their reasoning for choice of that response, whether it was correct or incorrect. All interviews were recorded, transcribed, and subsequently analyzed in an attempt to gain further insights into the thought processes operating as students read the passages. It was hoped that student verbalizations about their written responses might yield information concerning their achievement or breakdown of comprehension. The transcript of one interview from each of the three groups is included in Appendix II.

The Data Collection

Two testing sessions were held with each of the four classes participating in the study during the final weeks of May 1974. All testing sessions were conducted by the investigator. On the first testing day, students received the Gates-MacGinitie Reading Test, Survey F, Form 1 as an assessment of general reading ability. Though the test consisted of three parts, Speed and Accuracy, Vocabulary, and Comprehension, the final data analysis used only the Comprehension section. The Technical Supplement supplied with this test indicates that it is best to use the comprehension score if a single index of a student's reading ability is desired. Also, this section of the test was felt by the investigator to be most related to the questions being posed in the study. The test was given under timed conditions as specified by the test manual.
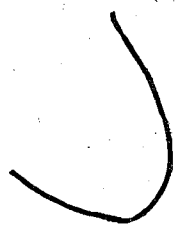
At the second testing session, students were given the series of three cloze passages. Because of time limitations, the passages were given as pre-reading cloze tests, that is, the students had not read the passages in their unmutilated state before receiving the cloze tests. The tests were given during a sixty minute period, the length of time having been concluded as adequate following the pilot study. The tests were presented to the students in a stapled test package. These test packages were assigned through use of a random number procedure. This procedure had been previously carried out as follows. The students' names on the class lists of the test population were numbered consecutively. Meanwhile, the contents of the test packages had been arranged in the six possible orders and stacked so that each variation occurred at every sixth position. Then the table of Random Numbers in Kerlinger (1973) was read horizontally and as a student's identifying number turned up, he was assigned the test package at the top of the stack. Each student's name was written on the test package he was to receive. This procedure was used to compensate for any learning effect which may have taken place during completion of the cloze tests. Students were instructed to do the tests in the order in which they appeared in their test packages.

The Use of Cloze Procedure

In a presidential address to the National Reading Conference (1974), Rankin stated that, in spite of some limitations, the cloze procedure, after twenty

years of use in research, had still much to recommend it as a basic

technique for studying language and reading. Since the intent of this

study was to explore by description, both the process as well as the

product of reading comprehension of social studies material about periods

of time, the cloze procedure was chosen by the investigator as a method

of obtaining data. It was felt that this procedure had the greatest

potential of revealing the students' operative thought processes during the

reading act. As Jenkinson (1957) related, past methods of testing reading

comprehension have usually equated the ability to answer questions either

spoken or written with comprehension. This presumes that the student has

understood the question accurately. Multiple-choice tests, while aiming

at objectivity in marking, involve a process of elimination or different

processes other than the ability to form a reply. Since the investigator was

interested in the underlying processes which assist or prevent comprehension,

it was therefore concluded that the cloze test procedure and subsequent

data obtained from interviews might provide the information sought.

Cloze procedure is a technique introduced by Wilson Taylor in 1953

and has been described as having tremendous potentialities for practical

use in the field of reading. The term "cloze" was coined from the Gestalt

concept of closure--the tendency for an organism to form a complete

whole by filling in gaps in a structure. Taylor (1953) defined a cloze

unit as any single occurrence of a successful attempt to reproduce accurately

a part deleted from a message by deciding from the context that remains,
what the missing part should be. In general, then, cloze procedure is
a means of measuring the degree of correspondence between the language
of the message and the language system of the reader. To the extent
that the reader's language facility allows him to utilize the semantic and
syntactic information in a passage, he is able to complete the cloze
task and communication (comprehension) is assumed to have occurred.
Thus, if the encoder producing a message and the decoder receiving it
have highly similar semantic and grammatical systems, the decoder ought
to be able to predict or anticipate what the encoder will produce at
each moment with considerable accuracy. In other words, if both members
of the communication act share common associations and common tendencies,
they should be able to anticipate each other's verbalizations (Ronkin,
1959). Conversely, a passage that uses vocabulary or grammatical patterns
unknown to the reader is difficult to complete, and thus comprehend.

A review of research was carried out to establish the validity of
the cloze procedure as a measure of reading comprehension.

Research Relating to Cloze Procedure as a Valid Measure
General and Specific Reading Comprehension

A substantial research base exists in the literature establishing the
empirical validity of the cloze procedure for measuring readability, intelligence,

and pre-reading knowledge, as well as several components of reading comprehension (Rankin, 1959). Literature on reading comprehension considers the use of cloze procedure as a measure of general and specific comprehension and the use of cloze procedure as a measure of reading comprehension as an on-going process. The review of research presented here considers these two topics.

Cloze procedure can be used to construct tests for the purpose of measuring either general reading comprehension as measured by standardized reading tests or specific comprehension of a particular article.

The cloze procedure has been extensively examined as a technique for measuring general reading comprehension as measured by standardized reading tests. Jenkinson (1957) working with students in Grades 10, 11, and 12 was the first to report correlations between cloze scores and a standardized reading test. Using the Vocabulary and Comprehension sub-tests of the Co-operative English Test, C-2, she obtained correlations of of .78 and .73 respectively. In his doctoral dissertation, Rankin (1957) used the Diagnostic Reading Test, Survey Section as a criterion of general reading skill and obtained correlations of .29 with story comprehension; .68 with vocabulary; and .60 with paragraph comprehension when correlations were made with cloze scores.

Ruddell (1963) reported correlations of .61 to .74 between cloze scores and the Paragraph Meaning sub-test of the Stanford Achievement

Test. In an investigation involving Grade six students, Schneyer (1965) correlated cloze scores on 10th word deletion exercises and the Gates Reading Survey and obtained correlations of .63 and .74 with vocabulary and .60 and .68 with reading comprehension. Correlating 20 cloze tests with the Reading section of the Metropolitan Achievement Test, Friedman (1964), in an investigation of the use of cloze procedure for improving the reading comprehension of foreign students, obtained correlations ranging from .63 to .85 with vocabulary and .71 to .87 with the total score. The results reported here show a substantial relationship between cloze test scores and results of standardized reading tests.

In order to determine the validity of the cloze test as a measure of specific comprehension, cloze scores have been correlated with comprehension test scores covering the same material and the conclusion is that cloze procedure is also a valid measure of specific reading comprehension. In fact, it appears to be a more accurate measure of specific reading comprehension than of general reading comprehension as measured by standardized tests. In the previously mentioned study Jenkinson (1957) reported a correlation of .82 between any word deletion cloze test results and objective questions based on the same material. Rankin (1959) obtained correlations of .78, .86, and .78 between comprehension tests and cloze tests. More recently, Bormuth (1963) reported

correlations from .73 to .84 between nine cloze tests and nine comprehension tests, as well as a correlation of .93 between the total scores of the comprehension tests. On the basis of the studies reported here, cloze procedure appears to produce tests which tend to measure specific comprehension of an article better than general comprehension. This supports the investigator's use of cloze procedure as a measure of reading comprehension for three social studies passages concerning periods within Ancient, Medieval, and Modern Times.

Research Relating to Cloze Procedure and Its Use for Measuring Reading Comprehension as an On-Going Process

Rankin (1959) saw the greatest potential of the cloze technique for its use in measuring reading comprehension as an on-going process, that is, a learning process which takes place during the reading of a passage. Taylor (1953) and Rankin (1957) measured reading comprehension as a learning process and obtained gain scores between pre and post tests at .001 level of significance. In order to measure the amount learned through reading a passage two cloze tests based on samples of an article were prepared and administered one before and one after reading the passage.

Jenkinson (1957) used cloze procedure to study reading process

in yet a different way. Based on cloze test performance on three literary passages, she interviewed a select number of students in Grades 10, 11, and 12 and had them take another cloze test while simultaneously verbalizing reasons for cloze responses. Analysis of interview data revealed students' recognition of syntactic clues, sensitivity to style, fusion of separate meanings into ideas, recognition of implied meanings, verbal flexibility, knowledge of word meanings, and language structure. This use of cloze procedure thus yielded many insightful findings concerning the underlying factors involved in the process of reading. Again, previous research substantiates this investigator's use of cloze procedure and subsequent interviews as a valid means of exploring factors influencing reading comprehension while now extending the investigation into the area of social studies. Furthermore, Rankin (1974) has indicated that work concerning the use of cloze over a broad spectrum of age levels has been done and it is now concluded that cloze exercises or tests can be administered to readers from Grade one to adult years. The procedure was further deemed to be an appropriate method of testing for Grade 10 students.

Having substantiated the use of cloze procedure, the investigator then selected the reading passages which were to be subjected to this procedure for the present study.

Adoption of Cloze Procedure

Following selection of the passages and control for readability each was prepared as a cloze test. Deletions were made throughout the entire articles by use of the objective method introduced by Taylor in 1953. This method of omitting every fifth word was supported by MacGinitie's 1960 study (cited by Bormuth, 1965) in which experiments varying the numb   . . w.... .. ze test items were done. The findings indicated the   more words of continuous context appeared on ei   ar .   .   .   ..., . item's difficulty was unaffected by the de   _ d   the test.

deletions in   e present study were treated like words for purpose   and were replaced by blanks of 15 type spaces in length.   e passages used in this study were prepared as every fifth word deletion tests. The number of deletions for each test were; 56: Life in Fifth Century Athens; 72: Life on a Medieval Manor; and 70: A World Divided by a Cold War. Taylor (1956) suggested that a 50 word deletion test contained a sufficient number of items to attain the level of precision need   in experiments involving cloze procedure. More recently, Rankin (1974) has stated that the conventional 50 item cloze test does not always result in high enough reliability for individual use and that longer tests should sometimes be used.   he cloze tests used in this study meet that criteria.

Selection of Social Studies Reading Passages

Three different passages with topics concerning specific periods within Ancient, Medieval, and Modern Times were chosen for use in the study. The selection, <u>Life in Fifth Century Athens</u>, reports a specific period of time marked by a characteristic life style. <u>Life on a Medieval Manor</u> again concerns a specific period of time marked by a life style peculiar to the time and this is described throughout the passage. Similarly, <u>A World Divided by a Cold War</u> describes an important political development over a specific period of time.

To read passages about specific periods of time may make great demands on Grade 10 students. The material used in this study concerns the events from Ancient, Medieval, and Modern Times. A consideration of the adolescents' sense of time and social studies concepts leads the investigator to suspect that this kind of material frequently used in the classroom may pose reading problems. To make sense of Fifth Century Athens, the Medieval Manor, and the Cold War, the student reader probably falls back on comparison and analogy with his own experience and the concepts which regulate it. But he cannot do this effectively until his thinking has reached some maturity. This takes years and the midadolescent stage is very formative in this respect. (Burston & Thompson, 1967).

In light of current teacher practice to use many supplementary

materials as opposed to one textbook, three passages for this study were
selected from <u>Our World Throughout the Ages,</u> edited by Platt and
Drummond (1961). The investigator, as a former teacher of high school
social studies, judged the material to be acceptable for classroom use
at the Grade 10 level. A detailed description of the nature of these
passages is given later in this chapter. The investigator chose a text
which was felt to be unknown to the students participating in the study
so that memory would not be a factor in the subjects' completion of the
cloze tests. The passages were approximately the same in length as
indicated in Table III. <u>The Flesch Readability Formula</u> (Klare, 1963) was
used as a means of guaging the ease with which the passages might be
read. The estimate is expressed in a grade level at which the passage
should be read with ease and at which the average student will be able
to answer three quarters of the questions concerning detail, appreciation,
import, vocabulary, and concepts on a reading comprehension test. Thus,
a score of 7.5 for a passage indicates material that can be handled by
a student who is in the fifth month of grade seven.

In an attempt to control the readability levels, the three passages
were altered slightly, sometimes by shortening sentences or rephrasing to
cut the number of affixes. The resulting readability level calculated by
the Flesch Formula ranged from grade 7.5 to 7.9 as shown in Table III.

TABLE III

FACTORS DETERMINING READABILITY OF SOCIAL STUDIES
PASSAGES USED IN THIS STUDY

Passage	Total Number of Words	Average		
		Sentence Length	Number of Affixes	Number of Personal References	Readability Level
Ancient	330	18	19.3	3	7.5
Medieval	364	18.6	20.6	2.6	7.9
Modern	352	19.6	17.7	1.3	7.9

In a discussion of readership, reading ability, and readability

formulas, Dale and Chall (1956) stated that written material at approxi-

mately Grade seven level will reach a great majority. With the

readability levels of the passages in this study ranging from Grade 7.5

to 7.9 it was assumed that the Grade 10 subjects would be able to work

with the social studies passages in cloze form.

The Nature of the Social Studies Reading

Passages Selected for the Study

The three passages selected for use in the study were considered

by the investigator to be representative of social studies reading material

as described in Chapter II. Though each of the passages is described

as representative of social studies reading material, it cannot be claimed

that each is comparable, one with each other. The previously described

characteristics of social studies material are evident throughout the three

passages but the occurrence and blend of these characteristics is some-

thing unique to each. Though it is accepted that the characteristics of

social studies material, in themselves, pose reading problems, no research

appears to exist describing an appropriate blend of characteristics so that

social studies material might be written in a manner more palatable to

student readers.

Examination of the passages used in the present study illustrates

the occurrence of the previously cited characteristics of social studies reading material.

Vocabulary

Technical terms. All three passages contain several examples of technical terms which have restricted use and meaning within the social studies field. An example of such is found in Life on a Medieval Manor: "The economical basis of this feudal system..."

Figurative expressions. Words having different connotations from the literal meaning can be found. An example of such is found in A World Divided by a Cold War: "...Winston Churchill accused Russia of dropping an iron curtain..." It was noted that figurative expressions do not appear as frequently as other types of specialized vocabulary.

Multiple meanings. Words with various meanings occur, the understanding of which is based on context. An example of such is found in A World Divided by a Cold War: "...countries which have become known as soviet satellites..."

Social studies concepts. All three passages contain many examples of words which specifically denote social studies concepts. A sentence fragment from Life on a Medieval Manor provides examples, "Constant warfare and obstacles to trade..."

Concept Load

All three passages are overwhelmingly laden with words that can be categorized as social studies concepts as delimited by Wesley and Wronski (1957). For example, in Life in Fifth Century Athens, the sentence fragment, "To pay for its imports Athens sold pottery..." contains the five major social studies concepts of obligation, process, place, action, and entity, respectively.

Specific Concepts of Time and Place

Because the concepts of time and place are viewed by the investigator to be so vital in social studies material concerning periods of time they have been selected out from the general discussion of social studies concepts. It is seen that references to time and place may vary in number from passage to passage. The discussion of the topics in three passages exhibit the interrelationships of time, place, and events. For example, the reader, to understand Life on a Medieval Manor must know the meaning of the time reference, medieval, as well as the location and extent of Europe in that time.

Writing Style

Nature of style and content. The three passages used in this study show variation in the nature of style and content. Life in Fifth

Century Athens is basically a descriptive passage in that it describes
the characteristics of fifth century Athens in terms of its business and
trade, housing, manner of dress, and eating habits. The passage has
little direct reference to chronology but it is comparative-contrastive
in its reference to contemporary life as a means of deeper explanation
of the period under discussion.

Life on a Medieval Manor begins as an explanation of medieval
feudalism and shifts to description in its illustration of the occupations
of those who lived there, the physical set-up of the land, and methods
of farming. There is little reference to the chronological order of events
but this passage is also comparative-contrastive in its reference to farm
methods of 100 A.D. and 1000 A.D.

A World Divided by a Cold War is an explanatory passage in its
explanation of how the cold war started. Yet, it is also chronological
as it lays out the evolution of this war in chronological sequence.

Lack of personal references. The lack of personal references in
social studies reading was previously cited as a style characteristic of
this type of material. The three passages in this study exhibit this
characteristic. Only one person, Pericles, is mentioned by name in
Life in Fifth Century Athens while Winston Churchill is mentioned in
A World Divided by a Cold War. Life on a Medieval Manor mentions

no person by name. There are few pronouns or nouns of personal nature

in any of the three passages. The emphasis in the passages is really on

social patterns as time, place, events, and their interrelationships are

given prominence.

Grammatical constructions. Connectives were previously cited in

Chapter II as one type of function word signaling relationships in social

studies material. The occurrence of connectives is noted in all three

passages, for example, in Life on a Medieval Manor, "Medieval feudalism

was neither a system, nor a scheme, nor a plan."

Scoring of Data

Students used separate answer sheets to record responses to the

Gates-MacGinitie Reading Test. These tests were handscored by the

investigator through use of the scoring key provided in the test package.

Alternative methods of scoring cloze tests have been suggested

based on the exact word or synonym replacements. Taylor (1953)

compared the proportions of total scores associated with three cloze

passages on an exact deletion and synonym count. Although synonym

count increased the total score, it did not improve the discrimination

between passages and he concluded that evaluation and scoring of

synonyms was unprofitable. Ruddell (1963) examined the reliability

and validity of cloze comprehension tests when cloze responses were

scored by an exact deletion method and a synonym count method. No significant differences at .01 level of confidence were found between the reliability coefficients in the cloze tests scored by the two methods, with the exception of one test and Ruddell explained this result with reference to high frequency patterns of language structure in that particular test. The validity coefficients were calculated by correlating each set of scores (exact versus synonym) with the paragraph meaning test of the Stanford Achievement Test. Following calculation of significant values between the two sets of correlations, no significant difference at the .01 level of confidence was found between the correlation coefficients. Ruddell concluded that there is no significant difference between exact word and synonym scoring in terms of validity. In a further study to determine which method of scoring yielded the most valid measures of a reader's comprehension ability Bormuth (1965) classified responses obtained from twenty passages into seven categories. He concluded that when cloze tests are used as measures of individual differences in reading ability, scores obtained by counting responses exactly matching the deleted words seems to yield most valid scores and when cloze tests are used as measures of comprehension difficulties of passages, scores obtained by counting responses exactly matching deleted words seems to yield the greatest amount of discrimination among passage difficulties. Rankin (1974) also reported that the objective scoring system results in measurements which

are as valid as a "subjective" scoring system. On the basis of the research cited here the investigator elected to use the exact word method of scoring in this study. In addition to confidence of validity and reliability of passages scored in this way, the method can be used with ease and assured objectivity. The investigator scored the cloze tests by hand.

Treatment of Data

All test scores and student data were punched on data cards and processed through the computer facilities of the Division of Educational Research, Faculty of Education, University of Alberta.

To answer research question one, concerning students' reading achievement on the cloze tests, the raw scores for all students' cloze responses were placed on computer, and test means, standard deviations, and mean percentage scores were calculated. Using this data, descriptive statements were made with reference to studies relating cloze percentage scores to corresponding reading levels. Bormuth (1967) reported that 73 fourth and fifth grade children obtained cloze scores of 38 per cent and 50 per cent which corresponded to comprehension scores of 75 per cent and 90 per cent respectively on passages concerning literature, history, and science. Betts (1954) stated that scores of 75 per cent and 90 per cent on multiple choice tests were representative of students' instructional and independent reading levels respectively. Peterson, Paradis, & Peters (1972) reported a study carried out to determine if Bormuth's

findings were applicable to students in more advanced grades. A total of 196 high school students provided data for the study which concluded results to be consistent with previous findings from other age groups.

To answer research question two, concerning girls' and boys' reading achievement on the cloze tests, the raw scores for girls' and boys' cloze scores were placed on computer, and test means, standard deviations, and mean per centage scores were calculated for each close test individually. Test means, standard deviations and mean percentage scores were also calculated for the composite cloze score.

To answer research question three, concerning the relationship between general reading comprehension and social studies reading, Pearson product moment coefficients of correlation were calculated between the comprehension scores on the <u>Gates-MacGinitie Reading Test</u>, Survey F, Form 1 and each of the cloze tests.

To answer research question four, concerning student performance in deletion types, all raw scores for each deletion of each cloze test were coded for computer use and a frequency count was made of correct response, incorrect response and no response. These were expressed in mean percentage form.

For purposes of discussion and description of student performance, all items on the cloze tests were categorized as deletion types. The categorization of deletion types was based on the previously described characteristics of social studies reading passages discussed in Chapter II.

The resulting categories were: technical terms, figurative expressions, multiple meanings, social studies concepts, time concepts and place concepts. The investigator elected to identify a category not discussed in the literature. It was noted that words expressing quantity occurred in the passages in this study and that such words were of both definite and indefinite nature. The investigator wished to determine whether quantitative expressions were a source of confusion to Grade 10 student readers.

The investigator considered the correct response for each deletion and assigned it to the appropriate category. Words not fitting the given categories were classified as miscellaneous. These included words such as pronouns, prepositions, connectives, prepositions, indefinite articles and auxiliary verbs.

Table IV reports the occurrence of the deletion types throughout the three cloze passages. Appendix III contains the classification of all words deleted into their respective categories.

To answer research question five, concerning information obtained from student interviews, the investigator's personal examination and analysis of interview transcripts gave rise to three kinds of information: Grade 10 students' expressed feelings about social studies reading; students' approach to the cloze test, and reasoning for responses to specific deletions.

Pilot Study

A pilot study was conducted to give the investigator practice in the administration of tests and to establish the approximate time required

TABLE IV

OCCURRENCE OF DELETION TYPES IN CLOZE PASSAGES

Deletion Type	Ancient Passage	Medieval Passage	Modern Passage
Technical Terms	5	1	4
Figurative Expressions	0	0	3
Multiple Meanings	0	1	2
General Social Studies Concepts	28	27	17
Time Concepts	0	1	1
Place Concepts	4	6	7
Quantitative Expressions	1	2	2
Miscellaneous	28	34	34
TOTALS	66	72	70

for completion of tests. The pilot was also intended to provide indication to the investigator whether students' responses to such a test would provide data worthy of analysis and description.

The 25 subjects for the pilot consisted of one Grade 10 social studies class in a high school of the Edmonton Catholic School District. The pilot was carried out in two testing sessions. On the first day the Comprehension Sub-test of the Gates-MacGinitie Reading Test, Survey F, Form 1 was administered. On the second day the students took the cloze tests during a class period of forty-five minutes. Information provided by the students indicated that a sixty minute period should provide adequate time for the completion of the three cloze tests.

The results of this initial administration of the cloze tests enabled the investigator to score and examine the kinds of responses made by students to the deletions. The nature of the responses, in many cases, suggested difficulty with many aspects of reading social studies material about periods of time. The investigator also concluded that an exploration of student reasoning for specific responses, through an interview procedure, would be a worthwhile feature of the main study.

Summary

The final test sample consisted of 81 Grade 10 students who were members of four social studies classes from three Edmonton Catholic high

schools. All students received the Gates-MacGinitie Reading Test,

Survey F, Form 1 and three cloze tests, Life in Fifth Century Athens,

Life on a Medieval Manor, and A World Divided by a Cold War. The

data from these tests was analyzed by use of frequency counts, Pearson

Product moment coefficients of correlation, and subjective analysis of

interview transcripts.

CHAPTER IV

FINDINGS OF THE STUDY

This chapter presents the findings of the investigation as revealed by the data analysis of the standardized reading tests and cloze tests. The description and discussion of the findings are presented in relation to the five research questions.

1. Achievement of Grade 10 students on cloze tests constructed to measure reading comprehension of passages about Ancient, Medieval, and Modern Times.

2. Achievement of Grade 10 girls in comparison to Grade 10 boys on the cloze tests.

3. Relationships between general reading comprehension as measured by the Gates-MacGinitie Reading Test, Survey F, Form and comprehension on the cloze tests as shown by Pearson product moment correlations.

4. Analysis of student performance on cloze tests with reference to student responses to deletions.

5. Information from student interviews with reference to student responses to deletions.

Achievement of Grade 10 Students on Cloze Tests

Measuring Comprehension of Passages about

Ancient, Medieval, and Modern Times

Table V reports the number of students taking the cloze tests,

the student group to which they belonged according to their achievement

on the standardized reading comprehension test, the cloze test means,

the standard deviations, the range of scores and the mean percentage

scores. The results presented here indicate that all three groups achieved

their best performance on the passage concerning Modern Times, while

their lowest performance occurred on the passage concerning Ancient

Times.

Though it was possible to label performance on specific passages

as the "best" or the "lowest" a further examination of the data revealed

a more accurate and somewhat startling insight into the students' actual

performance.

Research by Bormuth provided clarification here. In a 1967 study

involving students in Grades four, five, and six, he devised comparable

cloze and multiple choice comprehension test scores. In fact, he devised

a table, which gives for each of several cloze test percentage scores

the most likely equivalent score on a multiple choice test on the same

passage. The more recent study by Peterson, Paradis & Peters (1973)

indicates that the use of this table is also applicable for high school

TABLE V

ACHIEVEMENT OF GRADE 10 STUDENTS ON EACH CLOZE TEST

Group	Passage	Test Mean	Standard Deviation	Range of Scores	Mean % Score	Number of Students at Independent Reading Level
High	Ancient	27,000*	7.630	5 – 36	40.909	7
Middle	"	21.519*	4.525	11 – 31	32.604	0
Low	"	15.778*	6.250	0 – 26	23.906	0
High	Medieval	33.185**	5.806	20 – 44	46.091	9
Middle	"	24.741**	4.419	18 – 33	34.362	0
Low	"	19.556**	5.718	0 – 28	24.383	0
High	Modern	36.333***	4.861	26 – 44	51.905	19
Middle	"	27.519***	4.649	18 – 36	39.312	2
Low	"	19.111***	6.999	2 – 30	27.302	0

Number of Students in Each Group: 27

* Total Possible Score: 66
** Total Possible Score: 72
*** Total Possible Score: 70

students. Reference to Bormuth's table indicated that a 50 per cent score on a cloze test would be equivalent to 90 per cent on a multiple choice test. Independent reading has been defined by Betts (1954) as that level at which fluent reading takes place and 90 per cent comprehension is achieved. Re-examination of Table V revealed that a very small number in this present sample were able to read the given passages with 90 per cent understanding, the criteria for independ eading.

It was observed that the performance of the students improved as the passages moved closer in time to the present.

This finding may well relate to the view of reading comprehension presented in Chapter II, where it was stated that the reader must use his experience and knowledge to construct the concepts presented by the writer (Jenkinson, 1973). The best performance on the passage most recent in time may have been due to the students' actual proximity in time to the event described. For example, students' personal knowledge and experience with the cold war may have influenced the more success-ful attempt at completion of the passage describing it.

For purpose of discussion students were ranked according to their performance on the standardized reading test and the total sample divided into thirds. The resulting groups were classified as High, Middle, and Low. It was observed that those who scored high on the standardized reading test received the best scores on the cloze passages, and those

who scored low on the standardized reading test scored worst on the

cloze passages.

Comparison of Achievement of Grade 10
Boys and Girls on Cloze Tests

Table VI shows the achievement of all boys and all girls on each

of the cloze passages. Table VII indicates the overall performance of

boys and girls on the three cloze passages. Both girls and boys showed

their best performance on the passage about Modern Times. The boys

performed worst on the passage about Ancient Times, while the girls

performed worst on the passage about Medieval Times. It is noted,

however, that the girls' performance on the passages concerning Ancient

and Medieval Times differed only by 0.581 per cent. The boys' achieve-

ment was higher than the girls on two of three passages (Medieval and

Modern Times) while the girls surpassed the boys on only one passage

(Ancient Times). Though the girls were seen to perform better than

the boys overall, their achievement differed by only 1.019 per cent.

Relationship Between General Reading Comprehension
and Comprehension on the Cloze Tests

Table VIII presents the correlations between general reading

comprehension (as measured by the comprehension section of the

Gates-MacGinitie Reading Test Survey F, Form 1) and comprehension

TABLE VI

ACHIEVEMENT OF GRADE 10 BOYS AND GIRLS ON EACH CLOZE TEST

Passage	Total Possible Score	Mean Score		Standard Deviation		Mean % Score	
		Boys	Girls	Boys	Girls	Boys	Girls
Ancient	66	19.854	23.050	8.610	6.391	30.081	34.924
Medieval	72	25.676	24.727	8.243	8.384	35.661	34.343
Modern	70	28.786	26.436	9.650	8.047	41.122	37.766

TABLE VII

OVERALL ACHIEVEMENT OF GRADE 10 GIRLS AND BOYS ON CLOZE TESTS

	Mean Score*	Standard Deviation	Mean % Score
Girls	75.244	21.406	36.175
Boys	73.125	24.486	35.156

* Total Possible Score = 208

TABLE VIII

CORRELATIONS BETWEEN GENERAL READING COMPREHENSION
AND COMPREHENSION ON CLOZE TESTS

Passage	Correlations Between General Reading Comprehension And Cloze Tests	Significance
Ancient	.644	**
Medieval	.813	**
Modern	.806	**

** Significant at the .01 level

as measured by cloze tests about Ancient, Medieval, and Modern Times. The Pearson Product Moment correlation was used in these calculations.

Significant and positive relationships were found to exist between the standardized measure of reading comprehension and the cloze tests used in this study. These correlations are consistent with other studies reported previously in Chapter III (Rankin, 1957; Jenkinson, 1957; Fletcher, 1959; Ruddell, 1963; Friedman, 1964; and Schneyer, 1965). It would seem that general reading comprehension was a significant factor in student achievement on the cloze tests used in this study.

Analysis of Student Performance on Cloze

Tests by Deletion Type

Table IX shows the student performance on the cloze tests according to deletion type. The setting up of deletion types was discussed in Chapter III. Performance is recorded according to the mean percentage correct, mean percentage incorrect, and mean percentage of no response. This information was examined to determine on which blank types students (a) performed best; (b) performed worst, and (c) made the least response. Other observations about this data are also given.

Examination of Table IX appears to   e that the students performed best on figurative expressions, where a 59.671 mean percentage correct score was

TABLE IX

ANALYSIS OF STUDENT PERFORMANCE ON CLOZE TESTS BY DELETION TYPE

Deletion Type	Number	Mean % Correct	Mean % Incorrect	Mean % No Response
Technical Terms	10	11.873	65.082	23.405
Figurative Expressions	3	59.671	32.099	8.230
Multiple Meanings	3	11.317	72.531	10.494
General Social Studies Concepts	72	22.797	10.842	16.361
Time Concepts	2	3.703	88.889	7.407
Place Concepts	17	20.057	65.932	14.011
Quantitative Expressions	5	25.309	65.123	9.568
Miscellaneous	96	37.378	47.035	15.437

obtained. This might suggest a knowledge of such terms; however, it was noted that this type of item occurred only three times. Thus, it is not possible for the investigator to presume to draw any conclusions or make generalizations about Grade 10 students' ability to understand figurative expressions in social studies reading. Had the passages used contain a greater number of figurative expressions, this investigator, in fact, would expect to see students demonstrate difficulty with this type of term.

The students' worst performance appeared to be on the deletion type involving time concepts where an 88.889 mean percentage error score was recorded. Here, also, it was difficult to interpr   meaning of these results since only two deletions of this type appear   in the passages given. The investigator, supported by Decarol 972)   others cited. in Chapter II would suspect that other specific   designed to probe Grade 10 students' understanding of time c   pts in social studies reading would   eveal weaknesses in this area.

The highest mean score of no response was 23.405 per cent. This was recorded for technical terms. All other instances of no response were under 20 per cent and it would appear that students preferred to attempt response rather than not respond to the deletions.

Some tentative observations were made about other deletion types. Students produced a high mean correct score of 37.378 per cent on the

miscellane   in comparison to performance on other types of dele-
tions. T   achievement in this category may have been due to
the existence of simple function words like articles, pronouns, prepositions,
auxiliary verbs and connectives.

The low percentage of correct scores on the social studies concepts
categories would seem to indicate that these pose a very real reading
problem to Grade 10 students when they appear in print. The social
studies concepts in these passages concerning three different time periods
may have been so remote in time from the subjects' personal time reference
points and experience as to cause reading problems. The density of
general social studies concepts (72) in these three short passages would
appear too numerous for mastery and their numbers may serve to compound
reading problems.

Similarly, the concept of place seems, on the basis of the mean
correct score of 20.057 per cent, to have been a specific problem for
the Grade 10 students. The student interviews, to be reported later
in this chapter, reveal very imprecise knowledge of geographic loc
Such a lack of knowledge would seem to allow students to come away
with little appreciation and vague notions of the topics about which
they have read.

The low performance on technical terms would seem to indicate a
lack of knowledge of words of restricted use and meaning within the social

studies field.   Such words must be understood   [?]ading since their

meaning cannot necessarily be determined through contextual clues.

Examples causing difficulty in this study were the word _feudal_ in the

medieval passage and _western_ in the modern passage.

In conclusion, there is no clear cut case for highlighting any one

of the categories as the major problem in social studies reading; however,

it does appear that the combined effects of eight categories of deletion

types within the three passages in this study formed real obstacles to

comprehension by Grade 10 students.

Information Obtained from Student Interviews

This section uses information gathered in the twenty-one student

interviews held within one week of the students' completion of the

cloze tests.   The selection of students for the interviews was described

in Chapter III.   The basic approach to the interview was to (a) ask

student to verbalize their feeling about social studies reading in

general and (b) to ask students why they gave a particular response to

specific deletions selected by the investigator for discussion. Examining

tion of the interview transcripts gave rise to three kinds of information:

first, the student expressed feelings about social studies reading;

students approach to the cloze tests; and reasons for responses to specific

deletions. Three interviews are presented in full in appendix B.

Grade 10 Students' Expressed Feelings about Social Studies Reading

When asked to verbalize their feelings about social studies reading,

the students interviewed, though not eloquent, made the literature

reviewed in Chapter II, concerning the nature of social studies reading

come alive. Features of social studies cited as potential reading problems

by the investigator in Chapter II were frequently mentioned by the

students. The excerpts given here are representative of comments made

throughout the interviews. For purposes of reporting the interviews, sub-

jects have been identified by S and a number. This number and back-

ground data on the subjects is found in Table II. The researcher is

identified by R.

R   ...the first thing I want to know is what you think
        about social studies reading.

S#1   This year I really liked it. I usually find it really
        boring and I liked it this year. I really like our
        course ...[before] I probably wasn't interested in
        any of the topics.

R   What about terminology? Do you find there's
        a special set of terms for social studies?

S#1   It's mostly just usually the language I use ordinarily.
        It's not really hard terms ... I usually understand
        what it means.

R   When you have to do social studies reading in school
        ...how do you find it?

S#4   Not too bad. Depending on what I'm reading.
        It can be a real chore.

R   Any particular subject area that makes it more enjoyable for you?

S#4   Well, I'm particularly interested in World War II.

R   ...Do you find that there are some things that make the reading more difficult?

S#4   Well, something that you're not interested in.

R   ...Do you find it has its own special language ...special terms?

S#4   Sometimes.

R   Do they throw you over?

S#4   Sometimes.

R   Do you like social studies reading in general?

S#3   No.

R   Why?

S#3   I don't read very much at all. I guess I don't mind it, but I don't go out and read the newspaper.

R   Is there anything about social studies reading in particular that turns you off?

S#3   All the stuff with a lot of facts and figures.

R   Do you find that there's special terms used that throw you...?

S#3   I don't think so. I don't have much trouble.

R   ...do you like social studies reading?

S#5   Well, last year I really didn't like it at all. I enjoy it this year... the essays aren't bad and I like the stuff on urbanization a bit and I was interested in that...

R   Do you find that there's anything hard about
        reading social studies material?

S#5   Not really.   Some of the stuff like I'm not really
        interested in and I find it hard.

R   ...what do you think about social studies reading
        in general?

S#15   Well, myself I'm not a very good reader, but I'd
        rather prefer having it more oral and more discussions
        and things like that.

R   ...Social studies reading, how do you find it?

S#18   ....it depends on what it is...

R   When it is difficult, what do you think it is
        that trips you up?

> S#18 Reading the dates and we have to memorize th
        some of the names are hard.

R   [Do] you find anything particularly difficult about
        social studies reading?

S#19   It's not too bad.

R   Do you find it pretty easy?

S#19   Not really.   I'm not the greatest reader.

R   When you read social studies what is it that
        gives you difficulty?   ...something about the way it's
        written perhaps?

S#19   Yes, it depends on the content and the vocabulary
        they use.

R   ...How do you find it [social studies reading]?

S#10   I think it's pretty easy.

R   Can you see that there's anything in it that could
        cause difficulty for someone?

S#10   ...oh yeah, some of the harder words and
        stuff like that.

R   What do you think about social studies reading?

S#11   It's kind of boring....the issues are kind of boring...
        cuz we don't really understand and there's some
        kids who don't understand anything.

R   Do you think that there's something about the
        way social studies reading is written that makes
        it harder to understand when you're reading?

S#11   It's kind of dragged out...like if they pick out
        one point of an issue they drag it out for pages
        or something...   If you don't know what it's about
        really, basic stuff, it's complicated.

R   ...what do you think about social studies reading?

S#20   Nothing really.   I'm not interested in it.

        ...do you find that type of reading is difficult?

S#20   In parts ...some of the topics ....he [teacher]
        picks out a topic that we're supposed to study
        for a couple of weeks, just the name,   isn't like
        I'm not interested in.

R   ...do you find special words in social studies?
        does that bother you sometimes?

S#20   No.

R   ...is there anything about social studies, the
        way it's written, that makes reading hard for you?

S#13   I don't think so, like what we've been reading
        mostly is ...what Mr. [teacher] has written up,
        and it's his own version which isn't complicated
        with a bunch of words that you don't know.

R   ...I'd like to ask you what you think of social studies
        reading.

S#21   I hate social.

R   ...why?...

S#21   I don't know. I just hate it... I hate reading
        too...   I can't keep my mind on it.

R   ...Do you find that there's anything difficult
        about social studies reading...

S#8   Not really, except sometimes it's written fairly
        dry. They use a lot of terms, but generally it's
        a dry thing to read.

Some tentative observations can be made after reading the student comments above. Subjects 1, 4, 5, 11, 20 and 21 mentioned interest as a factor in their feelings about social studies. Subject #5 seemed to suggest that one's interest in the material is related to one's perception of the difficulty of the material. Interest and achievement may also be related. Those who expressed some positive interest in social studies were also noted to be the higher achievers of those interviewed for the most part. Subject 21 who "hates" social studies reading achieved the sixth lowest position overall on the cloze tests.

Three students from the lowest group of achievers made comments which suggest a relationship between general reading comprehension and social studies reading comprehension. Such statements can be seen illustrative of the significant and positive relations noted earlier in this chapter between general comprehension on a standardized reading test and the cloze tests used in this study.

Nine of the twelve students cited here made some reference to "words," "terms" or "vocabulary." It is noted that Subject #1, who was the top achiever overall in the cloze tests considered social studies terms as within his ordinary language repertoire. All the others found vocabulary within social studies to present reading problems. It is interesting to note that Subject #13 felt that his teacher had alleviated this problem by rewriting material "which isn't complicated with a bunch of words you don't know."

Reference was also made to the content and style of social studies reading material. Subjects #3 and #18 are plagued by facts, figures, hard names, and dates to be memorized. Subjects #8 and #11 made reference to the writing style in social studies material and referred to it as "dragged out" and "dry." This could be interpreted as reference to the expository nature of social studies writing which students may find both difficult and uninteresting.

Students Approach to the Task

The investigator observed among the students interviewed, a number of comments which may be suggestive of their approach to the given task. These patterns are discussed under the headings of task completion, unjustified response, awareness of errors, use of context and reference to background experience.

Task completion. In a number of cases, the students, when questioned on their reasoning behind a certain response, could only indicate that their objective had been to fill the blank, to complete the task. Jenkinson (1957) noting such a pattern, referred to this as verbal closure. In many cases an "anything goes" attitude is suggested by answers which lack not only semantic but syntactic meaning. These responses led to imprecise if not total lack of comprehension. Excerpts from the interviews are given below.

Passage: A World Divided by a Cold War

R   ....American democracies?

S#1   I just put it in.

Passage: A World Divided by a Cold War

R   ...an Iron bomb?

S#7   I just couldn't think of anything else to put in there.
       I was thinking and thinking and just gave up.

Passage: Life on a Medieval Manor

R   ...you said, "the manor had its carpenters and helpers..."

S#18   I just tried to think of something and put anything down.

Passage: Life in Fifth Century Athens

R   "...imported girls?"

S#11   I don't know. I just couldn't think of anything and that
       was the first thing that came to mind. I was kind of
       stumbling on that one.

Passage: Life in Fifth Century Athens

R   "...imported the lumber?"

S#20   It was the only word that came to my mind.

Passage: Life on a Medieval Manor

R   "Conquering these chiefs ...?"

S#21   I don't know.   I wasn't really reading thes..
           I was just trying to see what word could. fit
           in there.   Any word that would come to my head.

Unjustified response.   In a number of cases, the subject, in
retrospect, could give no reason for a particular answer.   The answers
given in such cases often lacked syntactic as well as semantic accept-
ability and were deterrents to comprehension.

S#3   I can't really say why I put it down.

S#5   I don't know.   It doesn't sound that good.

S#11   Well I don't really know.   I think I was thinking
           about what we were reading before...

S#12   I just...I don't know.

S#9   Athens is, well...I don't know.

Awareness of Error.   In a number of instances, the subjects, when
att.   . was called to a specific deletion, noted their error and then
in some cases, gave the correct answer.   This ability of the students to
give an accurate answer in retrospect, caused the investigator to
speculate about students' lack of psychological attention during reading.

Excerpts of such conversations are given below.

Passage: Life in Fifth Century Athens

R   "The yearly climate kept them outdoors." Why
         do you suppose you put yearly?

S#18   I don't think that makes sense.

R   Now that you read it again, what do you suppose
         would be more appropriate? Do you know where
         Athens is?

S#18   In Greece somewhere.

R   Yes and what would you expect the climate to be like?

S#18   Nice and warm or something.

Passage: Life on the Medieval Manor

R   ...You didn't put a reply, but if you thought about
         it again, what type of plow do you suppose they'd have?

S#11   Wooden, horse-drawn.

Passage: Life in Fifth Century Athens

R   Now, down here you have that they used machine
         oil. What type of machines do you think they had?

S#5   I'm not really sure now.

R   Does it make sense to you?

S#5   No.

R   Why   it make sense?

S#5   Well, when I think of it now, you know, like they
         didn't have machines like we do now, you know, th
         don't squeak or anything.

Passage: Life on a Medieval Manor

R   ..."Conquering of chiefs often made grants of land."
        Why did you use of?

S#10   It seemed to fit.

R   Do you think it fits now?

S#10   No.

Passage: A World Divided by a Cold War

R   .. you ... described the Revolution of 1917 as the
        Industrial Revolution.

S#8   And that wasn't too bright.

Use of context   Many of the students interviewed mentioned use
of context as a factor in determining their response to deletions.   Excerpts
from such conversations follow.

    R   When you were getting the answers what did you use
            to help you?

    S#1   Just different things that made sense in the paragraph.

    R   Can you remember why you used the word medieval?

    S#9   Well, the whole thing is talking about the medieval manor
            and this sentence is explaining this system of what the
            paragraph was talking about and I figured it just had to
            be that.

    R   ...where were you getting your clues when you
            were guessing?

S#9   Well, I always just try to get it from the context
       of the sentence... if something I know a little
       bit about it, I just well, look at the context of
       the sentence and I could find a pretty good answer
       for it, but sometimes it's a little harder and I have
       to think about it.

R   you tell me why you chose past tense in both
       of these cases?

S#20   It makes sense. It fits the sentence.

Use of background experience. Comments made by several students

indicated that background experience was a factor in their choice of

response and overall performance. The experience cited was sometimes

personal or that which could be described as vicarious. However, since

the overall achievement of subjects was so low (as described previously)

it would appear that many of the students did not always capitalize on

the experience cited. Excerpts making reference to background experience

are given here.

S#1   I've heard a little about it and I remember we
C   studied it.

S#4   Well we took it in grade nine so...I read up
       quite a bit on it.

S#5   Most of all the pictures I've seen are sunny...you know,
       [a] fairly mild climate. Probably it's the sun that made
       me feel it would be a warm climate.

S#15   I enjoy it. My parents they come from Europe and
       they talk about quite a few things like that...about
       wars and my grandparents were in wars...Again my
       answer came from home. My aunt, she came from
       Russia and my dad hadn't seen her for sixteen years.
       It was really something.

S#9   ...In grade six I had a real good social teacher.
It wasn't all book work, like it was more projects,
it was more working on your own,...and not too
much studying and stuff like that. It was a lot
better. We used to make model buildings and
stuff like that and it was really interesting.

S#14   was reading an article in Time Magazine.

S#2   I read a book about that.

S#4   Oh, I've heard it. I believe I heard it on a Newsweek
type program at times and in my reading sometimes, too.

Student Responses to Specific Deletions

In discussing their answers to specific deletions the students shed
some light on why certain category types were difficult and why compre-
hension scores were low on the cloze tests. Specific examples from
categories of deletions will be used to illustrate students' problems.

Place concepts. When questioned on certain deletions requiring
knowledge of place, a number of students showed that they lacked know-
ledge of these concepts so important to the understanding of material
about periods of time. Students, to understand periods of time should
have been able to envisage the situation in the past. Yet these students
proved sadly lacking in this area. Excerpts from conversations illustra-
ting this appear below.

Passage: Life in Fifth Century Athens

R   Do you now where Athens is? In what present day
country?

S#10   No.

R   No?   Have you heard of Athens before?

S#10   Yeah.

R   But you don't know what country it's in?   ...
        Do you have any idea generally what part of the
        world it's in ...north, south, east, west?

S#10   Well, it's near the equator.

Passage: Life in Fifth Century Athens

R   ....do you have any idea, by the way, where
        Athens is?...

S#20   No.

R   Do you expect it to be in North America?

S#20   Yes.

Passage: Life in Fifth Century Athens

R   Why did you choose the word hot to describe the
        climate of Athens?

S#13   That's cuz I really don't know where Athens is, and
        as a rough guess, I think it's somewhere close to
        Africa or something like that, and I don't kn
        the name just sounds hot to me.

R   ...Do you know where Athens is?

S#14   It's really on a map, bu   don't know.

R   Yeah...can you tell me what country it's in today?

S#14   Athens is in....not really.

Passage: Life in Fifth Century Athens

R   Where is Athens anyway?   In what present day
         country?

S#12   In Greece.

R   In Greece...good.   And where is Greece?

S#12   It's near Rome, like near Naples.   I think.

R   Where is Athens?   In what country is it located?
         Do you know?

S#8   I really don't honestly really know.   I'd have
         to guess in the Roman area.

Passage: Life on the Medieval Manor

R   Do you have any idea what type of people may
         have been living over the land here?

S#17   Indians.

R   Indians?   Where do you think this whole thing
         happened?

S#17   In Saskatchewan.

Time concepts.   In order to have adequately understood the

social studies material about periods of time, students should have had

a time reference.   Again, in discussion, students revealed a very vague

understanding of words or events denoting periods of time.   Such vague

concepts of time may have negatively affected reading comprehension.

Students' comments illustrated the lack of connection between time

and events.

Passage: Life on a Medieval Manor

R   Do you have any idea, speaking of [a] medieval manor, when medieval times were?

S#15   Um, gee whiz.

R   It doesn't have to be that exact...

S#15   Sixteenth century, fifteenth century.

Passage: Life in Fifth Century Athens

R   Why would you choose steel?

S#18   Well, I was thinking of building materials actually and I thought of steel.

Passage: Life on a Medieval Manor

R   When was medieval time anyway?

S#11   I don't know.

R   But you heard the expression before, didn't you? Can you harbour a guess?

S#11   About 1760 or something like that.

Passage: Life on a Medieval Manor

R   Do you have any idea when Medieval Times occurred?

S#20   Quite a ways back.

R   Yeah...could you put a rough date on it... something approximate?

S#20   1875 roughly.

Passage: Life on a Medieval Manor

R\   ...do you have any idea when medieval times were?

S#9   Well, I don't really even understand what medieval is.

Passage: Life on a Medieval Manor

R)   Have you heard the word medieval before?

S#14   Yeah.

R   What does it mean to you?

S#14   Medieval...um...mean

Passage: A World Divided by a Cold War

R   ...you talk about the American Revolution [of 1917].
       Can you tell me why you chose the word American?

S#9   Well we took about the American Revolution and the
       British, no not the British, but the French, had come
       in the thirteen colonies. That was the American
       Revolution when they fought for independence with
       France.

Figurative expressions. Though there were few figurative expressions

in the social studies passages in this study, students found them to be

a source of confusion and their comments indicated lack of familiarity

or knowledge with them. Some understood the meaning but did not

know the term. Those who knew the expression cited background

experience as basis for choice of response. Excerpts of conversation on

this topic are given here..

Passage: A World Divided by a Cold War

R   O.K. Now down here you said "Churchill accused Russia of dropping an iron hand from the Baltic to to Atlantic." What did you mean by that?

S#5   I didn't know what to put in there, but an iron hand, well, kind of a restriction or something like that. That's what an iron hand means, something strict or something like that. That's what an iron hand means.

R   You'll notice that this is in quotation marks...Did you realize that it's some special expression?

S#5   Well, I heard Reg talking it's the Iron Curtain. I don't know, I just put hand.

Passage: A World Divided by a Cold War

R   ...what do you mean by Iron Boundary?

S#20   It divided the country.

R   Do you mean he actually put something there?

S#20   No, it's just an imaginary line. He just wrote it on paper that the boundary would be there.

R   ...that's an expression commonly expressed as Iron Curtain. Have you heard that before?

S#20   Yeah.

Passage: A World Divided by a Cold War

R   ...why an iron gate?

S#9   Well, Russia kind of tried to keep information from going in or out, you know about their way of living like, and I just remembered about the Iron gate, sort of.

R   Was it a real gate?

S#9   Well, I've seen it on movies where they have the
Iron Gate, but I don't really think it's a real gate.
It's just an invisible barrier between somebody like
if two people didn't like each other, they'd try and
avoid each other.

Passage: A World Divided by a Cold War

R   ...Iron Curtain--how did you happen to know that
expression?

S#15   ...Again my answer came from home. My aunt she
came from Russia and my dad hadn't seen her for
sixteen years. It was really something.

R   And she came out from behind the Iron Curtain?

S#15   Right.

R   O.K. Is the Iron Curtain a real thing?

S#15   Oh, no. It's a government thing, I think, so that
the people took a lot to get her out of the country.
The government prevented people to go freely from
country to country.

Passage: A World Divided by a Cold War

R   O.K. and again you knew a word that not too
many people knew and that was this terminology,
"Iron Curtain."

S#4   I read up quite a bit on it.

Words with multiple meaning. Comments by some students indicated

that they were not always aware of the multiple meaning of words,

especially the aspect of meaning which pertained to social studies.

Sometimes understanding was indicated though the term was not known.

Yet others showed no concept at all of the idea expressed. Some excerpts

of conversation give evidence of this, during discussion of the deletion

requiring the response, Soviet satellites in the passage, A World Divided

by a Cold War.

R   ...have you ever heard the word satellites, Soviet
         satellites?

S#15   Which is like, you know, things in the sky that
         are orbitting around the world?

R   If I told you this term, Soviet satellites ...have
         you head that before?

S#19   I heard satellites, but not Soviet satellites.

R   O.K. Over here we're talking about Russia helping
         to put communist governments in countries which
         became known as...and you say Soviet Union. Why
         did you put Union there?

S#11   Well, they kind of needed to go to the countries and
         pelt them under their power to be one giant.

R   O.K. Have you ever heard the expression Soviet
         satellites?

S#11   Yeah.

R   ...that was the correct answer really. Do you know
         what Soviet satellites are?

S#11   Well, they're countries that are really run by the
         communists, Russia and Moscow.

R   ...now, over here, several people talked about Russia
         helping to put communist governments in countries

which became known as the Soviet Union.
Can you tell me why you chose the word Union there?

S#9   That's the name Russia had before it was named Russia.
I think.

Technical terms.   Technical terms were expected to cause problems

for students because there is usually little information in the surrounding

context to explain the term.   When discussing the deletion requiring

the word feudal, in the passage, Life on a Medieval Manor, students

gave evidence of lack of understanding of this term.

R   ...you used the word, primitive system...but there
was a word there which is a special language word,
feudal.

S#1   I was gonna use that...

R   Were you? What does feudal...mean to you?

S#1   Well, usually I think of some kind of a fight that
just keeps on. I know it means with a lord and
manor and all the area around it.

R   Have you heard that expression, feudal?

S#3   I was thinking of that but I couldn't remember the name.

R   What does it mean to you?

S#3   Two opposing sides. Well, history and...

R   Now here, you have the economical basis of this
new system.

S#5   New system? I think up here it said something about
it was a new thing so that was the only word I thought
fit in there.

R   ...in social studies you may come across special expressions and the special expression to be used here was feudal, feudal system.

S#5   Oh yeah.

R   What does it mean to you...?

S#5   Kinda like two opposing people or countries or something like that, having a feud over some history or something like that.

R   Did you ever think of it as a type of land system?

S#5   I don't know.

R   ...said "the economic basis of this developed system..." can you tell me why you put that?

S#13   Well... [no response]

R   O.K. Now, if I tell you that the correct response was feudal...have you heard this word before?

S#18   Yeah. I heard it, but I don't know what it means.

Summary of Findings

Analysis of the data produced the following findings in response to the questions posed in Chapter I.

1. On cloze tests constructed to measure reading comprehension about Ancient, Medieval and Modern times, Grade 10 students' highest achievement was on the passage, A World Divided by a Cold War, while their lowest achievement was on the passage, Life in Fifth Century Athens.

Only 21 students achieved a level of independent reading comprehension on the Modern passage, while 9 did so on the Medieval passage, and 7 did so on the Ancient passage.

2. Grade 10 girls demonstrated a higher level of reading achievement than Grade 10 boys on the total cloze test; however their performance topped the boys by only 1.019 per cent.

3. Using the Pearson Product Moment Correlation, correlations of .644, .813, and .806 were found between the Gates-MacGinitie Reading Test, Survey F, Form I (Comprehension Section) and the cloze passages on Ancient, Medieval, and Modern Times respectively.

4. Students performed best on the figurative expression deletion type where a 59.671 mean percentage correct score was recorded. The students' worst performance was on the time concept deletion type where an 88.889 mean percentage error score was recorded. The highest mean percentage of no response was 23.405 on the technical terms deletion type.

5. Interviews with Grade 10 students resulted in three kinds of information, their feelings about social studies reading; students' approach to cloze the tests; and reasoning for responses to specific deletions. Students seemed to suggest a connection between interest and achievement in social studies reading. Others' comments indicated a connection between general reading comprehension and social studies reading achievement. Problems in social studies reading mentioned by students were words, terms, vocabulary, content and style of writing.

A number of comments made by students suggested their means of approach to the cloze test. Some students indicated that their choice of response was motivated only by the need to respond, to give some answer, in fact any answer. Others made responses that could not be justified in retrospect, while others showed awareness of errors in retrospect. Context clues were mentioned by some as the means of arriving at response. Background experience both personal and vicarious was a factor in choice of response for some students.

Discussion of specific responses by students revealed problems with time and place concepts, figurative expressions, technical terms and multiple meaning words. The comments made by students, if indicative of their thought processes during reading would seem to suggest why there was vague understanding of the passages read.

CHAPTER V

SUMMARY, MAIN FINDINGS, CONCLUSIONS, IMPLICATIONS
AND SUGGESTIONS FOR FURTHER RESEARCH

Summary

Research previously cited in this study has indicated that time is a difficult area of learning for students at all grade levels. The purpose of this study was to assess Grade 10 students' reading comprehension of social studies passages, the content of which dealt with specific periods within Ancient, Medieval, and Modern Times and to subsequently explore by description of student responses in the test situation, the aspects of such material which may influence reading comprehension.

Five research questions were posed and an analysis of data was made in the attempt to answer the following questions.

1. What level of reading achievement do Grade 10 students demonstrate on a cloze test constructed to measure reading comprehension of passages about Ancient, Medieval, and Modern Times?

2. Do Grade 10 girls demonstrate a higher level of reading achievement than Grade 10 boys on a

cloze test constructed to measure reading comprehension of passages about Ancient, Medieval and Modern Times?

3. Is performance on a standardized test of general reading comprehension a predictor of performance on social studies reading?

4. In an analysis of student performance on the cloze tests, on which blank types did students (a) perform best? (b) perform worst? (c) make the least response?

5. What, if any, additional information may be gathered from selected students in an interview situation to suggest further factors which may influence the level of reading achievement on a cloze test constructed to measure reading comprehension of passages about Ancient, Medieval, and Modern Times?

The test population consisted of four Grade 10 social studies classes in three senior high schools of the Edmonton Catholic School System. The final test sample consisted of 81 subjects for whom complete sets of data were obtained.

All students' general reading comprehension was measured by the comprehension section of a standardized test, The Gates-MacGinitie Reading Test, Survey F, Form 1. Reading comprehension of social studies

material about periods of Ancient, Medieval, and Modern Times was

measured by student completion of cloze tests on each of these topics.

These cloze tests followed an every 5th word deletion pattern. They

were scored by the exact word deletion method. The level of reading

achievement on these cloze tests was described by reference Bormuth's

research (1967). . The Pearson Product Moment correlation was used to

calculate correlations between student achievement on the Gates-

MacGinitie Reading Test and on each of the cloze passages in order to

suggest whether there is a relationship between general reading compre-

hension and social studies reading.

Responses on the cloze tests were placed into categories by the

investigator in order to serve as a basis for description of the aspects

of these passages which may have affected reading comprehension of

social studies material concerning Ancient, Medieval, and Modern Times.

Interviews with a select number of subjects were used to supplement

the information obtained from the difficulty analysis of responses given

on the cloze tests.

Main Findings

The main findings of the study have been summarized in relation

to the five research questions.

1. On cloze tests constructed to measure reading comprehension

about Ancient, Medieval, and Modern Times Grade 10 students' highest

achievement was on the passage concerning Modern Times, A World

Divided by a Cold War, while their lowest achievement was on the

passage concerning Ancient Times, Life in Fifth Century Athens.

Scores indicating a level of independent reading comprehension

were achieved by 21 students on the passage concerning Modern Times,

9 students on the passage concerning Medieval Times, and 7 students

on the passage concerning Ancient Times.

2.   Overall, Grade 10 girls demonstrated a higher level of reading

achievement than Grade 10 boys on the cloze tests; however, their

performance topped the boys by only 1.019 per cent.

3.   Using the Pearson Product Moment Correlation, correlations

of .644, .813, and .806 were found between the Gates-MacGinitie

Reading Test, Survey F, Form 1, comprehension section, and the cloze

passages concerning Ancient, Medieval, and Modern Times respectively.

This indicates a significant and positive relationship between general

reading comprehension and each of the cloze tests.

4.   Students appeared to perform best on the deletion type,

figurative expressions, where the mean correct score was 59.671 per cent

The students' worst performance appeared to be on the deletion type,

time concepts where an 88.889 per cent error score was recorded.

Deletion involving technical terms evoked the least response from students

in 23.405 per cent cases.

5.   Interviews with Grade 10 students resulted in three kinds of information: their feelings about social studies reading, their approach to the cloze tests, and their reasoning for responses to specific deletions.

Conclusions

From the findings listed above, the following conclusions were drawn.

1.   It would seem that social studies passages about periods of time present reading problems for Grade 10 students. Achievement of comprehension of written material concerning periods of time seems to be related to the passage's place in time. Comprehension appears to be greater if the passage is close to the students' time reference. The farther removed in time is the topic of the passage, the lower comprehension appears to be. Higher comprehension of material in which the content deals with events closer to the students' own time reference may be a result of greater personal or vicarious experience with the topic. For example, some of the students interviewed cited media exposure and family experience as previous associations with the cold war.

2.   No valid conclusion can be made from the finding that Grade 10 girls demonstrated a higher level of reading achievement on the cloze tests than Grade 10 boys. The difference in their overall performance was too small to suggest or warrant any conclusion. There is no previous research on Grade 10 students' reading comprehension of

social studies material about periods of time to which the investigator can relate this finding. The finding, however, seems to be consistent with research previously cited (Friedman & Marti, 1945; Spiro, 1948; Wesley & Wronski, 1958) which reported high school students' low understanding of time concepts. In these studies sex was not a significant factor.

3.   General reading comprehension as measured by a standardized reading test is seen to be a significant predictor of the ability of Grade 10 students to comprehend social studies material about passages of time. This seems to indicate that the transfer and application of general reading skills to social studies is necessary for reading proficiency in this curriculum area.

4.   No valid conclusion can be made about the deletion types on which students (a) performed best; (b) performed worst, and (c) made the least response. Though students appeared to perform best on the figurative expression deletion types, it must be qualified that this type of item occurred in only one passage and in three instances therein. It is felt that the occurrence of this deletion type was not frequent enough to generalize about Grade 10 students' ability to understand figurative expressions within social studies passages.

Though the students' worst performance appeared to be on the deletion type involving time concepts, it must be qualified that this type of item

occurred in only two instances. It is felt that the occurrence of this blank type was not frequent enough to generalize about Grade 10 students' ability to understand time concepts within social studies passages. Should this type of deletion have occurred more frequently, previously cited research (Friedman & Marti, 1945; Spiro, 1948; Wesley & Wronski, 1958) would seem to suggest that Grade 10 students would demonstrate a significant weakness in the understanding of time concepts.

With the exception of blank types involving technical terms, all instances of no response were under 20 per cent and it would appear that students preferred to attempt a response rather than leave the blank unfilled. Because of the limited occurrence of blank types involving technical terms, no conclusive statement can be made about students' resistance to deal with these kinds of deletions.

5. Comments obtained from the interviews were considered under three general headings, students' feelings about social studies reading, their approach to the cloze tests, and their reasoning for responses to specific deletions.

Students' comments about social studies confirmed statements in the literature concerning reading in the social studies. Students spoke of the relationship between one's interest and one's subsequent achievement in social studies reading. This would seem to indicate that motivation is a personal factor affecting a students' willingness to work with such material

in an attempt to grasp the author's meaning and formulate new thoughts.

Other comments made by students were suggestive of their approach to the cloze test. Some students admitted making responses simply to complete the task, others made responses that could not be justified in retrospect, while others showed awareness of errors in retrospect. This information seems to indicate that many students do not approach social studies reading with the serious intent and purpose of communicating with the author through the printed page. Such an approach seems to indicate a lack of motivation, and a lack of precision in the students' thinking as they read social studies material. It would seem that many prefer to proceed with their reading rather than stop to locate a place on the map, or seek the definition of a word which is new to them.

Though some students cited background experience as a factor in their choice of response, this did not necessarily lead to a correct response. It would seem that students do not always capitalize on background experience so that it becomes an aid to reading comprehension.

Discussion of responses to specific deletions revealed student difficulty with time and place concepts, figurative expressions, technical terms and multiple meaning words. These kinds of words which are so characteristic of written social studies material are seen to pose specific comprehension problems to Grade 10 social studies readers.

Implications for Education

This study has educational implications for both authors of social studies material and classroom teachers of Grade 10 social studies.

Authors of social studies material should be more aware and cognizant of students for whom they write. Authors tend to write in a complex, narrative style which has little appeal to Grade 10 readers. This study used material in the state in which teachers would present it to their students. The findings of the study indicate that this material is laden with concepts and terminology with which Grade 10 students are not familiar. Authors, therefore, must be prepared to give greater explanation of topics by way of definition and specific relation to students' point of reference.

Classroom teachers should closely examine the reading material they intend to use in their social studies classrooms. Students must be taught how to cope with the style and content of social studies. Instruction should be given in the reading of complex, narrative material. The present study has revealed that Grade 10 students experience difficulty with the specialized vocabulary of social studies reading as well as with social studies concepts, specifically those of time and place. These items are deserving of instructional focus. New social studies vocabulary should be introduced and discussed prior to reading. Greater use of teaching aids such as maps, timelines, and other illustrative material may promote the development of social studies concepts. Students should be taught how to capitalize on personal and vicarious experience as aids to reading

comprehension. The teacher must attempt to motivate his tudents as much as possible so that they want to read the material, want to communicate with the author, rather than remaining content with the imprecise impressions and meanings formulated by so many of the students in this study.

Teachers may find cloze procedure, as used in this study, a valuable diagnostic teaching aid. Analysis of responses to a cloze test prepared over a social studies passage may give focus to areas of difficulty with specific vocabulary and concepts. Answers could be discussed in retrospect so that students' misconceptions could be corrected and further explanation provided where needed.

Suggestions for Further Research

At the completion of this study it is felt that reading comprehension in the social studies is a topic deserving of further exploration and research. The following suggestions are put forth to future researchers.

1. The present study indicates that Grade 10 students experience difficulty in reading social studies passages about specific periods within Ancient, Medieval, and Modern Times. The investigator suggests that a practical line of curriculum research be pursued which would develop teaching units focussing on areas of difficulty in the reading of studies material by Grade 10 students.

2. The investigator, in the present study, used an interview

procedure to examine the reasoning of students for their responses to specific deletions in retrospect. An interesting study might involve a small number of tested "good" and "poor" readers who would verbalize their responses as they worked through social studies passages prepared in cloze form. A qualitative comparison of their responses might give insights into the difficulties experienced by "poor" readers.

3. It became apparent during the categorization of deletion types in this study that social studies material has a great concept density. An interesting research project might be the formulation of a readability scale specifically for social studies based on the content aspects of the material, for example, the number of social studies concepts as opposed to the basis of many existing readability formulas which consider the mechanics of the material such as sentence length and counts of multi-syllabic words.

Summary Statement

This study gives evidence that the reading of social studies material about periods of time presents many problems for Grade 10 students. Further attention to and study of reading in the social studies at the secondary school level is warranted by researchers, textbook writers, and classroom teachers.

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APPENDICES

APPENDIX I

Cloze Tests

INSTRUCTIONS TO STUDENTS

1. You have three social studies passages which have some words missing. Each blank stands for ONE word and one word only.

2. You are to decide which word is missing from the blank and write it in.

Example

With his pan in hand the miner sought a place on the bank of the stream. Then he filled it with soil and water and began to move the pan in a circular motion. He waited hopefully for gold nuggets to settle to the bottom.

3. Though more than one word may seem to fit a blank, you should always write the one you think fits best.

4. If you cannot think of the word for a particular blank, go on to the next and come back to it later.

5. Please do the passages in the order presented.

LIFE IN FIFTH CENTURY ATHENS

Under Pericles the port _at_ Piraeus hummed with activity

for Athens was then the _business_ center of the Mediterranean

world. Its leading competitor, an _ally_ of Persia, had been _defeated._

To furnish the many _craftsmen_ with materials Athenians imported

metal, lumber, and wool while _rich_, luxury-loving Athenians

received _perfumes_, fine cloths, Oriental rugs _and_ Persian

slippers brought on _ships_ from the east.

To _pay_ for its imports Athens _sold_ pottery, metal products,

wine, _olive_ oil, furniture, and cloth. _The_ small shops in which

Athenian craftsmen worked each specialized _in_ manufacturing a

single product _and_ slaves and non-citizen _freemen_ did most of this

work. Athens might have been _more_ prosperous if more had _been_

known about banking and _business_ but any money made _was_ stored

rather than being _invested_. The majority of Athenians _were_

farmers who specialized in _raising_ figs, grapes, and olives _by_

use of crude equipment.

The average Athenian lived in _a_ simple home facing a

narrow garbage-strewn alley which _had_ no sidewalks. Since most

__houses__ had no windows, courtyards __had__ to supply light and

__air__ . There was usually no __floor__ but the earth though __a__

few rich homes had __floors__ and walls of mosaic __tiles__ . These

wealthier dwellings usually __had__ porches with columns and __were__

often equipped with plumbing. __They__ were also decorated with

__handsome__ vases, tapestries, and statues. __But__ in general,

living in __a__ fine house seems to __have__ meant little to the __Athenian,__

rich or poor. The __sunny__ climate kept him outdoors, __usually__ in

the market place __or__ open air assembly. Instead __of__ spending

money on a __beautiful__ home for himself, a __patriotic__ Athenian

contributed to the __construction__ of magnificent public buildings

__to__ share with his fellow __citizens__ .

Greek food was much __like__ ours. For sweetening they

__used__ honey. Both men and __women__ draped loose flowing linen

__garments__ around their bodies and __wore__ sandals. Women wore

their __hair__ in waves, drawn back __and__ fastened into a knot __with__

bone or ivory hair __pins__ .

LIFE ON A MEDIEVAL MANOR

Medieval feudalism was neither _a_ system, nor a scheme, _nor_ a plan. Nor was _it_ exactly the same in _every_ area of Europe. It _was_ a development out of _necessity_ . When the Roman empire _began_ to crumble many farmers _turned_ over their lands to _powerful_ landlords in exchange for _protection_ . Many religious persons turned _over_ their lands to the _Church_ and were granted the _right_ to cultivate them. Conquering _German_ chiefs often made grants _of_ land to their followers _in_ return for continued support. _The_ economical basis of this _feudal_ system was the lord's _estate_ called the manor.

Constant _warfare_ and obstacles to trade _caused_ the medieval manor to _strive_ for self-sufficiency. But _then_ as now complete self-_sufficiency_ was impossible because people _had_ to import such things _as_ salt and spices for _preserving_ their food and iron _for_ making tools.

On the _manor_ besides the castle, there _were_ peasants' huts, a church, _workshops_ , barns and perhaps a _mill_ . Stretching for miles around _the_ castle were strips of _neatly_ cultivated land looking like _checkerboards._ The manor had its

shoemakers and carpenters, millers and brewers and shepherds, but over ninety per cent of the people were farmers. All work was done by serfs and free peasants for it was considered a disgrace for a noble to do any manual labour.

Probably the Roman farmer in 100 A.D. used more advanced methods than did the serf of 1000 A.D. All manorial land capable of cultivation was divided into three fields. Each farmer was given strips of land, some good, some poor, and scattered throughout three fields. If one peasant neglected any of his strips, his weeds might grow over and spoil the crops on another man's strip. Medieval farmers had little knowledge of the value of fertilizer. Neither did they know how to effectively use the principle of rotation of crops. They thought that the best way to restore fertility was to leave one of the three fields uncultivated each year. Their wooden ploughs, sickles, and other tools were crude. And there was no scientific breeding of farm animals. Because good and bad strains of cattle roamed in common pasture, their offspring was often scrawny and puny.

A WORLD DIVIDED BY A COLD WAR

It is hard to __believe__ that the United States __and__ the Soviet Union were __allies__ in World War II. __For__ shortly after the war, __the__ world seemed to split __into__ two hostile camps that __of__ the U. S. and that __of__ the U.S.S.R. Between these __camps__ what is called a " __cold__ war" has been fought __creating__ ъ period of world-__wide__ tension. The cold war __has__ been fought not on __the__ battlefield, but with such __weapons__ as name-calling, propaganda, __as__ military and financial aid __to__ allies. One example shows __the__ extent to which propaganda __has__ been used in the __cold__ war. A Russian accusation __suggested__ that Americans had infested __German__ potato fields with beetles __in__ order to have a __market__ for surplus American potatoes.

In a sense the cold __war__ dates back to the __Communist__ Revolution of 1917 and __the__ suspicion between the communist __and__ capitalist countries thereafter. Even __while__ they were allies during __World__ War II, there was __some__ mistrust between Communist Russia __and__ its Capitalist Allied. Russian __leaders__ announced to their people __and__ ld that __Great__ Britain and the United __States__ were enem _____ cy __and__ were preparing for war __against__ Russia.

The United States __denounced__ the Soviet Union for __intensifying__ its spread of Communist __propaganda__ and for using threats __and__ violence -to try to __dominate__ its neighbours. In 1939 __and__ 1940 Russia had regained __much__ of the territory lost __as__ a result of World __War__ I. Shortly after World War __II__, the Russians helped to __put__ communist governments in countries __which__ became known as Soviet __satellites__ .

_Meanwhile, the Americans and __British__ were bitter because Russia __had__ not lived up to __its__ agreement to permit free __elections__ in other countries of __Europe__. Russia encouraged the spread __of__ communism in some countries __and__ created Communist government in __others__ . All this alarmed the __western__ democracies. They accused Russia __of__ "Red imperialism." It became __difficult__ for publications or visitors __from__ the democratic world to __reach__ the people of Communist __Russia__ or its satellites. Because __of__ this, Winston Churchill accused __Russia__ of dropping an "iron __curtain__ " from the Baltic to __the__ Adriatic Sea.

APPENDIX II

Sample Interviews

INVESTIGATOR"S INTERVIEW WITH SUBJECT #2

R First of all I'm wondering what you think of social studies

reading? How do you feel about it?

S#2 That depends on the topic, but usually I find it easy.

R What is it that makes it easy for you?

S#2 Oh, I don't know. I just find it easy. I like to read.

R Yeah, that helps. Do you have an interest in it to

begin with?

S#2 Yeah.

R O.K. Now, I was looking at your performance and basically

you made the same on two passages--one was A World Divided

by a Cold War and the other was Life on a Medieval Manor.

Now why do you think that your score on the cold war

would have been better than your score on ancient Athens?

Any idea?

S#2 Well, I heard about the cold war. And ancient Athens, well,

I never really studied it.

R Yeah, O.K. That's good. Have you known anyone who's

travelled to Russia or seen very much about Russia on T.V.?

S#2 Yeah.

R Do you find that this helps your reading when you've seen

something like that and then you find something written?

S#2   Yeah. It helps to picture it in your mind.

R   And do you find that picturing things in your mind adds to your understanding the material? Have you ever noticed that?

S#2   Yeah. It will help you. Like for something you would normally understand, you can picture it in your mind.

R   O.K. Let's go back and look at some of your responses. You did very well on the test and in some cases what we're going to do is look at your responses and see if you can remember what you did. Now, here, we were talking about things that Athens imported and you were one of the few people who realized that Athens imported <u>metal</u>. Do you know why you were able to come up with that response?

S#2   It seems like the logical thing. I heard it before.

R   Yeah. You know that from before. Anything around this area in the paragraph also that helped you figure what should be there?

S#2   I heard about a lot of those.

R   What about down here, they were talking about things that Athens sent out and again you were one of the few people who realized <u>olive</u> oil. I had all sorts of answers for that.

R   How did you know <u>olive</u>?

S#2   Oh, I got a book at home, <u>The Country of Greece,</u> and

it talks about olives, that they had a lot of olives, so

I realized it.

R   O.K. Good. Coming down here I want to look at some

verbs. Here you have <u>were</u> and down here you have <u>had</u>.

Those verbs are in the past tense and you made the correct

consistent choice of past tense all the way through. Why

did you use past tense?

S#2   I don't know. I just felt it should be past.

R   Why would you not put "The majority of Athenians <u>are</u>..."

or "The allies which <u>are</u>..."?

S#2   Well, you know, because it's in the past and you have to

put the past tense there.

R   Good. Now over here you talked about the <u>pleasant</u>

climate in Athens. Where is Athens, anyway? How do you

know what kind of climate?

S#2   It's on the Mediterranean.

R   O.K. Now let's go over to the medieval manor and you

did quite well on that one, too. Can you put an approxi-

mate date on medieval times? Like what does medieval

times mean to you?

S#2   It would be about 500 A.D. to about 1200 A.D.

R   That's good. Now coming down here, the only thing that

        seemed to trip you up in the ones that I'm wondering about

        is the one on the chiefs. Did you have any idea what you

        wanted to put in there, but did not know the name?

S#2   Well, the first thing I thought was Indians, then I thought

        tribal chiefs. I looked around to see if there was anything

        that would help, but I couldn't find anything.

R   Yeah, actually they were German, German chiefs. Does

        that surprise you?

S#2   No.

R.   Coming down here you were one of the few people who knew

        the term feudal.

S#2   Well, I've read about it.

R   Yeah, O.K., and you got a little tripped up in what types

        of people might have been on the manor.

S#2   I don't know. I just thought of that and I couldn't really

        place anything besides that. It had the millers and that, and

        then I couldn't really think.

R   Yeah, O.K. Now, over here we're talking about the things

        that they used on the farm. You used the word small to

        describe plow. Can you think of any other thing?

R   What other ideas might you have about the plows?

S#2   Primitive.

R   Yeah, very primitive. What might they be made of?

S#2   Wood, stone as a plow, and very crude.

R   Yeah, that's good. Now you used the word implements. Some students were using the word machinery. Why do you think that your choice of implements might have been more appropriate than their choice of machinery?

S#2   Well, like there it was all muscle power. They didn't have machinery yet. When you think of implements, you think of something you work yourself.

R   That's good. Now, for the last section, we move over to the cold war. Now here you have (notice we're talking about tense again) the correct tense, you have "The cold war has been fought." Why did you choose has instead of had?

S#2   It happened in the past, but it still goes on.

R   Good. Now you talked about (I think you mean) the Bolshevik Revolution. Some students looked at it as an American Revolution or Industrial Revolution. How come you knew?

S#2   Well, I thought it was the Bolshevik Revolution.

R   O.K.   Then over here you were one of the few people

again who knew the term satellites.

S#2   Well, I've heard that being used a lot, when people talk about

Soviet satellites in communist countries.

R   Very good.   And also you were one of the few people who

knew the term western democracies.   What do we mean when

we talk about the western democracies?

S#2   Well, usually the western democracies are the North American

countries and the countries of Europe that aren't communist.

R   O.K. And again you were one of the few people who

knew the term iron curtain.

S#2   I read a book about that.

R   Yeah.

S#2   And I read about different places of communism.

R   Now you seem to get along fairly well in social studies

reading.   Can you see anything about it that might cause

difficulty?   I'm sure you have lots of friends who maybe think

that social is a drag?   You're quite interested and as

you say, you know that you are a competent reader, but

can you see though what might be a problem in social studies

reading for other students?

S#2   Well, a lot of time when you first read large words.   You

S#2   know, for lots of people those words have no meaning

because they haven't seen them before and they don't

know what they mean.

R   O.K.

S#2   Or else show one concept and use another one. Lots of

time people haven't seen it before.

R   O.K. That's great Glenn. Very good.

INVESTIGATOR'S INTERVIEW WITH SUBJECT #8

R   Now what I'm trying to discover here is what you feel

        about social studies reading. What do you think about

        it in general?

S#8   The previous reading I don't like. I don't like to have

        a lot of reading at one time, you know, a little bit of

        reading at a time. You know, just small sections taken

        at a time, and I don't like to be forced to have a lot

        of work.

R   When you do it, do you enjoy social studies reading?

S#8   I don't lie. Like sometimes I like to go by a teacher's

        guidelines cuz otherwise I sluff off, but it's something I

        don't do too well.

R   Do you find it interesting or is there some other kind

        of reading that you'd rather do?

S#8   Yeah, I like science a lot, a matter of fact.

R   Do you find that there's anything difficult about social

        studies reading, the way it's written?

S#8   Not really, except sometimes it's written fairly dry. They

        use a lot of terms, but generally it's a dry thing to read.

R   Yeah. You mentioned terms. Do you notice that there

are special terms used.

S#8   I understand most of them.

R   You do? O.K. Now let's look at how you did on each

of these things. First of all, the one you did best on was

the one on the medieval manor. Any idea why that one would

have been the best?

S#8   We've taken up some of this in class and I recall some of it.

R   Yeah. And then the one that looks like your least favourite

was the one on fifth century Athens.

S#8   Yeah, I haven't had a lot on that.

R   O.K. Now let's look at some of your responses. First of

all, the one on fifth century Athens. [Here] , they're

talking about the different things that were brought into

Athens. I see you used the word spices. Why did you

choose spices there?

S#8   I hadn't really known what to put down. I thought spices -

spices will be alright. It was just a guess.

R   O.K. Now down here you used olive oil. It was correct.

Not too many people got that. How come you knew olive oil?

S#8   It's the area. I felt Athens and olive oil clicked.

R   Why did it click?

S#8   The general area, I guess. It was the general area of

Athens, the Roman area, and you usually hear olive

oil used.

R   O.K. Coming down here you had to find two verbs, which

you had correct in both cases. Those verbs are in past

tense. Do you know what I mean by past tense?

S#8   Yes.

R   Why did you choose past tense?

S#8   I really don't know. It just sounds right.

R   What about if I had said "The majority of Athenians are

farmers." What would you say then?

S#8   I don't know. I guess in my case it's just a matter of

opinion. I'd rather use <u>were</u> than <u>are</u>.

R   Well, what's the difference between present and past tense?

S#8   Well, it has happened and it is now happening.

R   Umm hum. And what was the case up here?

S#8   Well, I don't recall the entire paragraph, but apparently

I must have found that, well, "<u>were</u> farmers," this happened

in the past, I guess.

R   O.K. That's good. Now over on the other page you were describing a plow and you used the word <u>pulled</u>. How did you arrive at that decision to describe the plow as <u>pulled</u>?

S#8   I really don't know. As a matter of fact, I'd have to read the entire thing to let you know.

R   Do you think when you were reading these passages, that you were thinking about the time and place in which it happened?

S#8   Yes. I was creating a picture of it, you know, trying to get a picture of it.

R   Hmm... Where is Athens? In what country is it located? Do you know?

S#8   I really don't honestly really know. I'd have to guess in the Roman area.

R   O.K. That's a good guess. You think it's down there? How do you think the climate might be?

S#8   Hot always, but I don't know, I just didn't think that out properly. I can see where I went wrong there now. Sort of ridiculous, but anyhow.

R   That's good. Now let's look at the medieval one. You're not the only one who's making these mistakes. They're quite common.

R   Now, over here, "Conquering __(blank)__ chiefs." You didn't fill in that blank so I see you did have difficulty with it. Looking back at it now, we're talking about the medieval manor, do you know when medieval times was?

S#8   I don't know if I can place it. I can think of what it might have been like, but I can't place the date.

R   Yeah, well, could you give it a stab?

S#8   15th century or something?

R   O.K. Now about the time that you were thinking, what types of chiefs might have been coming in and invading?

S#8   The term chiefs doesn't seem to fit.

R   What would you have said?

S#8   I guess lords, or something.

R   I see. Very interesting that you got this word correct. How did you know feudal?

S#8   That was taken up in social class and it reminded me up here, medieval.

R   Oh, good. What does feudal mean to you anyway? You have the feudal system.

S#8   I don't know the meaning of the word, I've just taken it in class and it happened to come to me--feudal, lords, feudal system.

R   And you can't really remember what the word or term

        means?

S#8   No.

R   O.K.   Now down here you had a little bit of difficulty

        trying to figure out the types of workers that were on the

        manor.   When you were thinking about the manor did you

        realize that it was a small community where they were

        trying to support themselves?

S#8   No.   Manor gives me the impression of a large sort of

        estate type.

R   A large estate, oh, you mean like a big home?

S#8   Yeah.

R   You didn't think of it in terms of a village then?

S#8   No.

R   O.K.   Then over on this side, I noticed that you were

        going to call the plows _crude_, then decided not to.

S#8   Yeah, cuz it says here, "Their _crude_ plows, sickles and

        other tools were _crude_."

R   Thinking back about it now, what type of plows do you

        think they would have had?

S#8   Probably horse-pullen.

R   Out of what would they have been made?

S#8   Perhaps iron if they can get it.

R   Yeah, do you think they would have had iron?

S#8   Perhaps, you know, yeah, I-think if they could afford
       it, or if they could just get a hold of it.

R   Yeah. Now you chose the word tools here which is the
       right word. Some students used the word machinery. Why
       would you choose tools as opposed to machinery?

S#8   They didn't have anything that really compared to machinery.
       Tools are a simple sort of mechanism, or not even mechanisms.
       I don't know what to say. Machinery generally does something--
       it has a purpose. You know, it does it by itself. A tool,
       somebody picks up and he uses it. A machine, you turn
       it on and it works.

R   Yeah, that's a good thought. Now, on the cold war, I asked
       you about verb tenses before. We have a sentence here and
       you did insert the correct answers "The cold war has been
       fought." Why would you say "The cold war has been fought?
       Why didn't you say "The cold war had been fought?"

S#8   I think because the cold war has been fought.

R   And you were right.

S#8   I don't know. It has, it was, I don't think of it as a past tense.

R When you think of the cold war, you think of what period of time?

S#8 I think of the 16th century. I picked this up from my reading.

R O.K. Now down here, you and a number of other students described the Revolution of 1917 as the Industrial Revolution.

S#8 And that wasn't too bright.

R Why wasn't it too bright?

S#8 I couldn't think of the proper word.

R But why now would you tell yourself it wasn't too bright? What was the Industrial Revolution, do you know?

S#8 I don't know the period, but this is where there's a lot of technological advancement all of a sudden.

R Yeah, and was it before this or around this time?

S#8 Oh, I don't really know. I think it was after.

R Really. This term is called the Communist Revolution of 1917.

S#8 That, I don't know. I know very little of the cold war.

R O.K. Now over here, and again, you might first glance down, we're talking about shortly after World War I, the Russians had put communist governments in countries which became known as "Soviet republic." What is republic to you?

S#8   I put the word down simply because I felt it was the only
        thing that I could bring to mind and it sounded at the
        moment right. I felt that it was wrong anyway.

R   What is a republic? Do you know?

S#8   I really don't know.

R   Yeah. Do you think of it as a number of countries?

S#8   I think that it was just a guess. I feel that a republic is
        a community of lots of nations, I don't know, it's hard to say.
        I'd hate to say anything and then prove myself wrong. I'm
        not sure at all.

R   No, you're certainly not going to be penalized or anything.
        Down here you have "All this alarmed the united democracies."
        Who do you suppose you were thinking of when you said
        united?

S#8   . The United Nations, the League of Nations.

R   Oh, yeah. Then down here you had a term that not too
        many people know. "Iron curtain." How did you know that?

S#8   Oh, I heard it. I believe I heard it on a Newsweek type
        program and in my reading sometimes, too.

R   Now something that I probably asked you repeatedly, but now
        we'll sum up. When you're confronted with some reading like
        this, do you try and put yourself back and relive and think
        about how it probably was?

S#8   To an extent, yeah, I do.

R   Do you like to read about things in the 60's rather

       than fifth century Athens?

S#8   I believe fifth century Athens, the points that were shown in

       fifth century Athens, that we should pick up today, you

       certainly should get some history on that. I'm sort of

       more for current events, not that I wouldn't want to know

       about Athens.

R   . Thanks a lot.

INVESTIGATOR'S INTERVIEW WITH SUBJECT #16

R   What do you think about social studies reading in

    general?

S#16 Well, I find social pretty difficult.

R   What is it about social studies reading that you think

    causes difficulty, not only for you but for an awful lot of

    other people?

S#16 Well, for me it's vocabulary. I don't understand that.

R   O.K. Are you interested in it? Do you find it interesting?

S#16 Yeah, pretty interesting.

R   Now, the passage that you did the best on was this one,

    A World Divided by a Cold War. Do you have any idea

    why you did better on that one than any other one?

S#16 No. I guess it was pretty interesting.

R   Yeah, and speaking about the other ones, the one that

    seemed to give you the most trouble was the one on the

    medieval manor. Any reason why that would have been

    the lower one?

S#16 I didn't understand it.

R   O.K. Now Russia, which was your best one,--have you

    studied about it before, read about, seen it on T.V., or seen

    anything about it?

S#16   Last year in social we took it up.

R   Yeah.

S#16   So I got pretty well most of the answers from then.

R   Yeah, that's good.   Do you find that it helps if you talked

        about something before you read it?

S#16   Yeah.

        O.K.   Let's look at some specific responses.   Now I want to

            if you can remember what it is that helped you arrive

            ese various answers.   Some of them will be right and

        ome of them will be wrong.   But the important thing is

            , and find out what made you think that.   Okay?

        .K.

        lere we're talking about things that were brought into

        Athens and you mentioned tools.   Why do you think tools?

S#16   Well, just down further or up further it has something about

        well, it's ancient and you expect them to use tools.

        don't know really.

R   O.K.   And down here we're talking about Athens sending

        out oil.   What type of oil do you think it might have been?

S#16   I don't know.

R   Any idea?

S#16   No.

R   Now, down here you used the verb <u>had</u> which is correct.

Why do you use the past tense?

S#16   Well, that happened. Like it went on before and now it's

finished, it's gone.

R   That's good. And then over here you talked about the

climate of Athens and you used the word <u>beautiful</u> to

describe the climate. Do you know where Athens is?

What would have made you think about the climate being

<u>beautiful</u>?

S#16   I don't know, I guess I was in a hurry or something.

R   Yeah. Do you know what country Athens is in?

S#16   No.

R   What part of the world?

S#16   Probably in Europe or something.

R   You're right. Any idea what part of Europe?

S#16   No.

R   O.K. Athens is in Greece. Do you know where Greece

is?

S#16   Roughly.

R   O.K. Now let's look at the medieval one. You were

close in this one, but not quite. You had conquering <u>Rome</u>...,

you probably meant <u>Roman</u> chiefs. What made you think of

<u>Roman chiefs</u>?

S#16   Just some stuff I heard before like Roman Empire and all that.

R   Yeah, O.K. Actually, the answer was <u>German.</u> Then you had "The economical basis of this medieval <u>feudalism</u> system." O.K. Now your answer isn't quite right. Actually, the answer was feudal. But I'm interested to know that you did know something about feudalism. Do you remember why?

S#16   No. I saw it up here and it was about the only answer I could think of. It was a guess.

R   Oh, well, that was a smart cue cuz sometimes we can take a cue from other things that are in the material. Have you heard about feudalism before though?

S#16   Not that I can remember.

R   O.K. Then coming down here we were talking about people on the farm or on the medieval manor. You had "helpers" but you seemed to have a little bit of difficulty. Was it because you didn't know about the medieval manor?

S#16   No, I never had anything on it and I had to guess that. It was pretty hard and I didn't know anything that was going on.

R   Over here we talked about the plows that they used.

Now, the word that was going to go in there would play

what part?   What would it do to plow?   What part of

speech?

S#16   I guess it would kinda describe it's use.

R   Yes, be an adjective, right?

S#16   Yeah.

R   This was in medieval times.   Do you have any idea as to

when medieval times might have been?   Or can you tell

from the paragraph?

S#16   It would be pretty long ago.

R   Yes.   Would you try an approximate date?

S#16   No.

R   O.K.   Now, knowing that it was a pretty long time ago,

what type of plows might they have had?

S#16   Pulled by oxen or something.

R   O.K.   What do you think they would have been made out of?

S#16   Probably out of some kind of wood and vines.

R   O.K.   Then going over to the last one, to the cold War.

And I think this is the one that you did the best on.   First

of all, we were talking about the cold war and you have here

"was been fought. "   What would you put now?

S#16   <u>Had</u> been fought.

R   O.K.   The cold war, "<u>had</u> been fought." Now <u>had</u> is past

        tense.   Why would you use <u>had</u>?

S#16   Well, the passage would belong to the past.

R   Now down here we're talking about a revolution and you

        talk about the <u>American</u> Revolution.   Why did you choose

        that one?

S#16   It's about the only one that I could think of.

R   You mean in terms of revolutions?

S#16   Yeah.

R   The only one you've ever heard of?

S#16   Yeah.

R   When you were reading did you notice that over here it

        says "...Revolution of 1917"?

S#16   No, I don't think so.   All I got to was "Revolution."

R   O.K.   Now if you had noticed 1917 do you still think you

        would have put <u>American</u>?

S#16   No.

R   Why?   When was the American Revolution?

S#16   I don't know when it was.   It was sooner than the Russian

        one.

R   Yeah, O.K.   And what do you think, now, this revolution

        was?   Do you have an idea where the revolution took place?

S#16   Well, probably in Russia someplace.

R   Yeah, this is known as the <u>Communist</u> Revolution of 1917.

S#16   Umm hum.

R   Now, over on this side you and several other students used

        the expression "Soviet <u>union</u>." We're talking about the Russians

        helping to put communist governments in countries which

        became known as "Soviet <u>union</u>." Why "Soviet <u>union</u>'?

S#16   I guess I was in a hurry and I put it down. I hear about

        Soviet <u>union</u> and my grandpa comes from this and all this, so.....

R   O.K. Now, what does the Soviet <u>union</u> mean though? When

        we talk about the Soviet union, what are we really talking

        about?

S#16   About the communist countries. It's a whole bunch of

        countries together.

R   O.K., and then finally we're down here talking about the

        democracies. We're talking about how Russia had moved

        in and set up communist governments in other places and

        all this alarmed the "<u>U.N.</u> democracies." What did you

        mean by "<u>U.N.</u>"?

S#16   Well, I put down anything.

R   What democracies do you think might have been upset by

        this?

S#16   I don't have any idea.

R   O.K. And then you were one of the few people who knew

        this expression "Iron Curtain." How did you know that?

S#16   Cuz we took about it last year.

R   Yeah. What does the Iron Curtain mean to you?

S#16   Well, kinda like fleeing the country, something like that.

R   Do you think it was a real curtain?

S#16   No.

R   Yeah, O. K. Some people had "Iron wall" so I was just

        wondering if people thought that this Iron Curtain was a real

        thing, instead of an expression?

S#16   Umm hum.

R   O.K. So basically then you find social studies reading a

        little bit more difficult than others?

S#16   Yup.

R   And it's the vocabulary and language and that type of

        thing?

S#16   Yeah.

R   Do you find that if you hear something on the radio or see

        it on T.V. and then go to read it, it helps any?

S#16   Yeah.

R   Thanks. That's good.

APPENDIX III

Classification of Deletion Types in Cloze Passages

CLASSIFICATION OF DELETION TYPES IN CLOZE PASSAGES

Deletion Types	Word Deletions
Technical Terms	ally, craftsmen, freemen, patriotic, citizens feudal, allies, market, propaganda, western.
Figurative Expressions	cold, cold, curtain
Multiple Meanings	church, camps, satellites
General Social Studies Concepts	business, defeated, metal, rich. perfumes, ships, pay, sold, olive, work, business, invested, raising, narrow, air, floor, floors, tiles, handsome, sunny, beautiful, construction, women, garments, hair, pins, wore, used, necessity, began, twined, powerful, protection, right, warfare, caused, strive, sufficiency, preserving, neatly, checkerboards, shoemakers, brewers, people, free, considered, noble, labour, methods, capable, scattered, grow, crops, thought, leave, wooden, tools, farm, believe, creating, wide, weapons, suggested, war, Communist world, leaders, denounced, intensifying, dominate, War, II, put, difficult, reach.
Time Concepts	medieval, while
Place Concepts	world, Athenian, houses, Athenian, German, estate, manor, workshops, mill, fields, German, Great, States, British, Europe, Russia, Russia
Quantitative Expressions	more, every, ninety, some, one, some, much
Miscellaneous	at, for, and, the, in, and, been, was, was, were, by, the, a, had, had, a, had, were, they, but, a, have, usually, or, of, to, like, and, with, a, nor, it, was, over, of, in, the, then, had,

CLASSIFICATION OF DELETION TYPES IN CLOZE
PASSAGES (continued)

Deletion Types	Word Deletions
Miscellaneous (continued)	as, for, were, the, was, in, of, into, was, his, of, neither, to, of, to, was, had, in, was, and, for, the, into, of, of, has, the, and, to, the, has, in, the, and, and, and, and, against, and, and, as, which, had, its, of, and, others, of, from, of, the.